

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

June 2001

BUDGET ACTIVITY

5 - ENG MANUFACTURING DEV

PE NUMBER AND TITLE

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

COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
Total Program Element (PE) Cost	71879	57884	68205	0	0	0	0	0	0	0
909 TACTICAL SURVEILLANCE SYSTEMS-ENG DEV(TIARA)	71879	43104	0	0	0	0	0	0	0	0
957 TACTICAL EXPLOITATION SYSTEM (TES)/DCGS-A (TIARA)	0	14780	68205	0	0	0	0	0	0	0

A. Mission Description and Budget Item Justification:

PLEASE NOTE: This administration has not addressed FY2003-2007 requirements. All FY 2003-2007 budget estimates included in this book are notional only and subject to change.

This project supports the engineering development/enhancement of the Tactical Exploitation System (TES), Division TES (DTES), TES Light (TES-L), Distributed Common Ground Station -Army (DCGS-A), Advanced Electronic Processing Dissemination System (AEPDS) Mobile Integrated Tactical Terminal (MITT), and Forward Area Support Terminal (FAST). 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 existing and emerging capabilities 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 and exploits 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), 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. MIES, ETRAC, and the CIG/SS portion of TES are funded under PE 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. These systems support the Legacy to Objective transition path of the Transformation Campaign Plan.

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<u>B. Program Change Summary</u>	FY 2000	FY 2001	FY 2002	FY 2003
Previous President's Budget (FY2001 PB)	71879	57419	76674	0
Appropriated Value	72440	58419	0	
Adjustments to Appropriated Value	0	0	0	
a. Congressional General Reductions	0	0	0	
b. SBIR / STTR	0	0	0	
c. Omnibus or Other Above Threshold Reductions	-298	0	0	
d. Below Threshold Reprogramming	0	0	0	
e. Rescissions	-263	-535	0	
Adjustments to Budget Years Since FY2001 PB	0	0	-8469	
Current Budget Submit (FY 2002/2003 PB)	71879	57884	68205	0

Per Congressional recommendation, a new PE (0603766A, Tactical Support Development) was created to fund those advanced developmental efforts that leverage national and theater technology. Funds were transferred from PE 0604766 to PE 0603766 in FY02 and out.

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BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV				PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS-A (TIARA)				PROJECT 957		
COST (In Thousands)	FY 2000 Actual	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	FY 2006 Estimate	FY 2007 Estimate	Cost to Complete	Total Cost
957 TACTICAL EXPLOITATION SYSTEM (TES)/DCGS-A (TIARA)	0	14780	68205	0	0	0	0	0	0	0
<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 (TES-L), and Distributed Common Ground Station -Army (DCGS-A). TES interfaces with numerous satellite and aircraft tactical sensors and processes and exploits 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), 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 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 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. These systems support the Legacy to Objective transition path of the Transformation Campaign Plan. CIG/SS portion of TES are funded under PE 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 D907 in FY02 and out.</p> <p><u>FY 2000 Accomplishments</u> Effort is funded under project D909 of this PE in FY 2000.</p>										

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

PROJECT

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FY 2001 Planned Program

- 750 Provide program management support and upgrades to Semi Automated Imagery Processor (SAIP) activities. This effort was funded under Project D909 in FY 2000.
- 2360 Initiate development of SAIP miniaturization prototype.
- 2544 Complete engineering development of TES #2 Forward and Main, including integration of existing reusable components (i.e. MIDAS, DE, CIP, MIST) and the purchase and integration of COTs/GOTs GFE. This effort was funded under Project D909 in FY 2000.
- 9126 Continue engineering development of TES #3 Forward and Main, including integration of existing reusable components (i.e. MIDAS, DE, CIP, MIST) and the purchase and integration of COTs/GOTs GFE. This effort was funded under Project D909 in FY 2000.

Total 14780

FY 2002 Planned Program

- 11850 Ensures that TES has joint interoperability with current and future sensors (Global Hawk, Future Imagery Architecture).
- 9572 Complete engineering development of TES #3 Forward and Main, including integration of existing reusable components (i.e. MIDAS, DE, CIP, MIST) and the purchase and integration of COTs/GOTs GFE. This effort was funded under Project D909 in FY 2000.
- 10664 Initiate engineering development of TES #4 Forward, including integration of existing reusable components (i.e. MIDAS) and the purchase and integration of COTs/GOTs GFE.
- 11203 Initiate engineering development of TES #5 Forward, including integration of existing reusable components (i.e. MIDAS) and the purchase and integration of COTs/GOTs GFE.
- 4500 Continue development of miniturized SAIP prototype.
- 4876 Initiate engineering development of TES Basic for Corps and EAC not receiving a TES-Main.
- 9488 Continue software upgrades and enhancements of TES baseline to fully exploit national and theater capabilities.
- 3746 Continue support to TES/DCGS-A development (Army Topographic Engineering Center (TEC) and FFRDC (Aerospace).
- 2306 TES-Light prototype development

Total 68205

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(TIARA)**

PROJECT

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B. Other Program Funding Summary

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007	To Compl	Total Cost
PE 0603766A Project D907	0	0	16749	0	0	0	0	0	0	0
PE 0604766A TENCAP Project D909 (TIARA)	71879	43087	0	0	0	0	0	0	0	0
PE 0305208A (JMIP)	8004	7839	8242	0	0	0	0	0	0	0
Other Procurement Army, OPA-2	0	0	0	0	0	0	0	0	0	0
BZ7315 TENCAP (TIARA)	4351	12735	0	0	0	0	0	0	0	0
BZ7316 CIG/SS (JMIP)	2779	2807	2611	0	0	0	0	0	0	0
BZ7317 Tactical Surveillance System (TIARA)	0	0	26168	0	0	0	0	0	0	0

C. Acquisition Strategy: As pioneers in streamlined acquisition, ASPO's success in delivering systems as those described above to warfighters can be directly attributed to an environment emphasizing stable 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. Finally, Government and contractor personnel and facilities accomplish dedicated cradle to grave Integrated Logistics Support (ILS) for all systems through a coordinated effort.

D. Schedule Profile

	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	FY 2006	FY 2007
Complete development of TES #2 Forward, Main (-)		4Q		0	0	0	0	0
Complete development of TES #3 Main (-)		4Q		0	0	0	0	0
Complete development of TES #3 Forward			4Q	0	0	0	0	0
Complete development of TES-Light prototype			4Q	0	0	0	0	0
Complete development of TES #4 Forward				0	0	0	0	0
Complete development of TES #5 Forward				0	0	0	0	0
Complete development of TES BASIC #1				0	0	0	0	0
Complete development of TES Basic #2-#4				0	0	0	0	0
Complete development of TES #6 Forward				0	0	0	0	0
Complete development of TES #2 MAIN(+)				0	0	0	0	0
Complete development of TES #3 MAIN(+)				0	0	0	0	0

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**0604766A - Tactical Exploitation System/DCGS-A
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D. Schedule Profile (continued)	
Complete development of TES Trainer	

FY 2000

	FY 2001

FY 2002

	FY 2003
	0

	FY 2004
	0

	FY 2005
	0

	FY 2006
	0

	FY 2007
	0

100

ARMY RDT&E COST ANALYSIS(R-3)									June 2001			
BUDGET ACTIVITY 5 - ENG MANUFACTURING DEV					PE NUMBER AND TITLE 0604766A - Tactical Exploitation System/DCGS-A (TIARA)					PROJECT 957		
I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . TES #2 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	0	2544	1Q	0		0	0	0	0	0
b . TES #3 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	0	9126	2Q	9572	2Q	0	0	0	0	0
c . TES #4 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		10664	2Q	0	0	0	0	0
d . TES #5 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		11203	2Q	0	0	0	0	0
e . TES #6 EDM *	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		0		0	0	0	0	0
f . TES Basic	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		4876	2Q	0	0	0	0	0
g . CCRB	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		9488	2Q	0	0	0	0	0
h . SAIP Prototype	SS/CPAF	Northrop Grumman, Linthicum, MD	0	2360	2Q	4500	2Q	0	0	0	0	0
i . TDL	SS/CPAF	Northrop Grumman, Linthicum, MD	0	0		11850	2Q	0	0	0	0	0

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I. Product Development (continued)	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
j . DCGS-A Study	TBD	TBD	0	0		0		0	0	0	0	0
k . TES-L prototype		Northrop Grumman, Linthicum, MD	0	0		2306	2Q	0	0	0	0	0
Subtotal:			0	14030		64459		0		0	0	0
Remarks: * Effort funded in project D909 prior to FY01.												
II. Support Cost	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a . System Engineering (Government)	N/A	TEC, Alexandria, VA	0	400	1Q	2141	1Q	0	0	0	0	Continue
b . Contractor	C/FFP	Litton TASC, Westfields, VA	0	350	2Q	350	2Q	0	0	0	0	Continue
c . FFRDC	OGA	Aerospace Corp, Chantilly, VA	0	0		1255	1Q	0	0	0	0	Continue
Subtotal:			0	750		3746		0		0	0	Continue

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III. Test and Evaluation	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:												
Remarks: Not Applicable												
IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 2001 Cost	FY 2001 Award Date	FY 2002 Cost	FY 2002 Award Date	FY 2003 Cost	FY 2003 Award Date	Cost To Complete	Total Cost	Target Value of Contract
			0	0		0		0		0	0	0
Subtotal:												
Remarks: Not Applicable												
Project Total Cost:			0	14780		68205		0		0	0	Continue