

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

February 2005

## BUDGET ACTIVITY

7 - Operational system development

## PE NUMBER AND TITLE

0203744A - Aircraft Modifications/Product Improvement Program

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	273381	242628	409103	420769	334468	314141	361837	396500	0	2914931
028 AERIAL COMMON SENSOR (ACS) (JMIP)	102755	121879	164646	239439	167491	56578	64782	21954	0	986359
430 IMPR CARGO HELICOPTER	13959	12372	19748	0	0	0	0	0	0	49350
504 BLACK HAWK RECAPITALIZATION/MODERNIZATION	155003	108377	114988	59225	0	0	20243	25272	0	595106
D12 LONGBOW APACHE OPERATIONAL SYSTEMS DEVELOP	1664	0	0	0	44741	70549	152320	243475	0	512749
D17 APACHE BLOCK III	0	0	109721	122105	122236	187014	124492	105799	0	771367

**A. Mission Description and Budget Item Justification:** This PE provides for 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, the Apache 2nd Generation Forward Looking Infrared (FLIR), and Longbow Apache Operational Systems Development.

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## PE NUMBER AND TITLE

**0203744A - Aircraft Modifications/Product Improvement Program**

<u><b>B. Program Change Summary</b></u>	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	242853	201295	309107
Current Budget (FY 2006/2007 PB)	242628	409103	420769
Total Adjustments	-225	207808	111662
Net of Program/Database Changes			
Congressional Program Reductions	-23951		
Congressional Rescissions			
Congressional Increases	27200		
Reprogrammings			
SBIR/STTR Transfer	-3474		
Adjustments to Budget Years		207808	111662

FY 2006 - 2007 project D12 HQDA zero-summed FY 06 & FY 07 funding to SSN AA6607 (APA). Project 504 - increase of \$115 Million is for the P3I program to include CAAS, FADEC, Fly-By Wire and the Integrated Vehicle Health Mgmt System (IVHMS). Project D17 received a transfer from APA to RDTE in FY 06 & FY 07 in support for Apache Block III RDTE restructure efforts.

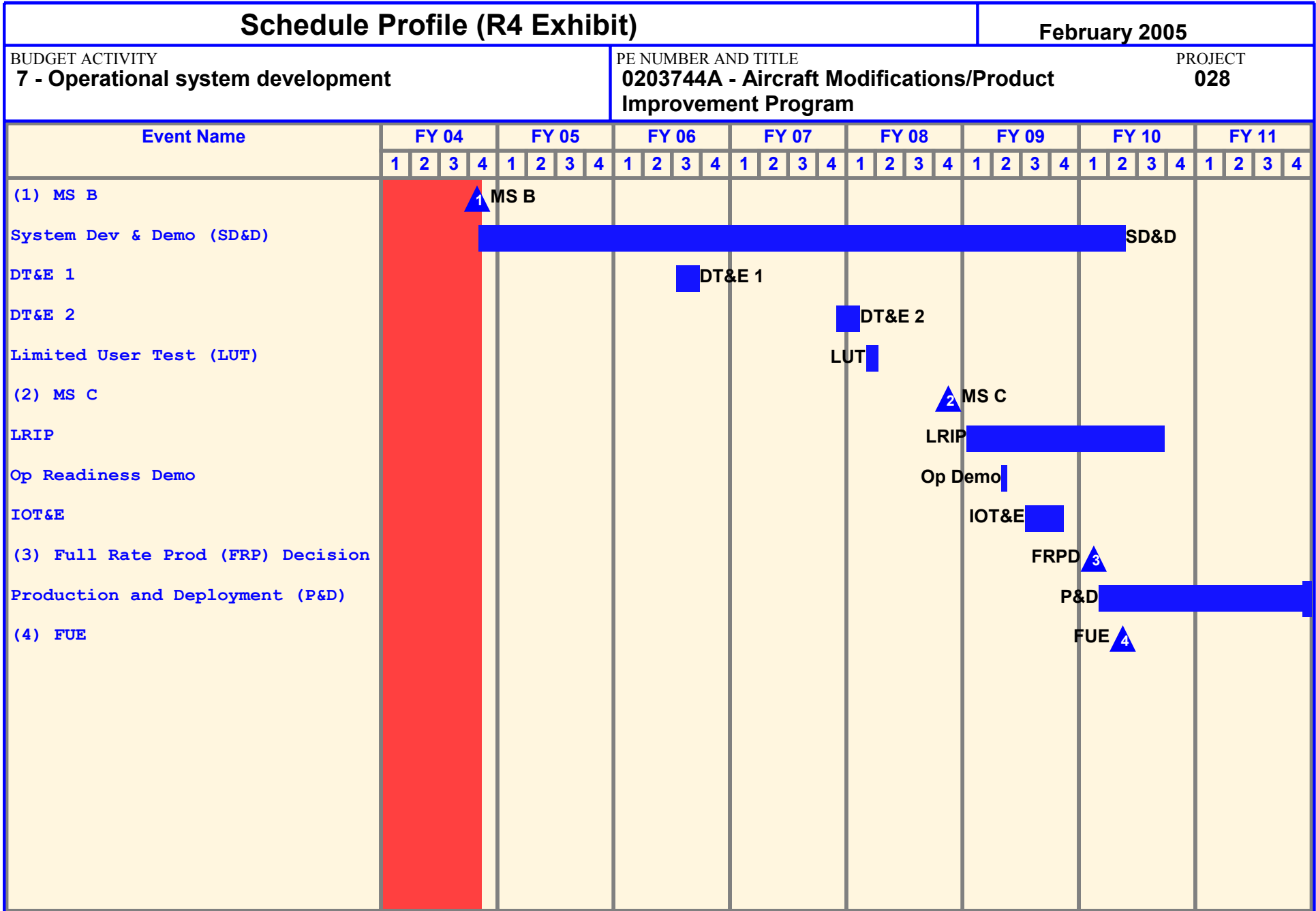
<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>							<b>February 2005</b>			
BUDGET ACTIVITY <b>7 - Operational system development</b>				PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>				PROJECT <b>028</b>		
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
028    AERIAL COMMON SENSOR (ACS) (JMIP)	102755	121879	164646	239439	167491	56578	64782	21954	0	986359
<p><b>A. Mission Description and Budget Item Justification:</b> The Aerial Common Sensor (ACS) is the airborne intelligence collection system required to provide critical support to early entry, forward deployed forces, and to support the future force's seamless intelligence architecture. ACS is the future force system that will satisfy the Army and Navy's critical need for a responsive worldwide, self-deployable, airborne reconnaissance, intelligence, surveillance and target acquisition (RISTA) capability that can immediately begin operations when arriving in theatre. The ACS will merge Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), and Measurement and Signature Intelligence (MASINT) into a single airborne system capable of providing a rapid response information dominance capability dedicated to the Component Commander's need for precision real-time geolocation of the enemy on the future force battlefield. ACS will be capable of operating independently or remotely via SATCOM or line-of-sight datalinks from a ground station. ACS will be Joint Airborne SIGINT Architecture (JASA) and Unified Cryptologic Architecture (UCA) compliant and be interoperable within the open Network centric C4ISR architecture in order to support all combat and combat support functions through the emerging DOD Global Information Grid. The primary mission will be standoff SIGINT collection, with a secondary mission of stand-off and overflight Imagery Intelligence. ACS ground functionality will be provided by the Distributed Common Ground Station-ARMY(DCGS-A). ACS is primarily targeted against threat maneuver forces, logistic areas, rocket and artillery forces, air defense artillery, and command control communications and intelligence nodes (C3I). ACS will satisfy unique Army/Land Force Commander Intelligence, Surveillance and Reconnaissance (ISR), reporting and targeting requirements, and those of the Joint and Combined Task Forces (JTF and CTF) across the full spectrum of Operations.</p> <p>This project is assessing Horizontal Technology Integration (HTI) candidates. A key consideration is the affordability of these subsystems. The National Security Agency's Defense Cryptologic Program (DCP) provides funding to support enhanced SIGINT capabilities.</p> <p>Navy is pursuing the Army's Aerial Common Sensor (ACS) as a replacement for the EP-3E, with the goal of reaching IOC in 2012.</p> <p>FY06 funding continues to support the System Integration (SI) portion of the System Demonstration and Development (SDD) Phase. FY 07 funds support transition to the System Demonstration portion of the SDD phase, as well as the first of two Development Test and Evaluation events. The SDD phase will conclude the development and design of the Prime Mission Equipment (PME) on the air platform subsystem and Limited User Test.</p>										

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>							<b>February 2005</b>				
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>			PROJECT <b>028</b>			
<b>Accomplishments/Planned Program</b>							FY 2004	FY 2005	FY 2006	FY 2007	
Award and execute contract for ACS Increment 1 System SDD Phase which will integrate technologies developed and demonstrated during the CAD phase							81438	95285	136561	198404	
Modeling, Program Office, Matrix Engineering and Test support for the SDD Phase							21317	26594	28085	41035	
Totals							102755	121879	164646	239439	
<b>B. Other Program Funding Summary</b>		FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
ACS DCP		15124	12995	17545	19056	12331	12320	12320	12320	Continuing	Continuing
CHALS DCP		4190	2931	1930	1456	4235	4232	4188	4165	Continuing	Continuing
GRCS DCP		7678	7109	3835	3845	2478	2476	4437	4437	Continuing	Continuing
0305206/DK98 Tactical Reconnaissance		4704	5128	5398	5599	5320	5544	6005	6103	Continuing	Continuing
A02005 Aerial Common Sensor- Aircraft Procurement, Army		0	0	0	0	0	403445	300096	403358	Continuing	Continuing
0307207N/3015 Navy Aerial Common Sensor		0	20400	92800	2500	5600	49000	0	0	0	170300
<p>FY06-FY07 DCP provides funding for the development of ACS technologies and technologies needed to ensure applicability of ACS in the evolving future force architecture. Tactical Reconnaissance funds MASINT/IMINT technologies that will be integrated into ACS during SDD Phase. Navy RDTE funding supports SDD efforts for the baseline ACS.</p> <p><b>C. Acquisition Strategy:</b>MS B ADM was approved 4QFY04 for entry into the ACS SDD phase. The SDD contract was awarded on a competitive basis on 2 August 2004. This effort will take the ACS program through Development, Testing, Limited User Test (LUT) and IOT&amp;E in 4QFY09. A MS C LRIP phase will be sole source to the SDD contractor and used to establish a manufacturing capability in support of a Full Rate Production Decision.</p>											

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>028</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ACS SDD Contract	C-CPAF	Lockheed Martin, Littleton, CO	81438	95285	1-2Q	136561	1-2Q	198404	1-2Q	Continue	511688	879000
Subtotal:			81438	95285		136561		198404		Continue	511688	879000
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ACS Operational Performance Model	SS-CPFF	SAIC thru JPSD	9205	1815	2Q	1500	1-2Q	1500	1-2Q	Continue	14020	Continue
b . Model Evaluation Support	Gov't /Kr	Multiple	5771	1285	1-3Q	1290	1-3Q	1290	1-3Q	Continue	9636	Continue
Subtotal:			14976	3100		2790		2790		Continue	23656	Continue

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>028</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Airframe Engineering Support	MIPR	AMRDEC, Redstone Arsenal, AL	3550	2600	1-3Q	2400	1-3Q	2000	1-3Q	Continue	10550	Continue
b . AEC Support	Govt/Kr; Various	Multiple	1497	1990	1-3Q	3000	1-3Q	15260	1-3Q	Continue	21747	Continue
Subtotal:			5047	4590		5400		17260		Continue	32297	Continue
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Program Management	In-House	PM, Signals Warfare	10930	4890	1-2Q	5500	1-2Q	5500	1-2Q	Continue	26820	Continue
b . Program Mangement	C-T&M	CACI, Eatontown, NJ	3304	3700	1-2Q	3700	1-2Q	3700	1-2Q	Continue	14404	Continue
c . Program Management	Kr; Various	Multiple	2857	2155	2Q	2065	1-3Q	2070	1-3Q	Continue	9147	Continue
d . Matrix Support	Gov't /Kr; Various	Multiple;	6802	3612	1-2Q	3680	1-2Q	3680	1-2Q	Continue	17774	Continue
e . Matrix Support	MIPR	CRDEC/I2WD, Ft Monmouth, NJ	0	2797	1-3Q	3200	1-3Q	4285	1-3Q	Continue	10282	Continue

ARMY RDT&E COST ANALYSIS(R3)										February 2005		
BUDGET ACTIVITY					PE NUMBER AND TITLE					PROJECT		
7 - Operational system development					0203744A - Aircraft Modifications/Product Improvement Program					028		
IV. Management Services (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
f. Software Matrix Support	C-T&M	ITEL, Tinton Falls, NJ	0	1750	1-3Q	1750	1-3Q	1750	1-3Q	0	5250	0
Subtotal:			23893	18904		19895		20985		Continue	83677	Continue
Project Total Cost:			125354	121879		164646		239439		Continue	651318	Continue



## Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY

**7 - Operational system development**

PE NUMBER AND TITLE

**0203744A - Aircraft Modifications/Product  
Improvement Program**

PROJECT

**028**

<u>Schedule Detail</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
ACS Milestone B Decision	4Q							
ACS System Dev and Demo (SD&D) Phase Contract	4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-4Q	1-2Q	
DT&E 1			3Q					
DT&E 2				4Q	1Q			
ACS LUT					2Q			
MS C LRIP Decision					4Q			
LRIP Phase Contract						1-4Q	1-4Q	
Operational Readiness Demo						2Q		
IOT&E						3-4Q		
Full Rate Production Decision							1Q	
Production and Development Phase							1-4Q	1-4Q
FUE							2Q	

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

February 2005

BUDGET ACTIVITY  
7 - Operational system development

PE NUMBER AND TITLE  
0203744A - Aircraft Modifications/Product  
Improvement Program

PROJECT  
430

COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
430 IMPR CARGO HELICOPTER	13959	12372	19748	0	0	0	0	0	0	49350

**A. Mission Description and Budget Item Justification:** As the Army's only heavy-lift helicopter capable of intra-theater cargo movement of payloads up to 16,000 lbs in a high, hot environment, the CH-47F Improved Cargo Helicopter is an essential component of the Army Future Force. The CH-47F program fills the Army's Aviation Transformation Chinook requirement. The CH-47F Common Avionics Architecture System (CAAS) digital cockpit will provide future growth potential; include a digital data bus that permits installation of enhanced communications and navigation equipment for improved situational awareness, mission performance, and survivability. New airframe structural components and modifications will reduce harmful vibrations, improving operation and support (O&S) efficiency and crew endurance. The CH-47F program funds completion of the Independent Operational Test and Evaluation program. Developmental improvements to the T55-L-714A engines are funded as part of a shared, cooperative effort with the Component Improvement Program Office. Developmental improvements are included for the Low Maintenance Rotor Hub (LMRH), and testing for engine compressor Blade Coating.

<u>Accomplishments/Planned Program</u>	FY 2004	FY 2005	FY 2006	FY 2007
Operational Test & Evaluation	0	0	2500	0
Provide product technical support	3690	0	1750	0
Continue Contract Live Fire Test & Evaluation	0	0	500	0
Continue in-house and program management administration.	316	300	827	0
Continue Government Test & Evaluation.	4800	0	2250	0
Test Analysis	1500	0	1000	0
714B Engine	3259	4375	2500	0
DT&E for Low Maintenance Rotor Hub	0	7697	7421	0
Blade Coating	0	0	1000	0
Small Business Innovative Research/Small Business Technology Transfer Programs	394	0	0	0
Totals	13959	12372	19748	0

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>								<b>February 2005</b>																								
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>				PROJECT <b>430</b>																							
<div style="border: 1px solid black; padding: 5px;"> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="text-align: left;"><b>B. Other Program Funding Summary</b></th> <th>FY 2004</th> <th>FY 2005</th> <th>FY 2006</th> <th>FY 2007</th> <th>FY 2008</th> <th>FY 2009</th> <th>FY 2010</th> <th>FY 2011</th> <th>To Compl</th> <th>Total Cost</th> </tr> <tr> <td>APA, SSN AA0252, CH-47 CARGO HELICOPTER MODS (MYP) (Including Adv Proc)</td> <td style="text-align: right;">510226</td> <td style="text-align: right;">857411</td> <td style="text-align: right;">677532</td> <td style="text-align: right;">624357</td> <td style="text-align: right;">757674</td> <td style="text-align: right;">1046959</td> <td style="text-align: right;">863713</td> <td style="text-align: right;">967937</td> <td style="text-align: right;">6381767</td> <td style="text-align: right;">12687576</td> </tr> </table> <p><b>C. Acquisition Strategy:</b> The CH-47F rebuild program extends the service life by twenty years, 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 rebuild program includes recapitalization of key dynamic components, bringing them to a near zero time.</p> </div>											<b>B. Other Program Funding Summary</b>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost	APA, SSN AA0252, CH-47 CARGO HELICOPTER MODS (MYP) (Including Adv Proc)	510226	857411	677532	624357	757674	1046959	863713	967937	6381767	12687576
<b>B. Other Program Funding Summary</b>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost																						
APA, SSN AA0252, CH-47 CARGO HELICOPTER MODS (MYP) (Including Adv Proc)	510226	857411	677532	624357	757674	1046959	863713	967937	6381767	12687576																						

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>430</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . EMD	CPIF	Various	117221	0		0		0		0	117221	117098
b . TOCR	CPIF	Various	1600	0		0		0		0	1600	1600
c . Technical Support	CPFF	Various	6658	0		1750	1-2Q	0		0	8408	0
d . 714B Engine	CPIF	Various	3259	4375	1-2Q	2500	1-2Q	0		0	10134	0
e . Low Maintenance Rotor Hub	CPIF	Boeing	0	7697	2-3Q	7421	2-3Q	0		0	15118	0
f . Blade Coating	CPIF	Honeywell	0	0		1000	1-2Q	0		0	1000	0
Subtotal:			128738	12072		12671		0		0	153481	118698

# ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0203744A - Aircraft Modifications/Product Improvement Program

PROJECT

430

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . PMO/OGA	Reimbursable	Various government	12380	300	2-3Q	827	2-3Q	0		0	13507	0
Subtotal:			12380	300		827		0		0	13507	0

III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . DT/OT	Reimbursable	Various government	14221	0		4750	1-2Q	0		0	18971	0
b . Live Fire Test & Eval	Reimbursable	Contract/Govt	6365	0		500	1-2Q	0		0	6865	0
c . Live Fire Test & Eval	Contract		50	0		0		0		0	50	0
d . Test Analysis	Reimbursable	Various Government	1500	0		1000	1-2Q	0		0	2500	0
Subtotal:			22136	0		6250		0		0	28386	0

ARMY RDT&E COST ANALYSIS(R3)										February 2005		
BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0203744A - Aircraft Modifications/Product Improvement Program					PROJECT 430		
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . CAMBER/Westar	SS/FP	Huntsville, AL	3901	0		0		0		0	3901	3901
Subtotal:			3901	0		0		0		0	3901	3901
Project Total Cost:						167155	12372		19748		0	
										0	199275	122599

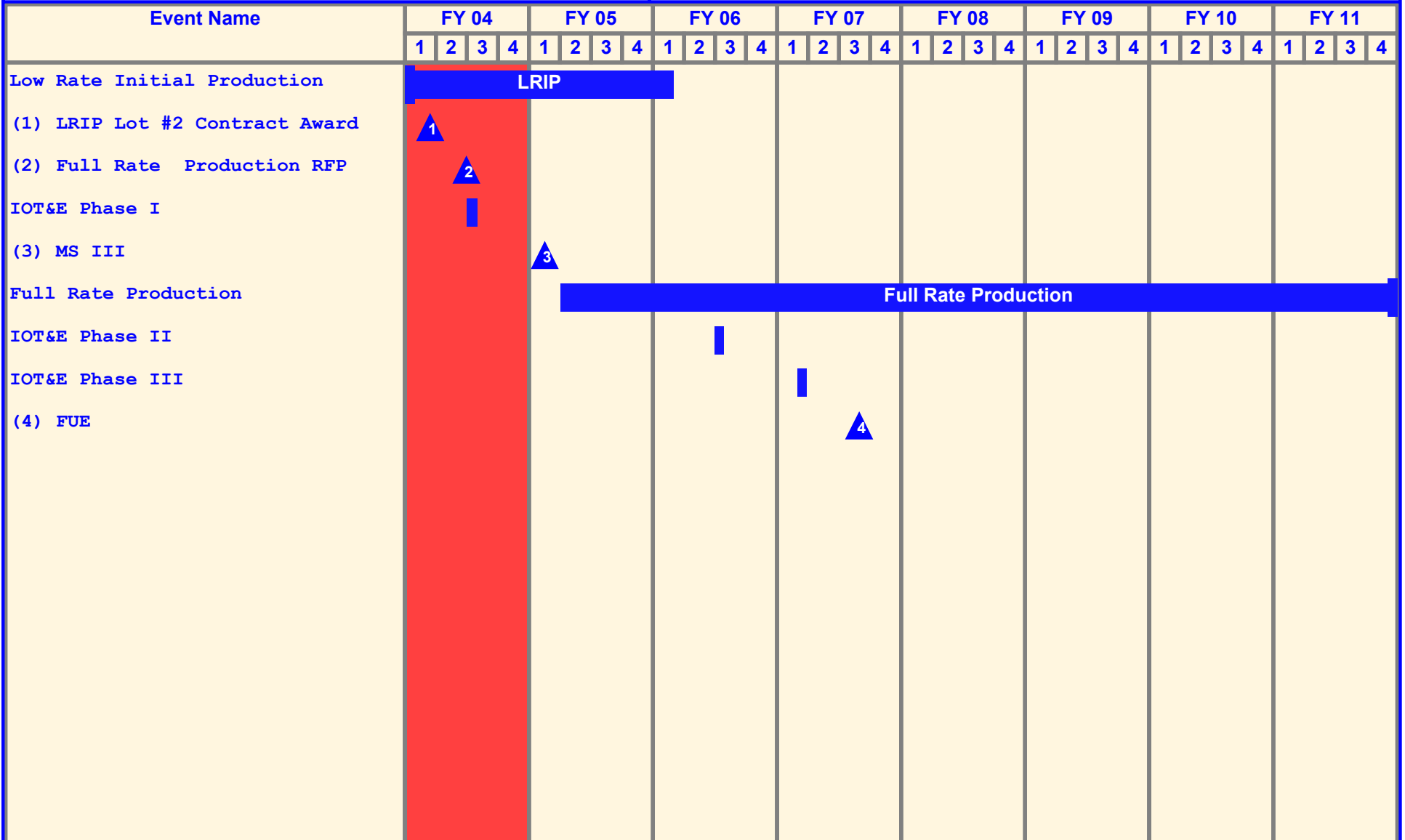
# Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY  
7 - Operational system development

PE NUMBER AND TITLE  
0203744A - Aircraft Modifications/Product  
Improvement Program

PROJECT  
430



Schedule Detail (R4a Exhibit)							February 2005	
BUDGET ACTIVITY <b>7 - Operational system development</b>				PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>			PROJECT <b>430</b>	
<b><u>Schedule Detail</u></b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	<b>FY 2008</b>	<b>FY 2009</b>	<b>FY 2010</b>	<b>FY 2011</b>
LRIP Lot 2 Contract Award	1Q							
Full Rate Production RFP	3Q							
Initial Oper Test & Eval (IOT&E) Phase I	3Q							
Milestone III		1Q						
Full Rate Pdn		1Q						
Initial Oper Test & Eval (IOT&E) Phase II			3Q					
Initial Oer Test & Eval (IOT&E) Phase III				2Q				
FUE				3Q				

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)							February 2005			
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0203744A - Aircraft Modifications/Product Improvement Program				PROJECT 504		
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
504 BLACK HAWK RECAPITALIZATION/MODERNIZATION	155003	108377	114988	59225	0	0	20243	25272	0	595106
<p><b>A. Mission Description and Budget Item Justification:</b> The UH-60 BLACK HAWK will serve 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 continues to procure UH-60L helicopters today. 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 25 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. 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 configuration. FY05 funding reflects the initial efforts to move the UH-60M program to 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. Also in FY05, funds are included for incorporation of Integrated Vehicle Health Management System (IVHMS) on the UH-60M. FY05 funds continue UH-60M integration and testing. FY05 also funds the Integrated Mechanical Diagnostic - Health Monitoring System (IMD-HUMS) and Maintenance Analysis Safety and Training (MAST) demonstration programs and initiation of the Helicopter Autonomus Landing Systems (HALS).</p> <p>FY06 and FY07 Funding is for Pre-Planned Product Improvements (P3I) for the UH-60M, it includes the Fly-By-Wire (FBW), CAAS, and the Full Authority Digital Engine Controls (FADEC). FY06-FY07 funds UH-60M testing efforts and completion of the Baseline integration contract.</p>										

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**0203744A - Aircraft Modifications/Product Improvement Program**

PROJECT

**504**

<b>Accomplishments/Planned Program</b>	<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>
Continue airframe, avionics and powerplant development based on finalized configuration as a result of airframe CDR. Conduct System Preliminary Design Review and Critical Design Review.	28550	18833	9211	2528
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.	20094	4215	863	609
Continue Producibility Engineering and Planning (PEP) as well as manufacturing planning and control.	14732	3787	591	40
Prototype build and delivery to support Development Testing (DT).	32756	25951	11266	841
Testing (Conduct flight testing, EME testing and ground testing).	33115	13268	7193	1342
Preparation of training documentation for Logistics Demonstration Familiarization Course, Government Test Pilot Familiarization Course and Test Data Collection Training Course.	3941	1893	997	883
Conduct training course to support test.	418	632	1970	408
Maintain Continuous Acquisition and Life Cycle Support (CALS)/Contractor Integrated Technical Information Service (CITIS) and deliver Interface Control Documents (ICD's).	665	465	106	22
Support Equipment	308	103	0	0
Helicopter Autonomous Landing System (HALS) - Development and delivery of a complete unit; technical support; and integration of the unit.	0	1905	0	0
IMD-HUMS demonstration program.	6763	20120	0	0
UH-60M P3I Efforts	0	14799	82791	52552
MAST Demonstration Program	4865	2406	0	0
SBIR/STTR	4383	0	0	0
Internal Reprogramming	3413	0	0	0
Performance Support System (NG) - For Apache program	1000	0	0	0
<b>Totals</b>	<b>155003</b>	<b>108377</b>	<b>114988</b>	<b>59225</b>

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

February 2005

BUDGET ACTIVITY  
7 - Operational system development

PE NUMBER AND TITLE  
0203744A - Aircraft Modifications/Product  
Improvement Program

PROJECT  
504

<b>B. Other Program Funding Summary</b>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
A05002 BLACK HAWK (MYP)	254196	454454	584702	846200	1132091	1084630	1088557	1135938	Continuing	Continuing

**C. Acquisition Strategy:** The UH-60 BLACK HAWK will serve as the Army's utility helicopter in the Future Force. The Army has revised the acquisition strategy for the UH-60M. Since the previous submission, the Army has decided to procure new UH-60M helicopters in lieu of Recap/Upgrade. The result of this decision is a significant increase in funding for SSN A05002 (UH-60 BLACK HAWK MYP), with a resulting decrease in funding to SSN AA0492 (UH-60 BLACK HAWK Mods). This program addresses current UH-60 fleet aging problems such as decreasing operational readiness (OR) and increasing O&S 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 (FY01-07), Production/Readiness Phase (FY05-30), and Operations and Sustainment Phase (FY06-FY49).

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>504</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Design, Integration & Qualification Contract	SS/CPAF	Sikorsky Aircraft Co 30 Moffitt Street Stratford, CT 06601	293153	58374	1-2Q	19386	1-2Q	734	1-2Q	0	371647	0
b . Development Support - Organic	MIPR	UH PMO/matrix	8746	2849	1-3Q	3102	1-3Q	767	1-3Q	0	15464	0
c . Development Support - Contractor	C/FP	Support Contractors	11468	500	1-3Q	526	1-3Q	482	1-3Q	0	12976	0
d . IMD-HUMS Development Support - Organic	MIPR	Aviation Applied Tech Directorate (AATD) Matrix	5471	1464	3Q	0		0		0	6935	0
e . IMD-HUMS Development Support - Contractor	C/FP	Goodrich, 100 Panton Road, Vergennes, Vermont 05491	27985	18656	3Q	0		0		0	46641	0
f . MAST Development Support - Organic	MIPR'S	Other Government Agency Support	334	1160	1Q	0		0		0	1494	0
g . MAST Development Support - Contractor	MIPR	Smith Industries Clear Water , FLI	4531	1246	2Q	0		0		0	5777	0
h . UH-60M P3I Efforts - Organic	MIPR		0	5503	2Q	11318	1-2Q	5719	1-2Q	0	22540	0

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>504</b>		
I. Product Development (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
i . UH-60M P3I Efforts - Contractor	CPAF		0	9296	2Q	71473	1-3Q	46833	1-2Q	0	127602	0
j . Future Utility Rotorcraft (FUR) - Organic			0	0		0		0		5157	5157	0
k . Future Utility Rotorcraft (FUR) - Contractor			0	0		0		0		40358	40358	0
l . Internal Reprogramming - Payback for FY03			3413	0		0		0		0	3413	0
m . HALS			0	1905	3Q	0		0		0	1905	0
n . Performance Support System - NG (Apache)	MIPR	Other Government Agency Support	1000	0		0		0		0	1000	0
Subtotal:			356101	100953		105805		54535		45515	662909	0
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. CAAS, FBW, and FADEC are all part of a seperate P3I program for the UH-60M.												

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>504</b>		
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Cost Analysis Support	MIPR	AMCOM Matrix	521	106	1-3Q	149	1-3Q	137	1-3Q	0	913	0
b . Logistics Analysis Support - Organic	MIPR	AMCOM Matrix	0	149	1-3Q	394	1-3Q	362	1-3Q	0	905	0
c . Logistics Analysis Support - Support Contractor	MIPR	Support Contractor	0	262	1-3Q	693	1-3Q	635	1-3Q	0	1590	0
Subtotal:			521	517		1236		1134		0	3408	0
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Test Planning, Test and Evaluation	MIPR	Various Activities	6451	4691	1-3Q	5543	1-3Q	848	1-3Q	0	17533	0
b . Test Planning, Test and Evaluation	MIPR	Various Activities	0	100	1-3Q	131	1-3Q	121	1-3Q	0	352	0
Subtotal:			6451	4791		5674		969		0	17885	0

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>504</b>		
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . PM Support - Organic	MIPR	UH PMO/matrix	4681	1413	1-4Q	1351	1-4Q	1745	1-4Q	0	9190	0
b . PM Support - Contract	C/FP	O2K Contractor	1135	703	1-3Q	922	1-3Q	842	1-3Q	0	3602	0
c . SIBR/STTR			4383	0		0		0		0	4383	0
Subtotal:			10199	2116		2273		2587		0	17175	0
Project Total Cost:			373272	108377		114988		59225		45515	701377	0

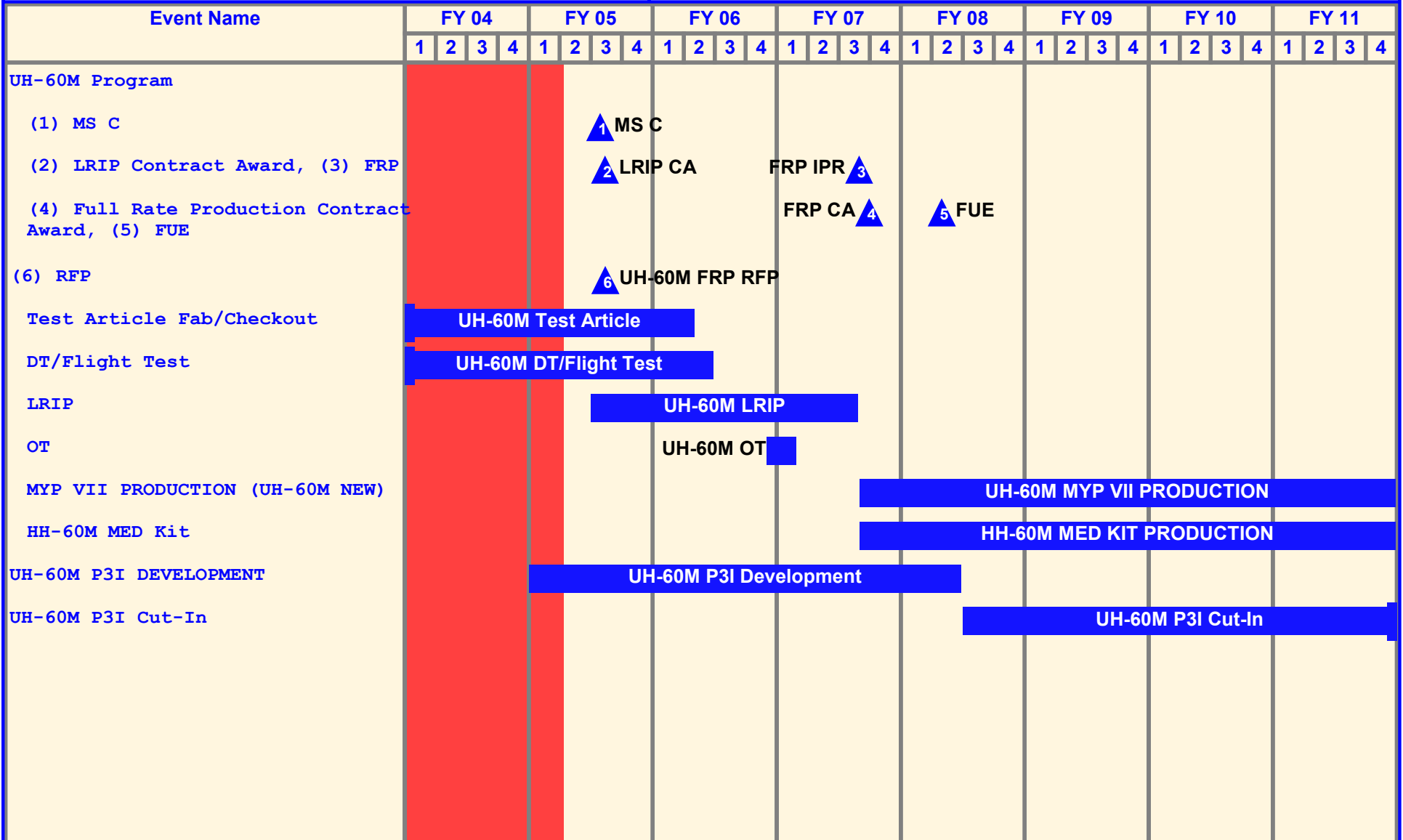
# Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY  
7 - Operational system development

PE NUMBER AND TITLE  
0203744A - Aircraft Modifications/Product  
Improvement Program

PROJECT  
504



Schedule Detail (R4a Exhibit)							February 2005	
BUDGET ACTIVITY <b>7 - Operational system development</b>				PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>			PROJECT <b>504</b>	
<u>Schedule Detail</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
IMD-HUMS: demonstration program	1-4Q	1-4Q						
Test article delivery for testing (UH-60M)	1Q	2Q	1-2Q					
OT preparation and conduct			1-4Q	1Q				
HALS		3-4Q						
Closeout of Integration and Qualification				2Q				
Milestone C (UH-60M)		3Q						
LRIP Lot 1 Contract Award (UH-60M)		3Q						
LRIP Lot 2 Contract Award (UH-60M)			2Q					
Full Rate Production IPR (UH-60M)				3Q				
First Unit Equipped (FUE) (UH-60M)					2Q			
Mast Demonstration Program	2-4Q	1-4Q						
Performance Support System	2-4Q							
UH-60M Low Rate Initial Production RFP	2Q							
UH-60M Full Rate Production RFP		3Q						

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>							<b>February 2005</b>				
BUDGET ACTIVITY <b>7 - Operational system development</b>				PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>				PROJECT <b>D12</b>			
COST (In Thousands)		FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
D12	LONGBOW APACHE OPERATIONAL SYSTEMS DEVELOP	1664	0	0	0	44741	70549	152320	243475	0	512749
<p><b><u>A. Mission Description and Budget Item Justification:</u></b> A FY04 Congressional add funded an Army Distributed Mission Training System (ADMTS) that provided US Army and USAF attack aircraft with a training capability to develop the skills needed to conduct coordinated attacks on enemy targets. This initiative is known as the Joint Air Attack Team (JAAT). The ADMTS will utilize the existing USAF DMT network and Army and Air Force flight simulators in a synthetic environment. This effort introduces the AH-64A Combat Mission Simulator (CMS) as the first rotary-wing member of the ADMTS and identifies the database constraints that have to be overcome for AH-64A pilots to participate in JAAT training scenarios. The follow-on FY 05 funding will enable the introduction of a second AH-64A CMS and a UH-60 simulator to the network and provide for the investigation of sample scenarios with a USAF A-10 simulator.</p>											
<b><u>Accomplishments/Planned Program</u></b>							FY 2004	FY 2005	FY 2006	FY 2007	
Contract modifications for ADMTS by PEO STRI (PM CATT)							1664	0	0	0	
<b>Totals</b>							1664	0	0	0	

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

February 2005

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0203744A - Aircraft Modifications/Product Improvement Program

PROJECT

D12

<b>B. Other Program Funding Summary</b>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
APA, SSNs: AA6606, AA6670	831292	694456	685404	822071	650782	587392	638706	611846	2193200	7715149
RDTE, 0203744A, D17	0	0	109721	122105	122236	187014	124492	105799	0	771367

**C. Acquisition Strategy:** PEO STRI (PM CATT) will manage the planned program under a revision to the Memorandum of Agreement with PM AAH which currently provides for the matrix support cell that administers the AH-64A Combat Mission Simulator (CMS) upgrade program. The effort is being contracted as a modification to the existing firm-fixed-price CMS upgrade delivery order under contract N61339-□□D-□712, or as a separate delivery order under the aforementioned contract.

<b>ARMY RDT&amp;E COST ANALYSIS(R3)</b>									<b>February 2005</b>			
<b>BUDGET ACTIVITY</b> <b>7 - Operational system development</b>					<b>PE NUMBER AND TITLE</b> <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					<b>PROJECT</b> <b>D12</b>		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . MIPR to PEO STRI (PM CATT) for Contracting	C, FFP	Northrop Grumman Space & Mission Systems	1664	1630	1Q	0		0		0	3294	3294
Subtotal:			1664	1630		0		0		0	3294	3294
Remarks: Northrop Grumman Space and Mission Systems (NGSMS), formerly TRW, Inc., Fairfax, VA, shall perform the work. NGSMS is the prime contractor for the current CMS upgrade effort.												
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

ARMY RDT&E COST ANALYSIS(R3)										February 2005		
BUDGET ACTIVITY 7 - Operational system development					PE NUMBER AND TITLE 0203744A - Aircraft Modifications/Product Improvement Program					PROJECT D12		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:												
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:												
Project Total Cost:			1664	1630		0		0		0	3294	3294

Schedule Profile (R4 Exhibit)																				February 2005																								
BUDGET ACTIVITY 7 - Operational system development										PE NUMBER AND TITLE 0203744A - Aircraft Modifications/Product Improvement Program																		PROJECT D12																
Event Name					FY 04				FY 05				FY 06				FY 07				FY 08				FY 09				FY 10				FY 11											
					1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4								
(1) ADMTS II Contract Award									1																								Army Distributed Mission Training System (ADMTS)											
(2) Draft Security Doc Complete																																												
(3) Install Enhanced Voice Comm																																												
(4) CMS Phase II Demo																																												

Schedule Detail (R4a Exhibit)						February 2005					
BUDGET ACTIVITY 7 - Operational system development				PE NUMBER AND TITLE 0203744A - Aircraft Modifications/Product Improvement Program			PROJECT D12				
<u>Schedule Detail</u>				FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Contract Award					2Q						
EAATS Security Draft Documentation Complete					3Q						
Install of enchanced dual voice communication					4Q						
CMS/JAAT Connectivity Demonstration						1Q					
This program will determine the standards that need to be updated to integrate the AH-64A CMS with the DMT network; upgrade one CMS to determine external interface requirements; and establish connectivity between the CMS and the DMT network via DMT portal and T1 lines.											

<b>ARMY RDT&amp;E BUDGET ITEM JUSTIFICATION (R2a Exhibit)</b>							<b>February 2005</b>			
<b>BUDGET ACTIVITY</b> <b>7 - Operational system development</b>				<b>PE NUMBER AND TITLE</b> <b>0203744A - Aircraft Modifications/Product Improvement Program</b>				<b>PROJECT</b> <b>D17</b>		
COST (In Thousands)	FY 2004 Actual	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	FY 2010 Estimate	FY 2011 Estimate	Cost to Complete	Total Cost
D17      APACHE BLOCK III	0	0	109721	122105	122236	187014	124492	105799	0	771367
<p><b>A. Mission Description and Budget Item Justification:</b>Project D17 funding is for the non-recurring engineering, development, and testing work associated with the planned remanufacture of 284 Apache Block I into Block III aircraft (deliveries to begin in FY10). This Block III program will provide Network-Centric capabilities for 284 Apache Longbows at a critical time as the Army transitions from the current force to the future force. Block III capability enhancements are achieved via planned technology insertions such as: Future Force (FF) Connectivity-Seamless Global Information Grid Communications (Joint Tactical Radio System (JTRS) embedded in an Open Systems Architecture (OSA)); extended range sensing; increased survivability; Cognitive Decision Aiding System (CDAS) which speeds critical battle tasks; improved aircraft performance: reduced Operations and Support (O&amp;S) cost and logistics footprint, and increased aircraft readiness. As a result of United States Army transformation, emerging FF organizational and operational structure, lessons learned from OEF and OIF, and a changing operational environment, the Modernized Apache is integral to achieving air-ground synergy during Future Force (FF) operations. The Block III Modernized Apache program upgraded system architecture will enable FF compatibility and enhanced war-fighting capability. Apache Block III Contract Award is scheduled for third quarter FY05; DD1415 has been submitted to support this requirement.</p>										
<b><u>Accomplishments/Planned Program</u></b>						<b>FY 2004</b>	<b>FY 2005</b>	<b>FY 2006</b>	<b>FY 2007</b>	
Proposal Prep						0	0	0	0	
Operational Assessments						0	0	670	766	
Joint Venture Contracts						0	0	14000	19000	
Boeing NRE Contracts						0	0	80721	87105	
NRE Program Support Activities						0	0	8300	9150	
Management Services						0	0	6030	6084	
<b>Totals</b>						0	0	109721	122105	

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

February 2005

BUDGET ACTIVITY

7 - Operational system development

PE NUMBER AND TITLE

0203744A - Aircraft Modifications/Product Improvement Program

PROJECT

D17

<b>B. Other Program Funding Summary</b>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
APA, SSN 6670, SSN 6605;	834692	689918	685405	822071	659782	587392	638706	611846	Continuing	Continuing
RDTE, 0203744A, D12	1664	0	0	0	44741	70549	152320	243475	Continuing	Continuing

**C. Acquisition Strategy:** The NRE for FY 05 will result in a Program Closeout Design Review. The NRE for FY06 – FY09 will encompass subsystem integration resulting in a Critical Design Review (CDR) and will utilize existing test aircraft, incorporate the technical insertions, and initiate appropriate qualification and flight testing. The LRIP effort will include a total quantity of 50 aircraft which will take 16 months for delivery and therefore will be two separate contractual actions (FY 09 & FY 10). These 50 LRIP aircraft are to be used for operational testing, FUE and training base fielding.

In FY 11, a contract for Apache Block III Lot 3 (60 aircraft), initiating full rate production, will be awarded with options for Lot 4 (60 aircraft), Lot 5 (60 aircraft) and Lot 6 (54 aircraft), for a total of 284 aircraft.

Interim Contractor Support is anticipated throughout LRIP to Apache Block III Lot 6 deliveries. Training device concurrency will be maintained with each technical insertion. Advanced material procurement is planned for award in FY 08 to support the LRIP deliveries in FY 10 – FY 11. All NRE 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, FY 11 and beyond. It is the Army's intent to remanufacture the balance of the Longbow fleet thru those years, which would result in a total of 500 Block III configured aircraft.

# ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY

**7 - Operational system development**

PE NUMBER AND TITLE

**0203744A - Aircraft Modifications/Product Improvement Program**

PROJECT

**D17**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Joint Venture Contract	Cost Reimb	Orlando, FL	0	0		14000	1-2Q	19000	1-2Q	53000	86000	86000
b . Boeing Contract	Cost Reimb	Mesa, AZ	0	0		80721	1-2Q	87105	1-2Q	398151	565977	565977
Subtotal:			0	0		94721		106105		451151	651977	651977

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Block III NRE Support	Various	Various Activities	0	0		8300	1-3Q	9150	1-3Q	37428	54878	54878
Subtotal:			0	0		8300		9150		37428	54878	54878

ARMY RDT&E COST ANALYSIS(R3)									February 2005			
BUDGET ACTIVITY <b>7 - Operational system development</b>					PE NUMBER AND TITLE <b>0203744A - Aircraft Modifications/Product Improvement Program</b>					PROJECT <b>D17</b>		
III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Operational Assessments, Test Integration Working Group (TWIG), TEMP, etc.	MIPR, Various	Various Activities	0	0		670	1-2Q	766	1-2Q	26817	28253	28253
Subtotal:			0	0		670		766		26817	28253	28253
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award Date	FY 2006 Cost	FY 2006 Award Date	FY 2007 Cost	FY 2007 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . Management Svcs (In-House, Travel, etc.)	Various	PMO AAH, Matrix Support, O2K	0	0		6030	1-2Q	6084	1-2Q	24235	36349	36349
Subtotal:			0	0		6030		6084		24235	36349	36349
Project Total Cost:			0	0		109721		122105		539631	771457	771457

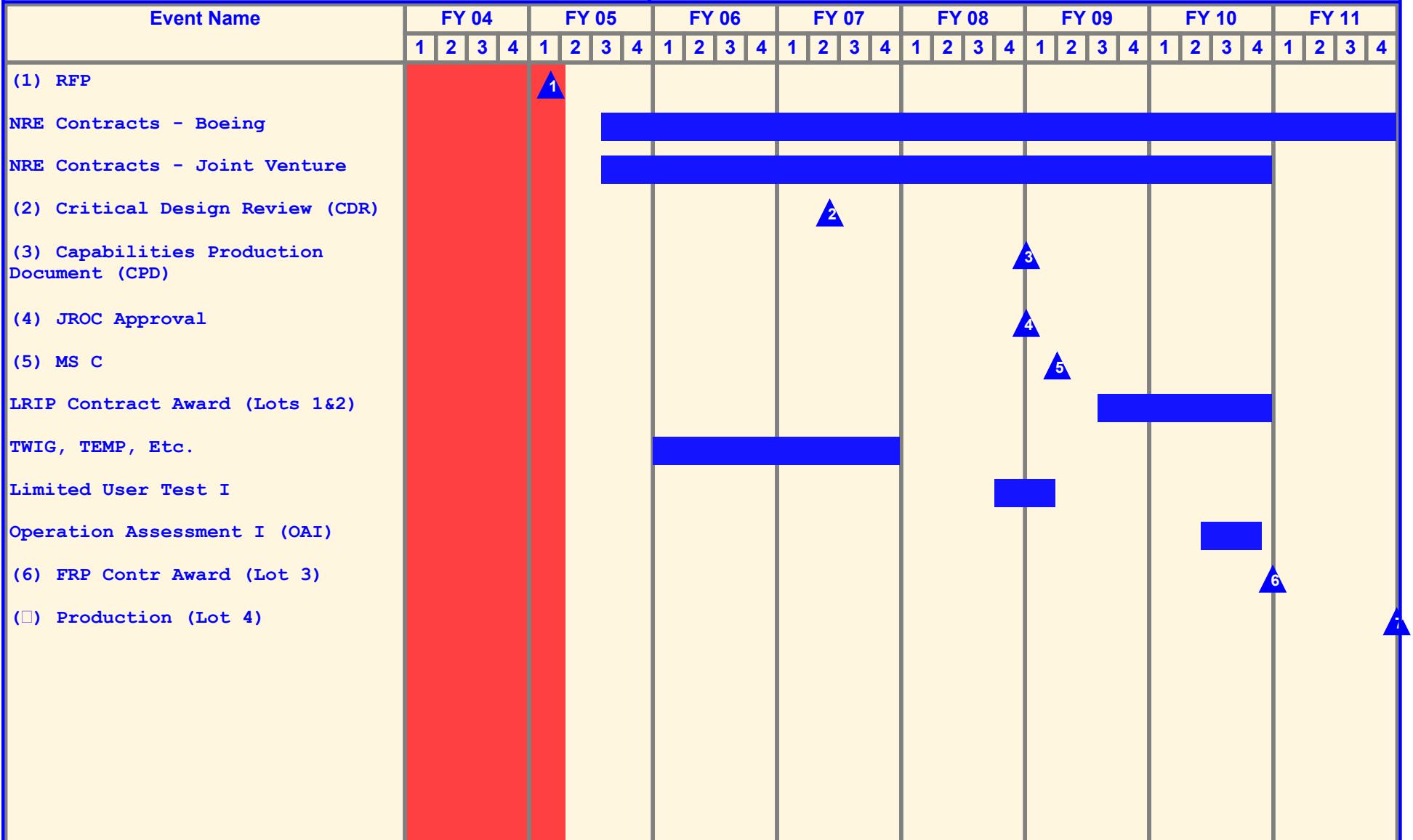
# Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY  
7 - Operational system development

PE NUMBER AND TITLE  
0203744A - Aircraft Modifications/Product  
Improvement Program

PROJECT  
D17



## Schedule Detail (R4a Exhibit)

February 2005

BUDGET ACTIVITY

**7 - Operational system development**

PE NUMBER AND TITLE

**0203744A - Aircraft Modifications/Product Improvement Program**

PROJECT

**D17**

<u>Schedule Detail</u>	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
RFP		1Q						
NRE Contract Award -- Boeing		3Q	1-2Q	1-2Q				
REU Contract Award -- Joint Venture		3Q	1-2Q	1-2Q				
Critical Design Review				2-3Q				
Capabilities Production Document (CPD)						1Q		
JROC Approval						1Q		
Milestone C						1-2Q		
TWIG, TEMP, Other Testing Activities			1-4Q	1-4Q				
LRIP Contract Awards (Lots 1 and 2)						3Q	1Q	
Limited User Test (LUT)					4Q	1Q		
Operational Assessment I (OAI)							2-3Q	
FRP Contract Award (Lot 3)								1Q