ARMY RDT&E BUDGET ITEM JUSTIFICATION (R2 Exhibit)

February 2004

BUDGET ACTIVITY	PE NUMBER AND TITLE	PROJECT
5 - System Development and Demonstration	**0604633A - AIR TRAFFIC CONTROL**	**586**

COST (In Thousands)	FY 2003 Actual	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
586 AIR TRAFFIC CONTROL	2161	2489	2088	2161	1936	1384	1406	0	15900

A. Mission Description and Budget Item Justification: This program element (PE) funds continuous efforts in the development of modernized tactical and fixed base Air Traffic Control (ATC) systems that will significantly enhance aviation safety in both the tactical and strategic ATC domains. Funded in this program element is the development of the Mobile Tower System (MOTS). The MOTS is a tactical mobile tower designed to meet the deployability and communication requirements of the current to future force. A Non-Developmental Item (NDI), MOTS will be equipped with modernized and secure avionics to ensure highly reliable and consistent tactical aircraft communications across all frequency bands and ranges to ensure compatibility with all Army, Joint, and Allied aircraft. MOTS will provide modern digital, secure, anti-jam communications, a digital recorder, basic weather information, a precision location capability, and full compatibility with all military and civilian airfields as well as tactical landing zones. The currently fielded systems, AN/TSW-7A and AN/TSQ-70A, are obsolete and require two, two and a half ton vehicles, a 15Kw generator, and a support trailer to fully operate the system. The system is not deployable on any aircraft smaller than a C-5, does not meet communications requirements across the operational spectrum, and is very difficult to maintain because parts are no longer manufactured for the system. MOTS is an effective risk management tool.
Product improvements include the Tactical Terminal Control System (TTCS) and the Air Traffic Navigation, Integration, and Coordination System (ATNAVICS)/ATC Equipment. The TTCS will be improved with modernized equipment that will provide additional capability and improve performance of the overall system. The TTCS will provide enhanced Air Traffic Services (ATS) communications support to aviation assets conducting reconnaissance, maneuver, medical evacuation, logistics, and intelligence operations across the battlefield. The ATNAVICS will be upgraded with a capability to interface with other ATC equipment. The ATC equipment will have the capability to display near-real-time Situational Awareness (SA) of aircraft that ATNAVICS will provide. This capability will allow the ATC community to share and create one ATC common picture. These systems support the Current-to-Future transition path of the Transformation Campaign Plan (TCP).

Accomplishments/Planned Program	FY 2003	FY 2004	FY 2005
Program Support	224	330	347
MOTS Prototype Development	1937	1164	0
TTCS P3I Development	0	935	419
TTCS P3I Testing	0	0	600
ATNAVICS/ATC Interface	0	0	722
Small Business Innovative Research/Small Business Technology Transfer	0	60	0
Totals	2161	2489	2088

B. Program Change Summary	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2004)	2199	2514	2596
Current Budget (FY 2005 PB)	2161	2489	2088
Total Adjustments	-38	-25	-508
Congressional program reductions		-23	
Congressional rescissions	-75		
Congressional increases			
Reprogrammings	89	-2	
SBIR/STTR Transfer	-52		
Adjustments to Budget Years			-508

FY 05: Funds realigned ($508k) to higher priority requirements.

C. Other Program Funding Summary	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	ToCompl	TotalCost
APA AA0050 - Air Traffic Control	63292	59518	59449	52328	62784	71640	62404	Continue	Continue

D. Acquisition Strategy: Explore new technology initiatives for the development of tactical ATC equipment, ensure complete integration of tactical ATC equipment with the National Airspace System (NAS), and integrate new technology into existing systems.

ARMY RDT&E COST ANALYSIS(R3)

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I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . MOTS	MIPR	Prototype Integration Facility (PIF), Redstone Arsenal, AL	3502	1733	1-2Q	0		0		0	5235	4472
b . TTCS P3I	TBS	TBS	0	0		995	2-3Q	419	1-2Q	0	1414	1354
c . ATNAVICS/ATC INTERFACE	TBS	TBS	0	0		0		722	2-3Q	Continue	Continue	Continue
d . IN-HOUSE SUPPORT		PM ATC	0	114	1-4Q	204	1-4Q	244	1-4Q	Continue	Continue	Continue
Subtotal:			3502	1847		1199		1385		Continue	Continue	Continue

II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
Subtotal:			0	0		0		0		0	0	0

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . MOTS	MIPR	REDSTONE TECHNICAL TEST CTR (RTTC), REDSTONE ARSENAL, AL	298	204	3Q	1164	2Q	0		0	1666	1666
b . TTCS TESTING	TBS	TBS	0	0		0		600	3Q	0	600	600
Subtotal:			298	204		1164		600		0	2266	2266

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2003 Cost	FY 2003 Award Date	FY 2004 Cost	FY 2004 Award Date	FY 2005 Cost	FY 2005 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . ATNAVICS		PM ATC	1125	0		0		0		0	1125	1125
b . MOTS		PM ATC	233	110	1-4Q	63	1-4Q	0		0	406	406
c . TTCS P3I		PM ATC	0	0		63	1-4Q	52	1-4Q	0	115	115
d . ATNAVICS/ATC INTERFACE		PM ATC	0	0		0		51	1-4Q	Continue	Continue	Continue
Subtotal:			1358	110		126		103		Continue	Continue	Continue
Project Total Cost:			5158	2161		2489		2088		Continue	Continue	Continue

Schedule Profile (R4 Exhibit)

February 2004

BUDGET ACTIVITY
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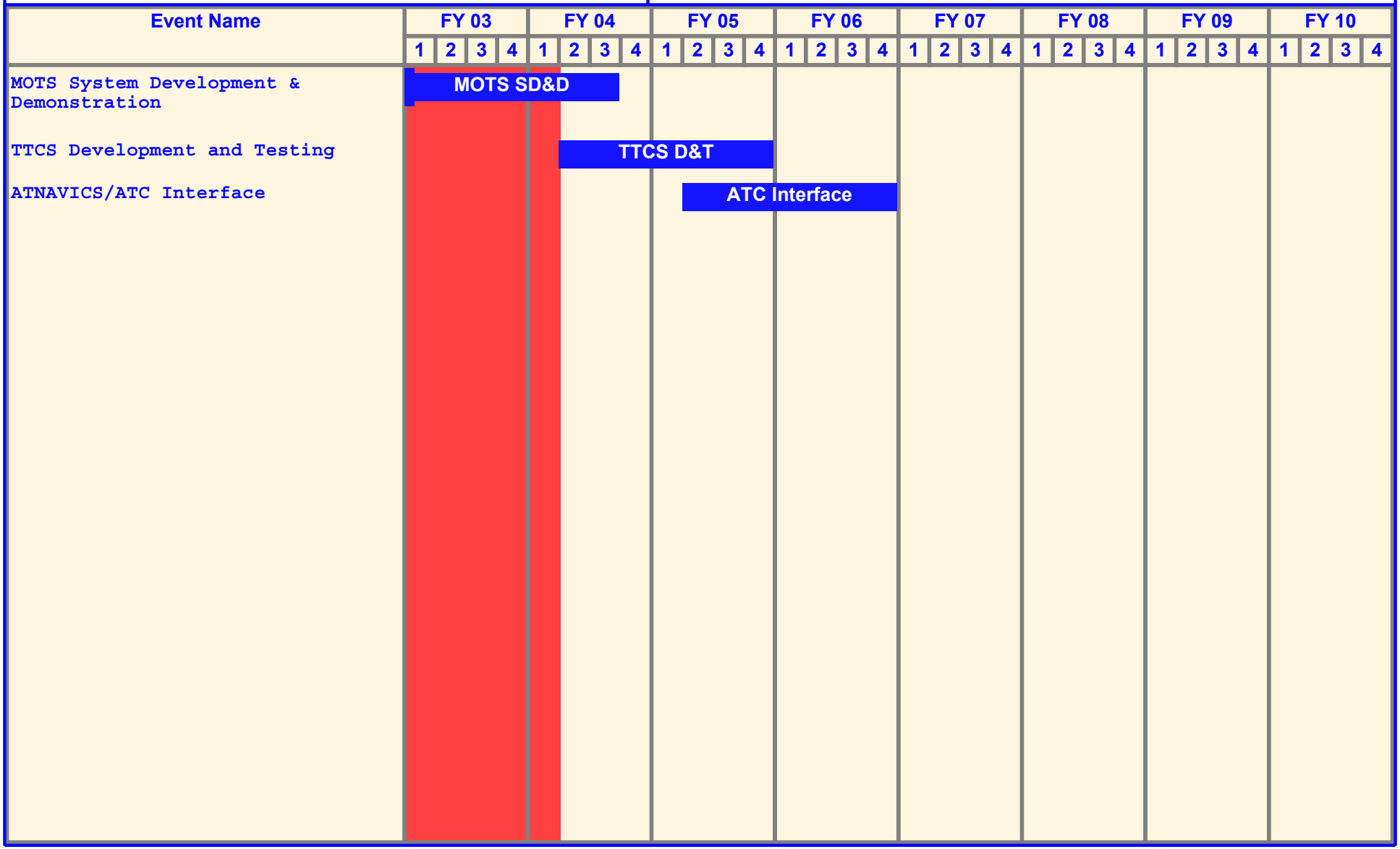

Schedule Detail (R4a Exhibit)

February 2004

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Schedule Detail	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
MOTS Prototype Development	1-4Q						
MOTS Developmental Testing	3-4Q	1-3Q					
TTCS P3I Development		2-4Q	1-4Q				
TTCS P3I Testing			3-4Q				
ATNAVICS/ATC Interface			2-4Q	1-4Q			