

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							February 2003				
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)							
COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost		59668	57255	19695	16	0	0	0	0	0	193820
909	TACTICAL SURVEILLANCE SYSTEMS-ENG DEV (TIARA)	0	1770	0	0	0	0	0	0	0	44176
957	TACTICAL EXPLOITATION SYSTEM (TES)/DCGS-A (TIARA)	59668	55485	19695	16	0	0	0	0	0	149644
<p><u>A. Mission Description and Budget Item Justification:</u>This project supports the engineering development/enhancement of the Tactical Exploitation System (TES), Division TES (DTES), TES Light Variant (TES-L), Distributed Common Ground Station-Army (DCGS-A). TES and DCGS-A will incorporate the standards and protocols dictated by the Common Imagery Ground/Surface System (CIG/SS) program. TES brings all of the Legacy Advanced Electronic Processing Dissemination System (AEPDS), Modernized Imagery Exploitation System (MIES) and Enhanced Tactical Radar Correlator (ETRAC) into an integrated common baseline that is downsized, modular and scaleable to meet a wide range of contingency requirements. TES interfaces with numerous satellite and aircraft tactical sensors and processes to exploit their data, imagery, and information. TES provides the commander with maximum flexibility to satisfy intelligence needs under a wide range of operational scenarios. TES operators can perform multiple imagery Intelligence (IMINT), Signal Intelligence (SIGINT), cross-intelligence, or dissemination functions from any workstation. TES provides extensive communication capabilities, including UHF, S,X,C and Ku radio frequency band communications. TES interfaces with and serves as the preprocessor for the All Source Analysis (ASAS), Common Ground Station (CGS), Guardrail Information Node (GRIFN), and the Digital Topographical Support System (DTSS). TENCAP Common Baseline addresses common subsystems, planned improvements, key activities and ongoing/planned initiatives determined to have potential application to multiple TENCAP systems. DCGS-A will incorporate the capabilities of TES, Guardrail/Information Node (GR/IFN), and Common Ground Station (CGS). TES and DCGS-A will incorporate emerging theater and national Intelligence, Surveillance, and Reconnaissance (ISR) capabilities. Specific details for TES are provided in the Tactical Intelligence and Related Activities (TIARA) Congressional Budget Justification Book and the Joint Military Intelligence Programs (JMIP) Congressional Budget Justification Book. These systems support the Legacy to Objective transition path of the Transformation Campaign Plan. This program is designated as a DOD Space Program.</p>											

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<u>B. Program Change Summary</u>	FY 2002	FY 2003	FY 2004	FY 2005
Previous President's Budget (FY 2003)	68205	56556	60183	49024
Current Budget (FY 2004/2005 PB)	59668	57255	19695	16
Total Adjustments	-8537	699	-40488	-49008
Congressional program reductions	-8000			
Congressional rescissions	-38			
Congressional increases		639		
Reprogrammings	-499	60		
SBIR/STTR Transfer				
Adjustments to Budget Years			-40488	-49008

Program Change Summary:

FY 2002 Funds realigned (\$8.0M) to Tactical Exploitation System (TES) procurement Congressional directed.

FY 2003 Received Congressional plus up of \$1.8M for Broadband Intelligence Training System (BITS)

FY 2004 Funds realigned (\$40,157M) to higher priority requirements.

FY 2005 Funds realigned (\$49,008M) to higher priority requirements.

Schedule Profile Detail (R-4a Exhibit)		February 2003
BUDGET ACTIVITY 5 - System Development and Demonstration	PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)	PROJECT 0604766A
<p><u>Schedule Detail:</u> Not applicable for this item.</p>		

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)							February 2003				
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)				PROJECT 957			
COST (In Thousands)		FY 2002 Actual	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	FY 2008 Estimate	FY 2009 Estimate	Cost to Complete	Total Cost
957	TACTICAL EXPLOITATION SYSTEM (TES)/DCGS-A (TIARA)	59668	55485	19695	16	0	0	0	0	0	149644
<p><u>A. Mission Description and Budget Item Justification:</u>This project supports the engineering development/enhancement of the Tactical Exploitation System (TES), Division TES (DTES), and the related Distributed Common Ground Station-Army (DCGS-A) capability. TES brings a common inter-service capability together for the first time, enabling theater commanders to better use assigned ISR assets in support operations. TES interfaces with numerous satellite and aircraft tactical sensors and processes to exploit their data, imagery, and information. TES provides commanders with maximum flexibility to satisfy intelligence needs under a wide range of operational scenarios. TES operators can perform multiple imagery intelligence (IMINT), signal intelligence (SIGINT), cross-intelligence, or dissemination functions from any workstation. TES provides extensive communication capabilities, including UHF, S,X,C and Ku radio frequency band communications. TES interfaces with and serves as the preprocessor for the All Source Analysis (ASAS), Common Ground Station (CGS), and the Digital Topographical Support System (DTSS). TES incorporates the standards and protocols dictated by the Common Imagery Ground/Surface System (CIG/SS) program. TES brings all of the existing and emerging capabilities of the Advanced Electronic Processing Dissemination System (AEPDS), Modernized Imagery Exploitation System (MIES) and Enhanced Tactical Radar Correlator (ETRAC) into an integrated common baseline that is downsized, modular and scaleable to meet a wide range of contingency requirements. DCGS-A should incorporate the capabilities of TES, Guardrail/Information Node (GR/IFN), and Common Ground Station (CGS). TES and DCGS-A should to continue to incorporate emerging theater and national intelligence, surveillance, and reconnaissance (ISR) capabilities. These systems support the Legacy to Objective transition path of the Transformation Campaign Plan. CIG/SS portion of TES are funded under 0305208A. Specific details are provided in the Tactical Intelligence and Related Activities (TIARA) Congressional Budget Justification Book and the Joint Military Intelligence Programs (JMIP) Congressional Budget Justification Book.</p> <p>ASPO program management support costs for these efforts are funded under PE 0603766 Project 907 in FY02 and out.</p> <p>ASPO was provided Defense Emergency Response Fund (DERF) supplemental funding as a non-add, for FY02 in the amount of \$6.0M to improve and procure 400 Grenadier BRAT Blue Force Tracking systems for fielding to units directly supporting Operation Enduring Freedom.</p>											

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)			February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration		PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)			PROJECT 957	
Accomplishments/Planned Program		FY 2002	FY 2003	FY 2004	FY 2005	
Completed engineering development of TES #3 Forward and Main, including integration of existing reusable components (i.e. MIDAS, DE, CIP, and MIST) and the purchase and integration of COTs/GOTs GFE. This effort was funded under Project 909 in FY 02.		9572	0	0	0	
Initiated engineering development of TES #5, including integration of existing reusable components (i.e. MIDAS) and the purchase and integration of COTs/GOTs GFE. (NOTE: Post rebaselining zeroed initiative)		2691	0	0	0	
Initiated engineering development of TES #6 Forward (-), including integration of existing reusable components (i.e. MIDAS) and the purchase and integration of COTs/GOTs GFE. (NOTE: Post rebaselining zeroed initiative)		4876	0	0	0	
TES-Light variant development. (NOTE: Post rebaselining zeroed initiative.)		2306	0	0	0	
TES Forward and MAIN Interop and Upgrade Spirals. Starting in FY-04 covered under PE 0305208 Project 956.		10626	11250	0	0	
Objective Architecture Software Spirals - Development Engineering Builds.		9501	6749	0	0	
Field Motivated Fixes, Baseline Builds, and Configuration Control Board. Starting in FY 04 funding supplemented within PE 0305208, Project 956.		0	5071	5768	16	
DTES Production and Interop and Upgrade Spirals. Starting in FY-04 covered under PE 0305208 Project 956.		0	10136	0	0	
Advance Planning and Engineering for Future Requirements and Studies to include DCGS transformation, Future Combat Systems (FCS), and National Imagery projects.		0	4311	2327	0	
Continued TES/DCGS-A development through Army Topographic Engineering Center (TEC) and FFRDC (Aerospace).		3746	3346	3465	0	
System Engineering and Technical Assistance, IPT Participation across programs and Services, Roadmaps, and DCGS Transformation Plans.		0	7053	6234	0	
Ensures Interoperability across the Services and other programs for evolving Sensors, data links, platform integration, COMMS, and Multilevel Security Engineering Efforts.		11850	7130	1901	0	
SAIP prototype single vehicle development, fielding, integration, and evaluation. Starting in FY-03 shared coverage with PE 0305208 Project 956 and in FY-04 covered in PE 0305208 Project 056.		4500	439	0	0	
Totals		59668	55485	19695	16	

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2A Exhibit)

February 2003

BUDGET ACTIVITY

5 - System Development and Demonstration

PE NUMBER AND TITLE

**0604766A - Tactical Exploitation System/DCGS
(TIARA)**

PROJECT

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B. Other Program Funding Summary	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009	To Compl	Total Cost
PE 0603766A Project 907	16225	16107	17068	16079	15928	16544	17223	19841	Continuing	Continuing
PE 0604766A TENCAP Project 909 (TIARA)	0	1770	0	0	0	0	0	0	0	1770
PE 0305208A Project 956 (JMIP)	71836	44823	8306	18167	43471	42361	46342	50380	Continuing	Continuing
BZ7316 CIG/SS (JMIP)	2277	11303	2687	2654	6780	11514	10456	13551	Continuing	Continuing
BZ7317 Tactical Surveillance System (TIARA)	34134	17100	0	0	0	0	0	0	0	51234

C. Acquisition Strategy:As pioneers in streamlined acquisition, ASPO's success in delivering systems as those described above to warfighters is directly attributed to an environment emphasizing space funding, low density acquisition, minimal use of MILSPECS, and managed competition. By tailoring existing technology, leveraging the best commercial practices and using commercial and government-off the shelf software, ASPO minimizes risk while maximizing efficiency and accelerated system production cycles. Government and contractor personnel and facilities accomplish dedicated cradle to grave Integrated Logistics Support (ILS) for all systems through a coordinated effort.

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)					PROJECT 957		
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 . TES #2 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	2544	0		0		0		0	2544	2544
b . TES #3 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	18698	0		0		0		0	18698	18698
c . TES #4 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	10626	0		0		0		0	10626	19000
d . TES DTES	SS/CPAF	Northrop Grumman, Linthicum, MD	7182	10136		0		0		0	17318	13208
e . Software upgrades and enhancements of TES baseline.	SS/CPAF	Northrop Grumman, Linthicum, MD	12192	11820	1Q	5768		16		0	29796	18947
f . SAIP Prototype	SS/CPAF	Northrop Grumman, Linthicum, MD	6860	439		0		0		0	7299	7520
g . TES joint interoperability with current and future sensors.	SS/CPAF	Northrop Grumman, Linthicum, MD	11850	7130	1Q	1901		0		0	20881	20850
h . TES Fwd and Main Sustainability/Interoperability Retrofits	SS/CPAF	Northrop Grumman, Linthicum, MD	0	11250	1Q	0		0		0	11250	0

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
BUDGET ACTIVITY 5 - System Development and Demonstration					PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)					PROJECT 957		
I. Product Development (continued)	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
i . Advance Planning, System Engineering, Future Requirements, Eng Transformation Plans	SS/CPAF	Northrop Grumman, Linthicum, MD	0	11364		8561		0		0	19925	0
Subtotal:			69952	52139		16230		16		0	138337	100767
Remarks: * Effort funded in project D909 prior to FY01.												
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
a . System Engineering (Government)	N/A	TEC, Alexandria, VA	2541	1741	1Q	1745	1Q	0		Continue	Continue	Continue
b . Contractor	C/FFP	Northrop Grumman Info Tech/TASC	700	350	2Q	350	2Q	0		Continue	Continue	Continue
c . FFRDC	OGA	Aerospace Corp, Chantilly, VA	1255	1255	1Q	1370	1Q	0		Continue	Continue	Continue
Subtotal:			4496	3346		3465		0		Continue	Continue	Continue

ARMY RDT&E COST ANALYSIS(R-3)									February 2003			
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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 . Not applicable			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
Remarks: Not Applicable												
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 . Not applicable			0	0		0		0		0	0	0
Subtotal:			0	0		0		0		0	0	0
Remarks: Not Applicable												
Project Total Cost:			74448	55485		19695		16		Continue	Continue	Continue

Schedule Profile Detail (R-4a Exhibit)							February 2003	
BUDGET ACTIVITY 5 - System Development and Demonstration				PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS (TIARA)				PROJECT 957
<u>Schedule Detail</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>FY 2006</u>	<u>FY 2007</u>	<u>FY 2008</u>	<u>FY 2009</u>
Complete development of TES Forward #1 and MAIN #1 (Done Previous Years)								
Complete development of TES DTES #1 (Done Previous Years)								
Complete development of TES FWD #2 and MAIN #2 (Done Previous Years)								
Complete development of TES FWD #3 (Done Previous Years)								
Complete development of TES Main #3 (Done Previous Years)								
Complete development of TES FWD #4*		2-3Q						
Complete development, upgrades, and fielding of DTES #s 2 - 10		3-4Q	2-4Q	1Q				
Complete development of MAIN #4			2Q					