	ARMY RDT&E BUDGET IT	]	February 2006							
	ET ACTIVITY stem Development and Demonstration		PE NUMBER A <b>0604870A</b> •		Arms Cont	rol Monito	ring Senso	r Network		JECT <b>1</b>
	COST (In Thousands)	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
SE1	NACT SENSOR ENGINEERING	0	0	7428	0	0	0	0	0	7428

A. Mission Description and Budget Item Justification: This project provides Research, Development, Testing & Evaluation (RDT&E) to meet technology requirements in support of implementation, compliance, monitoring and inspection for existing and emerging nuclear arms control activities and dual use technology for missile defense integration activities. The project addresses requirements validated by the Office of the Under Secretary of Defense, Acquisition, Technology & Logistics (OUSD AT&L). This project conforms to the administration's research and development priorities as related to Weapons of Mass Destruction (WMD) arms control and disarmament. Technical assessments are made to provide the basis for sound project development, evaluate existing programs and provide the data required to make compliance judgments and support US policy, decision-makers and negotiating teams. Technology developments and system improvement projects are conducted to ensure that capabilities for monitoring systems are available when required.

Primary emphasis is on improved sensor capabilities and improved detection and assessment capabilities against a wide range of threat origins.

The program includes development of equipment and procedures for data exchanges, inspections and monitoring capability and analysis. The technologies and procedures developed in the arms control technology program provide an invaluable source of information on equipment and procedures that is extensively used by US and international agencies. This project also supports the warfighting capability area of combating Weapons of Mass Destruction (WMD).

The Department of Defense transferred the Nuclear Arms Control Technology Program from the Defense Threat Reduction Agency (DTRA) to the Army under PBD 289 to be executed by the US Army Space and Missile Defense Command. For FY04 the RDT&E funding request was placed in PE 0603782A Warfighter Information Network-Tactical-Dem/Val under Project F98 Nuclear Arms Control Tech-Sensor & Network Monitoring. For FY05 and FY06 the funding request was placed in PE 0604805A Command, Control, Communications Systems-Eng Dev under Project F99 Nuclear Arms Control Technology-Sensor Network Monitoring. Congress directed the Secretary of Defense to create a stand alone PE for this effort - not a new start. PE 0604870A is the new PE.

Accomplishments/Planned Program	FY 2005	FY 2006	FY 2007
Conduct analyses as required to support the OSD treaty manager.	0	0	450
Continue development of a prototype sensor.	0	0	1400
Continue development of radionuclide particle and noble gas detectors	0	0	200
Continue Information management systems enhancements	0	0	1300
Continue the R&D support system	0	0	600
Continue on-location research of calibration for infrasound events	0	0	128
Continue development of techniques to identify signals from sensor systems	0	0	1900
Continue development of nuclear detection and measurement systems	0	0	1450
Total	0	0	7428

0604870A NACT SENSOR ENGINEERING Item No. 126 Page 1 of 6

Exhibit R-2 Budget Item Justification

BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604870A - Nuclear Arms Control Monitoring Sensor N								
B. Program Change Summary	FY 2005	FY 2006	FY 2007							
Previous President's Budget (FY 2006)	0	0	0							
Current BES/President's Budget (FY 2007)	0	0	7428							
Total Adjustments	0	0	7428							
Congressional Program Reductions										
Congressional Rescissions										
Congressional Increases										
Reprogrammings										
SBIR/STTR Transfer										
Adjustments to Budget Years			7428							

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

ARMY RDT&E COST ANALYSIS (R3)										February 2006						
BUDGET ACTIVITY			PE NUMBE	ER AND TI	ΓLE			I			PROJE	СТ				
5 - System Development a	nd Demons	stration	0604870	A - Nucl	ear Arm	s Contro	l Monito	ring Sen	sor Netv	vork	SE1					
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				
Product Development	Various	MS, HI	0	0		0		1731	1-3Q	0	1731	0				
Subtota	al:		0	0		0		1731		0	1731	0				
II. Support Costs	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				
Monitoring Sensor Systems, Program Data Analysis, Verification Systems Concept Demo	Various	SAIC, General Dynamics, VA	0	0		0		2697	1-4Q	0	2697	0				
Support Contracts & Government Support	Various	FL, NM, VA, AL	0	0		0		1500	1-4Q	0	1500	0				
SMDC Support	Various	Huntsville, AL	0	0		0		500	1-4Q	0	500	0				
Subtota	al:		0	0		0		4697		0	4697	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				
Test and Evaluation	Various	Huntsville, AL	0	0		0		500	2-3Q	0	500	0				
Subtota	al:		0	0		0		500		0	500	0				
							ı									
IV. Management Services	Contract Method &	Performing Activity & Location	Total PYs Cost	FY 2005 Cost	FY 2005 Award	FY 2006 Cost	FY 2006 Award	FY 2007 Cost	FY 2007 Award	Cost To Complete	Total Cost	Value of				
IV. Management Services SMDC Support												Target Value of Contract				

0604870A NACT SENSOR ENGINEERING Item No. 126 Page 3 of 6 873

Exhibit R-3 ARMY RDT&E COST ANALYSIS

ARMY RDT&E COST ANALY		February 2006							
BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER A		itoring Sensor N	PROJECT SE1					
Subtotal:	0	0	0	500	0	500			
Project Total Cost:	0	0	0	7428	0	7428			

Schedule Profile (R4 Exhibit)											Feb	rua	ry 20	06					
BUDGET ACTIVITY		PE NUMB															ROJE	СТ	
5 - System Development and Demonstration		0604870	)A -	Nucle	ar A	rms Con	trol	Mo	nito	ring	g Sen	sor I	Net	work		2	E1		
Event Name	<b>—</b>	FY 05		FY 06		FY 07	4		Y 08		-	Y 09		<del></del>	FY 1		-	Y 11	
Conduct exp & calibrations for seis, hydroacoustic, infrasound, & radionuclide	1	2 3 4	1	2 3	4	1 2 3	4	1 2	2 3	4	1   2	2   3	4	1	2 3	3 4	1 2	2   3	<b>i</b> 4
Baseline system software & analytical tools for event det & dentification																			
Develop a prototype sensor																			
Information Management Systems enhancements																			

## Schedule Detail (R4a Exhibit) BUDGET ACTIVITY 5 - System Development and Demonstration PE NUMBER AND TITLE 0604870A - Nuclear Arms Control Monitoring Sensor Network PROJECT SE1

Schedule Detail	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>	<u>FY 2010</u>	<u>FY 2011</u>
Conduct experiments and calibrations for seismic, hydroacoustic, infrasound, and radionuclide sensor			1-4Q				
Baseline system software and analytical tools for event detection and identification			1-4Q				
Develop a prototype sensor			1-4Q				
Information management systems enhancements			1-4Q				