ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**

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	27974	26343	29012	21028	21046	20320	23543	30536	Continuing	0
126 FAAD C2 ED	14827	13738	15799	10114	9881	9894	11858	15612	Continuing	0
146 AIR & MSL DEFENSE PLANNING CONTROL SYS (AMC PCS)	13147	12605	13213	10914	11165	10426	11685	14924	Continuing	0

A. Mission Description and Budget Item Justification: The Air and Missile Defense Planning and Control System (AMDPCS) is an Army Objective Force System with Homeland Defense capabilities that allows for the integration of Air and Missile Defense (AMD) operations for Air Defense Artillery (ADA) Brigades at Corps and Echelons above Corps (EAC), the Army Air and Missile Defense Command (AAMDC) Headquarters, at Army, Joint, or Coalition level forces.

The Forward Area Air Defense Command, Control, and Intelligence (FAAD C2I) System provides continuously tailored situational awareness and situational understanding of the battlespace (including data on threat aircraft, cruise missiles and unmanned aerial vehicles (UAVs) to support the planning and decision process at various levels of command. The mission is to collect, digitally process and disseminate real time target cueing and tracking information, common tactical air picture, and C2I information to all Short Range Air Defense (SHORAD) weapons (Avenger, Bradley Linebacker, Manportable Air Defense System (MANPADS), joint and combined arms). Unique FAAD C2 software will provide this mission capability by integrating FAAD C2 engagement operations software with the Joint Digital Radio (JDR), Single Channel Ground and Airborne Radio System (SINCGARS), Enhanced Position Location Reporting System (EPLRS), Global Positioning System (GPS), Airborne Warning and Control System (AWACS), Sentinel and the Army Battle Command System (ABCS) architecture. Provides joint C2 interoperability and horizontal integration with PATRIOT, THAAD, MEADS, JLENS and SHORAD weapon systems by fusing sensor data to create a scalable and filterable single integrated air picture (SIAP) and common operating picture (COP) at Army divisions and below. System software will provide target data and engagement commands/status to the Surface Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) air defense system. A small portion of RDTE funding is dedicated to SLAMRAAM C2 threshold requirements. FAAD C2 is the first system to digitize for Army Transformation in the First Digitized Division (FDD), III (Digitized) Corps, the Joint Contingency Force (JCF) and the STRYKER Brigade Combat Teams (SBCTs). The FAAD C2 netted and distributed system architecture has been briefed as the basis for a potential BM/C4I Future Combat Ssytem (FCS).

AMDPCS is the backbone of Army Air Defense, operating through the Battle Management/Command, Control, Communications, Computers, and Intelligence (BM/C4I), and the common tactical and operational air picture, (2) Air Defense System Integrator (ADSI), a communications data link processor and display system, provides real time joint airspace situational awareness and fire direction Command and Control (C2) for AMD, and (3) shelter configurations using computer hardware and tactical communications equipment (e.g., JTIDS 2M Terminals, Commanders Tactical Terminal). The AMDPCS enables Active, Passive and Attack Operations coordination and a correlated single integrated air picture (SIAP) to Army AMD and Joint Forces. The AMDPCS provides the Army Battle Command System (ABCS) architecture and the Army AMD Task Forces (AMDTF) with Joint BM/C4I capability and the Army component of

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Exhibit R-2
Budget Item Justification

BUDGET ACTIVITY	PE NUMBER AND TITLE
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**

interoperabile Joint Theater Air and Missile Defense (JTAMD) BM/C4I.

In addition, the AMDWS supports the Surface Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) air defense system by providing an automated defense planning capability for deployed units.

B. Program Change Summary	FY 2005	FY 2006	FY 2007
Previous President's Budget (FY 2005)	27376	29948	21308
Current Budget (FY 2006/2007 PB)	26343	29012	21028
Total Adjustments	-1033	-936	-280
Net of Program/Database Changes			
Congressional Program Reductions	-345		
Congressional Rescissions			
Congressional Increases			
Reprogrammings			
SBIR/STTR Transfer	-688		
Adjustments to Budget Years		-936	-280

FY06/07 funding moved to higher Army requirements

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Exhibit R-2
Budget Item Justification

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**	**126**

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
126 FAAD C2 ED	14827	13738	15799	10114	9881	9894	11858	15612	Continuing	0

A. Mission Description and Budget Item Justification: The Forward Area Air Defense Command and Control (FAAD C2) System provides continuously tailored situational awareness and situational understanding of the battlespace (including data on threat aircraft, cruise missiles and unmanned aerial vehicles) to support the air defense planning and decision process at various levels of command. The FAAD C2 mission is to collect, digitally process and disseminate real time target cueing and tracking information, the common tactical air picture, and C2 information to all Maneuver Air and Missile Defense (MAMD) weapons (e.g. - Avenger, Man-Portable Air Defense System, joint and combined arms systems) and to the Air Defense Airspace Management (ADAM) Cells that are being fielded to Brigade Combat Teams (BCTs), UAs, and UExs. Dynamic FAAD C2 software provides this mission capability by integrating FAAD C2 engagement operations software with the Multifunctional Information Distribution System (MIDS), the Joint Tactical Terminal (JTT), the Global Positioning System (GPS), the Airborne Warning and Control Systems (AWACS), the evolving Joint Tactical Radio System (JTRS). FAAD C2 inputs data to the Army Battle Command System (ABCS) via the Air and Missile Defense Workstation (AMDWS), and is expanding linkage to the Net-centric architecture. By integrating with ABCS, FAAD C2 is able to provide the detailed local air picture to higher echelon Army Air Defense, joint and interagency forces. The FAAD C2 system provides joint C2 interoperability and horizontal integration with PATRIOT, THAAD, MEADS, and JLENS by fusing sensor data to create a scalable and filterable single integrated air picture (SIAP) for joint services and the common tactical air picture at the UEx and UA. The FAAD C2 software is also able to provide target data and engagement commands/status to the Surface Launched Advanced Medium Range Air-to-Air Missile (SLAMRAAM) air defense system. The netted and distributed system architecture fielded with FAAD has been briefed as the basis for a potential BM/C4I Future Combat System (FCS). FAAD C2 also provides the interoperability link to multinational air defense forces IAW the Joint US/NATO Low Level Air Picture Interface (LLAPI).

FAAD C2 software, which has been integrated into the NORAD Architecture, is the principal Army air defense system deployed in support of the Homeland Security Program in the National Capital Region and other locations. In support of the Global War on Terrorism, FAAD C2 systems are in MAMD units and ADAM Cells deployed to Iraq and Afghanistan. These FAAD systems are critical in providing the local air picture to supported units and higher headquarters. FAAD C2 is also the integrating software that provides target track data and weapon system control for the initial Counter-Rocket, Artillery and Mortar (C-RAM) capability being deployed to Iraq in FY05.

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FAAD C2 ED

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Exhibit R-2A
Budget Item Justification

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**	**126**

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
Continue FAAD C2 Block III software development and engineering, including external Beyond Visual Range Engagements (BVRE), SINCGARS Data Looping, IFF/SIF Mode 5/S development, and SIAP Block 0 & 1 implementation. Software is being fielded to active and reserve component MAMB Battalions, to units in support of Homeland Defense, and to ADAM Cells deployed in support of OIF/OEF.	14827	8257	9528	813
Support of FAAD C2 software development for the new AMD Composite Battalions; unique software enhancements in support of Homeland Defense, and security accreditation upgrades. As a complementary Future Combat System (FCS), continue FAADC2 integration and interoperability with FCS Mission Applications. Consistent with DA and DoD Guidance, migrate FAAD C2 Engagement Operations software modules to the Joint Command and Control (JC2) Mission Capability Packages (MCPs).	0	5481	6271	3151
Initiate FAAD C2 Block IV software development and engineering, including Objective BVRE capabilities (e.g. Forward Pass, Engage on Remote), Air Battle Management Control Measures, training software upgrades, further integration and improvement for AMD Composite Battalion engagement operations and interoperability (component of Air and Space Missile Defense System of Systems.)	0	0	0	6150
Totals	14827	13738	15799	10114

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FAAD C2 ED

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Exhibit R-2A
Budget Item Justification

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**	**126**

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OPA 2, AD5050 - FAAD C2	24645	12615	26108	31655	28305	30762	32846	34903	Continuing	Continuing
Spares (BS9702) - FAAD C2	734	716	877	895	0	0	0	0	Continuing	Continuing

C. Acquisition Strategy: The acquisition strategy relies heavily on non-development items (NDI) and evolutionary software development to rapidly meet the demands of air defense battle management/command, control, communications, computers, and intelligence (BM/C4I) requirements, and to keep pace with automated information technologies. The concept of evolutionary software development is being followed and will be accomplished in Blocks I, II, III and IV. Blocks I and II have been completed. FAAD C2 Block III is currently being developed for both the Army's Active and Reserve components.

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FAAD C2 ED

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Exhibit R-2A
Budget Item Justification

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604 41A - Air Defense Command, Control and Intel - Eng

PROJECT
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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 . Northrop Grumman/TRW, BLK I	C/CPIF	Carson, CA	176461	0		0		0		0	176461	0
b . Northrop Grumman/TRW, BLK II	SS/CPIF	Carson, CA	32206	0		0		0		0	32206	0
c . Northrop Grumman/TRW, BLK III	SS/CPIF	Carson, CA	80975	9535	1Q	10963	1Q	813	1Q	Continue	102286	0
d . Northrop Grumman/TRW, BLK IV	SS/CPIF	Carson, CA	0	0		0		5794	1Q	Continue	5794	0
e . Northrop Grumman/TRW	SS/T&M	Carson, CA	7517	321	1Q	357	1Q	234	1Q	Continue	Continue	0
f . Program Management Administration	MIPR	Various	27219	2301	2Q	2637	2Q	2033	2Q	Continue	34190	0
g . Sentinel GBS	MIPR	Huntsville, AL	3791	0		0		0		0	3791	0
h . JTIDS	MIPR	Ft. Monmouth, NJ	6000	0		0		0		Continue	Continue	0
i . ABCS SE&I	MIPR	Ft Monmouth, NJ	346	0		0		0		0	346	0
j . Software Engineering	Various	Various	13799	1294	1-4Q	1523		1018		Continue	17634	0

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FAAD C2 ED

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Exhibit R-3
Cost Analysis

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**	**126**

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
Subtotal:			348314	13451		15480		9892		Continue	Continue	0

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

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 . ADATD	MIPR	Ft Bliss, TX	10166	91		100		81		Continue	Continue	0
b . RTTC	MIPR	WSMR, NM	2710	196		219		141		Continue	Continue	0
Subtotal:			12876	287		319		222		Continue	Continue	0

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FAAD C2 ED

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Exhibit R-3
Cost Analysis

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604 41A - Air Defense Command, Control and Intel - Eng

PROJECT
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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
Subtotal:			0	0		0		0		0	0	0

Remarks: Not Applicable

Project Total Cost:			361190	13738		15799		10114		Continue	Continue	0

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FAAD C2 ED

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Exhibit R-3
Cost Analysis

Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	0604 41A - Air Defense Command, Control and Intel - Eng	126

Event Name	FY 04	FY 05	FY 06	FY 0	FY 0	FY 0	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

FAAD Blk III C/A & MR

(1) UMR, (2) Materiel Release, (3) Materiel Release

- 1 UMR SBCT1
- 2 V5.2 CMR
- 3 MR V5.4

Block III Software Deliveries

(4) SW Delivery, (5) SW Delivery, (6) SW Delivery

- V5.4a SW Drop — 4
- 5 V5.4b SW Delivery
- 6 SW Delivery

Block III Test

LUT, JRF

- ETRAC LUT
- Joint Red Flag

V5.4a Test, V5.4b Test, SCT

- V5.4a Thread Test
- V5.4b Thread Test
- SCT V5.4b

(7) TRR, (8) TRR

- TRR V5.4a
- TRR V5.4b

FAAD C2 Block IV

(9) Contract Award, (10) CDR

- Blk IV C/A
- 10 CDR
- SCT V6.0 (Blk IV)

SCT

(11) Materiel Release

- 11 MR V6.0

C-RAM

C-RAM Demo

- C-RAM Demo

Legend:
C/A=Contract Award
Blk=Block
MR=Materiel Release
UMR=Urgent MR
CMR=Conditional MR
SW=Software
LUT=Limited User Test
NET=New Equipment Training

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FAAD C2 ED

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Exhibit R-4
Budget Item Justification

Schedule Detail (R4a Exhibit)

February 2005

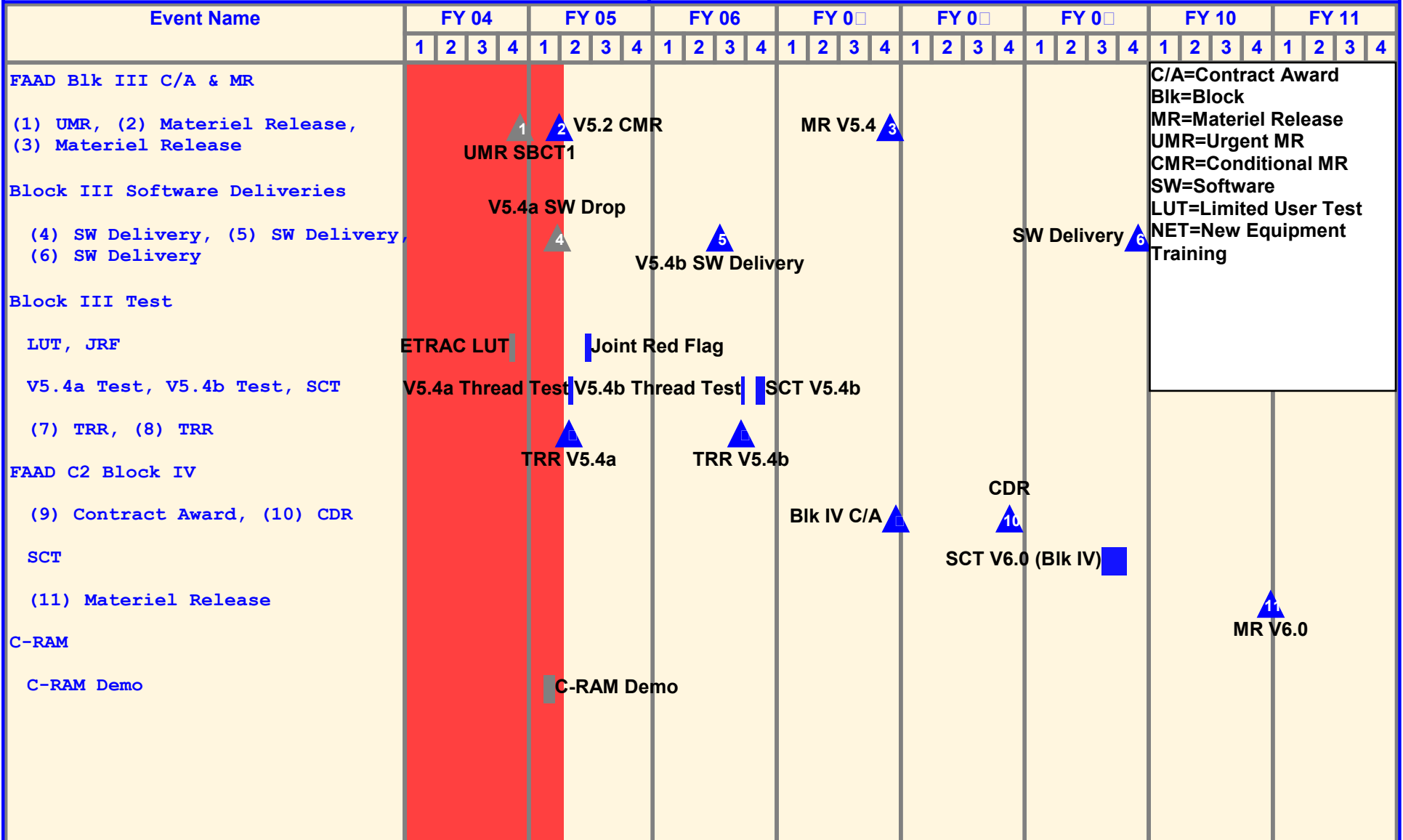| BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	0604 41A - Air Defense Command, Control and Intel - Eng	126

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Materiel Releases	4Q	1Q		4Q				1Q
Software Deliveries		2Q	3Q			4Q		
Testing	4Q	1-3Q	3Q			3Q		
Test Readiness Reviews		2Q	3Q					
Critical Design Review					4Q			
Contract Award				4Q				
C-RAM Demo/Test		1Q						

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FAAD C2 ED

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Exhibit R-4a
Budget Item Justification

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604 41A - Air Defense Command, Control and Intel - Eng**	**146**

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
146 AIR & MSL DEFENSE PLANNING CONTROL SYS (AMC PCS)	13147	12605	13213	10914	11165	10426	11685	14924	Continuing	0

A. Mission Description and Budget Item Justification: The Air and Missile Defense Planning and Control System (AMDPCS) is an Army Objective Force System with Homeland Defense capabilities that provides the integration of Air and Missile Defense (AMD) operations at Air Defense Artillery (ADA) brigades, Army Air and Missile Defense Commands (AAMDC), and Air Defense and Airspace Management (ADAM) Cells at the UExs and UAs. The development of ADAM Cells is essential in fulfilling the Army's Modularity requirement, and provides air defense interoperability with Joint, multinational and coalition forces. AMDPCS components are also vital to the transformation of ADA units and the activation of the AMD Composite Battalions. AMDPCS, which is the backbone of the Army Air Defense through the Battle Management/Command, Control, Communications, Computers, and Intelligence (BM/C4I) capability, has three major components:

(1) Air and Missile Defense Workstation (AMDWS), an automated mission (defense and staff) planning and situational awareness tool that provides the common tactical and operational air picture. AMDWS provides the Army Battle Command System (ABCS) with the air component of the Common Tactical Picture at the UA, UEx and UEy, and is the Net-centric interface for all components of the AMD force into ABCS. AMDWS also provides the interoperability link to multinational air defense forces IAW Annex C to a Joint US/NATO Air Defense Agreement;

(2) Air Defense System Integrator (ADSI), a communications data link processor and display system that provides near-real time joint airspace situational awareness and fire direction command and control for Air and Missile Defense (AMD); and

(3) Army Air Defense shelter configurations using automated data processing equipment, tactical communications (e.g. Multifunctional Information Distribution System (MIDS), Joint Tactical Terminal (JTT)), Common Hardware Systems, standard vehicles and tactical power). The AMDPCS provides AMD unit commanders and staffs, and the AMD staffs at the UExs and UAs, with the capabilities to plan missions, direct forces, and control the airspace.

In support of the Global War on Terrorism (GWOT), AMDWS and ADSIs are vital components of the AMDPCS shelter systems fielded to ADA units, the AAMDC and ADAM Cells that have deployed to Iraq and Afghanistan. In addition, these components have also been integrated into non-ADA higher headquarters such as the Coalition Forces Land Component Command (CFLCC). AMDWS is a critical component in the integration and fielding of a Counter-Rocket, Artillery and Mortar (C-RAM) capability to Operating Bases in Iraq and elsewhere. In support of Homeland Defense missions, the AMDWS has been integrated as the Force Operations component into the Joint Service/Air Force architecture. These AMDPCS systems provide the common tactical air picture, a major component of the Common Operating Picture (COP), and are critical to the development and planning of offensive and defensive operations.

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2a Exhibit)

February 2005

BUDGET ACTIVITY **5 - System Development and Demonstration**	PE NUMBER AND TITLE **0604 41A - Air Defense Command, Control and Intel - Eng**	PROJECT **146**

Accomplishments/Planned Program	FY 2004	FY 2005	FY 2006	FY 2007
Continue AMDWS development in support of ABCS 6.4 operational testing and release. Complete AMDWS software engineering and development consistent with Software Block II and III requirements, evolving the air and missile defense planning and control requirements to a net-centric environment, and fulfilling the air defense force operations capabilities identified in the AMD "1 to n" requirements list. Continue AMDWS software development and rehost onto emerging light/laptop common hardware computers. Complete integration of the PATRIOT Air Defense system Tactical Planner, and initiate development of SLAMRAAM and MEADS Tactical Planners. Continue supporting the Air Force Joint Tactical Air and Missile Defense (JTAMD), and support the evolving development of the Force Operations portion of the Air and Space Missile Defense (ASMD) System of Systems. As a complementary Future Combat System (FCS), initiate AMDWS integration and interoperability with FCS command and control system development. Begin migration of AMDWS software modules to the Joint Command and Control (JC2) Mission Capability Packages (MCPs).	13147	6948	7410	6179
Continue ADSI software engineering and development in software versions 13 and 14, including JRE 3011 implementation, development of a Common Message Format Interface Implementation, the Single Integrated Air Picture (SAIP), JTRS interfaces, and evolution to a net-centric environment.	0	1814	1873	1543
Continue software system certification testing, accreditation, and approval of Authority-to-Operate for the various software systems; continue Army and Joint integration and interoperability assessments.	0	1077	1125	889
Continue engineering, development, test and evaluation of the AMDPCS shelter subsystem Objective configurations; continue evaluation and definitization of the AMDPCS tactical communications, data processing and vehicle/shelter/power generation/environmental system block upgrade program for fielded systems.	0	2766	2805	2303
ABCS SE&I	0	0	0	0
Totals	13147	12605	13213	10914

BUDGET ACTIVITY **5 - System Development and Demonstration**	PE NUMBER AND TITLE **0604 41A - Air Defense Command, Control and Intel - Eng**	PROJECT **146**

B. Other Program Funding Summary	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	To Compl	Total Cost
OPA, AD 5070 - AMDPCS	8613	6272	3668	10934	11143	16289	65078	14392	Continuing	Continuing

C. Acquisition Strategy: The acquisition strategy relies on non-development items (NDI) and evolutionary software development to rapidly meet the demands of air defense battle management command, control, communications, computers, and intelligence (BM/C4I) requirements and to keep pace with automated information technologies. The concept of evolutionary software development will be accomplished in a series of AMDWS and ADSI Block releases and upgrades. AMDPCS is being developed for both the Army's Active and Reserve components.

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
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PROJECT
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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 . Northrop Grumman/TRW	SS/CPIF	Huntsville, AL	27557	6756	1Q	7108	1Q	5860	1Q	Continue	47281	0
b . APC, ADSI	SS/CPIF	Austin, TX	4626	379	1Q	361	1Q	274	1Q	Continue	Continue	0
c . Program Management Administration	Various	Various	14879	3954	2Q	4095	2Q	3603	2Q	Continue	26531	0
d . ABCS SE&I	MIPR	Ft Monmouth, NJ	619	0		0		0		0	619	0
e . Software Engineering	Various	Various	3321	1253	2-3Q	1392	2-3Q	1040	2-3Q	Continue	7006	0
Subtotal:			51002	12342		12956		10777		Continue	Continue	0

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

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AIR & MSL DEFENSE PLANNING CONTROL SYS (AMC PCS)

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Exhibit R-3
Cost Analysis

ARMY RDT&E COST ANALYSIS(R3)

February 2005

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604 41A - Air Defense Command, Control and Intel - Eng

PROJECT
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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 . Certification	MIPR	JITC, Ft Huachuca, AZ	432	85	1Q	81	1Q	49	1Q	Continue	Continue	0
b . Interoperability Assessment	MIPR	Various	618	178	1Q	176	1Q	88	1Q	Continue	Continue	0
Subtotal:			1050	263		257		137		Continue	Continue	0

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
Subtotal:			0	0		0		0		0	0	0

Remarks: Not Applicable

Project Total Cost:			52052	12605		13213		10914		Continue	Continue	0

0604741A (146)
AIR & MSL DEFENSE PLANNING CONTROL SYS (AMC PCS)

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Exhibit R-3
Cost Analysis

Schedule Profile (R4 Exhibit)

February 2005

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	0604 41A - Air Defense Command, Control and Intel - Eng	146

Event Name	FY 04				FY 05				FY 06				FY 0				FY 0				FY 0				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

AMDWS Materiel Release & C/As

(1) C/A, (2) C/A — Block III C/A △1, △2 Block IV C/A

(3) MR, (4) MR, (5) MR — V6.3 CMR △3, △4 △5 V6.4 CMR, V6.4 UMR

AMDWS Software Deliveries & Certs

(6) SW Build, (7) SW Drop, (8) SW Drop, (9) SW Drop — △6 V6.4 B5, SW Drop ▲, SW Drop ▲, SW Drop ▲

(10) V1.1D, (11) V6.4 B6, (12) SW Cert, (13) SW Cert — △10 V1.1D, △11 V6.4 B6, △12 Software Certification, △13 SW Certification

AMDWS Tests

UFL, 6.4 IAIC Test, 6.4 OT — 6.4 IAIC, UFL, ABCS 6.4 Op Eval

6.4 Test, JRF — 6.4 Baseline, JRF

ADSI V12

SLT, JITC Cert/SW Drop, JITC, SW Cert, SW, SW — JITC Cert, SLT, JIT 04-03, SW Certification, SW Certification, Software Release, Software Release

AMDPCS Sheltered Systems

(14) MS C — AMDPCS MS C △14

C-RAM Demo — C-RAM Demo

FCS Mission Applications (MAs) — Migration to FCS MAs

JC2 Mission Capability Packages (MCPs) — Migration to JC2 MCPs

B = Build
C/A = Contract Award
JITC = Joint Interoperability Test Command
MR = Materiel Release
CMR = Conditional MR
UMR = Urgent MR
SLT = Service Level Test
SW = Software
UFL = Ulchi Focus Lens
JRF = Joint Red Flag

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Exhibit R-4

AIR & MSL DEFENSE PLANNING CONTROL SYS (AMC PCS)
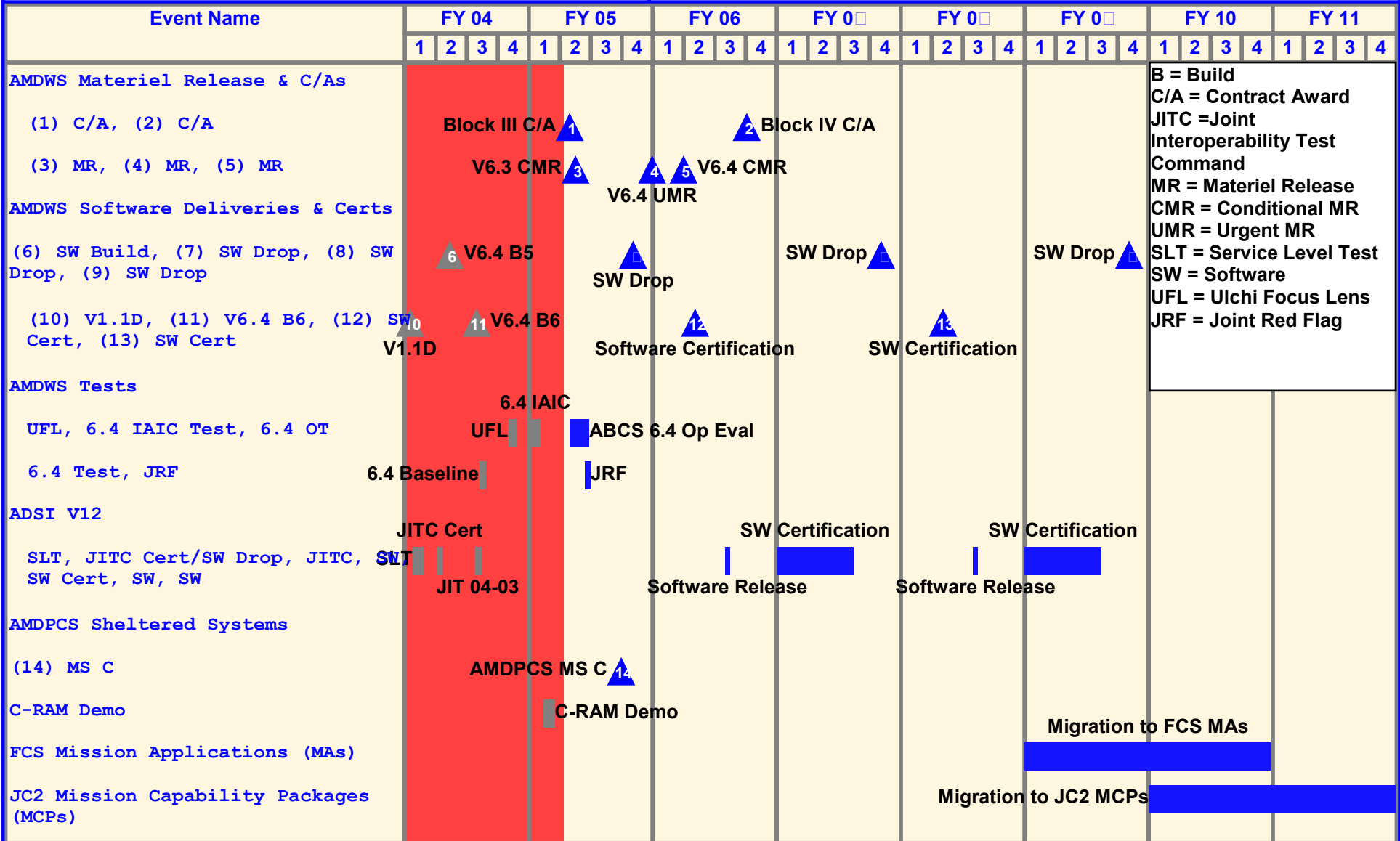644
Budget Item Justification

BUDGET ACTIVITY
5 - System Development and Demonstration

PE NUMBER AND TITLE
0604 41A - Air Defense Command, Control and Intel - Eng

PROJECT
146

Schedule Detail	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011
Materiel Release-AMDWS		2Q	1-2Q					
Software Deliveries-AMDWS	1-3Q	4Q		4Q		4Q		
Software Certification-AMDWS			2Q		2Q			
Testing-AMDWS	3-4Q	1-3Q						
Testing ADSI	1-3Q		4Q		4Q			
Software Certification-ADSI	2Q			1-3Q		1-3Q		
Software Drops-ADSI	2Q		3Q		3Q			
Contract Awards		2Q	4Q					
MS C- AMDPCS		4Q						
C-RAM		1Q						
Mission Applications						1Q	4Q	
Mission Capability Packages							1Q	4Q

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Exhibit R-4a
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