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ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)								DATE February 1999		
BUDGET ACTIVITY 7 - Operational System Development				PE NUMBER AND TITLE 0208053A Joint Tactical Ground Station (TIARA)				PROJECT D635		
COST (In Thousands)	FY 1998 Actual	FY 1999 Estimate	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost
D635 Joint Tactical Ground Station P3I (TIARA)	4835	12148	28061	6306	5243	3089	2744	3751	4058	70235
<p><b>A. Mission Description and Budget Item Justification:</b> This program element supports development of critical improvements to the Joint Tactical Ground Station (JTAGS). JTAGS is a transportable information processing system which receives and processes in-theater, direct down-linked data from Defense Support Program satellites and the follow-on Space Based Infrared System Satellites. JTAGS disseminates warning, alerting and cueing information on Tactical Ballistic Missiles (TBMs) and other tactical events of interest throughout the theater using existing communication networks. JTAGS is designated the in-theater element of the United States Space Command's Theater Event System. JTAGS supports all Theater Missile Defense pillars and by being located in-theater, provides the shortest sensor to shooter connectivity. The objectives of the JTAGS improvements are to integrate the Joint Tactical Distribution System (JTIDS) into the communication net, increase system accuracy and timeliness, and upgrade JTAGS to the Multi-Mission Mobile Processor (M3P) for operation with the next generation of the space based infrared satellites. The M3P development for the Space Based Infrared System includes shared funding by US Air Force and US Army and results in a combined development of M3Ps.</p> <p><b>FY 1998 Accomplishments:</b></p> <ul style="list-style-type: none"> <li>• 782 Complete Phase I fusion development and initiate TACDAR fusion development.</li> <li>• 633 Completed Phase I beacon development</li> <li>• 1420 Continued Phase I JTIDS development and Year 2000 (Y2K) planning</li> <li>• 2000 Initiated Phase II M3P development</li> </ul> <p>Total 4835</p> <p><b>FY 1999 Planned Program:</b></p> <ul style="list-style-type: none"> <li>• 330 Complete Phase I JTIDS development</li> <li>• 760 Continue Phase II M3P development and Y2K development</li> <li>• 6940 Provide Phase II M3P Integrated Product &amp; Process Development (IPPD) Support</li> <li>• 336 Provide Phase II M3P Management support</li> <li>• 3460 Provide Phase II M3P Integrated Product &amp; Process Development (IPPD) Support</li> <li>• 322 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs</li> </ul> <p>Total 12148</p>										

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**FY 2000 Planned Program:**

- 21428 Continue Phase II M3P development
  - 6290 Continue Phase II M3P IPPD support
  - 343 Continue Phase II M3P Management Support
- Total 28061

**FY 2001 Planned Program:**

- 4698 Continue Phase II M3P IPPD Support
  - 1288 Continue Phase II M3P development
  - 320 Continue Phase II M3P Management Support
- Total 6306

<b>B. Program Change Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget ( <u>FY 1999</u> PB)	5001	12229	29034	6551
Appropriated Value	5195	12229		
Adjustments to Appropriated Value				
a. Congressional General Reductions	-194	-81		
b. SBIR / STTR	-125			
c. Omnibus or Other Above Threshold Reductions	-41			
d. Below Threshold Reprogramming				
e. Rescissions				
Adjustments to Budget Years Since <u>FY 1999</u> PB			-973	-245
Current Budget Submit ( <u>FY 2000 / 2001</u> PB)	4835	12148	28061	6306

<b>C. Other Program Funding Summary</b>	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>	<u>FY 2002</u>	<u>FY 2003</u>	<u>FY 2004</u>	<u>FY 2005</u>	<u>To</u>	<u>Total</u>
									<u>Compl</u>	<u>Cost</u>
<b>Other Procurement Army, OPA-2</b>										
BZ8420 Joint Tactical Ground Station Mods	99	2630								2729

**D. Acquisition Strategy:** Critical JTAGS improvements under this PE will be developed making maximum use of NDI/Commercial Off-The Shelf (COTS) elements. After selection and assembly, the modification design will be subjected to thorough integration and performance testing to verify operational effectiveness and suitability. Phase II M3P will be a joint development effort with the US Air Force and will involve cost sharing of the acquisition effort.

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<b>E. Schedule Profile</b>	FY 1996	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005
Conducted P3I Phase I IPR	Sep 96									
Initiated P3I Phase I Program		Oct 96								
Conducted P3I Phase II IPR			Oct 97							
Implemented P3I Phase II Program			Oct 97							
Conducted Preliminary Design Review			Dec 97							
Exercise M3P Contract Option			Aug 98							
Complete P3I Phase I Development				Aug 99						
Conduct Critical Design Review				Aug 99						
Continue P3I Phase II Development					Oct 99					
Begin M3P Acceptance Test						Jan 01				
Conduct M3P Certification Test							Jan 02			
Conduct Ground Certification Test								Mar 03		
Complete M3P Acceptance Test								Apr 03		
Conduct P3I Phase II IPR								Sep 03		
Initiate P3I Phase III Program									Oct 03	
Continue P3I Phase III Development										Oct 04

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**ARMY RDT&E COST ANALYSIS (R-3)**

DATE **February 1999**

**BUDGET ACTIVITY**  
**7 - Operational System Development**

**PE NUMBER AND TITLE**  
**0208053A Joint Tactical Ground Station (TIARA)**

**PROJECT**  
**D635**

I. Product Development	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Primary Hardware Development	C/CPAF	Lockheed / Sunnyvale, CA	360	7262	Oct 98	21428	Oct 99	1288	Oct 00	4484	34822	34822
b. Engineering Services	C/CPFF	Aerojet / Azusa, CA	1244	1090	Oct 98						2334	2334
c. In-House IPPD Support	N/A	Various	1588	1774	Oct 98	1813	Oct 99	1884	Oct 00	7877	14936	0
d. Contractor Engineering IPPD Support	C/CPFF	Various	1345	1215	Oct 98	1241	Oct 99	1269	Oct 00	3174	8244	8244
e. Government Engineering IPPD Support	N/A	Various	298	471	Oct 98	1009	Oct 99	1545	Oct 00	2391	5714	
f. Government Furnished Equipment	N/A	Various				2227					2227	
Subtotal Product Development:			4835	11812		27718		5986		17926	68277	45400

II. Support Costs: Not applicable

III. Test and Evaluation: Not applicable

IV. Management Services	Contract Method & Type	Performing Activity & Location	Total PYs Cost	FY 1999 Cost	FY 1999 Award Date	FY 2000 Cost	FY 2000 Award Date	FY 2001 Cost	FY 2001 Award Date	Cost To Complete	Total Cost	Target Value of Contract
a. Management Support	N/A	N/A		336	Oct 98	343	Oct 99	320	Oct 00	957	1956	
Subtotal Management Services:				336		343		320		957	1956	

Project Total Cost:			4835	12148		28061		6306		18885	70235	45400
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