

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)							DATE February 2000			
BUDGET ACTIVITY 2 - Applied Research				PE NUMBER AND TITLE 0602785A Manpower/Personnel/Training Technology				PROJECT A790		
<i>COST (In Thousands)</i>	FY 1999 Actual	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	Cost to Complete	Total Cost	
A790 Personnel Performance and Training Technologies	8249	12005	11869	11903	12094	12275	12453	Continuing	Continuing	
<p>A. <u>Mission Description and Justification:</u> The objectives of this program are to provide the scientific basis to improve the selection and classification procedures to ensure the right person is placed in the right job, to determine leader skills and requirements for the future, to evaluate the impact of deployments on personnel issues (e.g., career commitment, retention, etc.), and to provide the behavioral technologies required for the development of effective individual and collective (unit) training strategies. Research topics include training strategies for the digitized battlefield, training strategies in simulated environments, optimum designs and utilization of simulators and training devices to achieve maximum learning at minimum cost, and modernization of the selection and classification systems to maintain warfighting capabilities in a downsized Army. Research in this PE is consistent with the Army Science and Technology Master Plan, the Army Modernization Plan, and Project Reliance and supports the Human Systems – Personnel Performance and Training – Defense Technology Area. This PE is managed by the U.S. Army Research Institute (ARI) for the Behavioral and Social Sciences.</p> <p>FY 1999 Accomplishments:</p> <ul style="list-style-type: none"> • 8249 - Developed and evaluated prototype training and performance assessment methods for Force XXI. <ul style="list-style-type: none"> - Developed and evaluated instructional modules for versatile thinking skills required by brigade staff. - Developed definitions and models of PERSTEMPO impact on soldier commitment, morale, and retention. - Assessed the impact of Land Warrior Systems on institutional training. - Completed readiness and cohesion data collection on battalions with key command staff positions stabilized for 24-months and similar battalions that did not have staff positions stabilized. - Identified the role of simulation devices, instructors, and instructional processes in a model simulator training program for Initial Entry Rotary Wing (IERW) flight training. - Implemented and evaluated model IERW simulator-based training program for TH-67. - Identified representative 21st century noncommissioned officer (NCO) performance requirements and attributes needed for effective performance. - Developed preliminary version of small unit leader training for Military Operations in Urban Terrain (MOUT) or other contingency operations using an immersive virtual environment system. <p>Total 8249</p> <p>FY 2000 Planned Program:</p> <ul style="list-style-type: none"> • 11770 - Develop measurement concepts and metrics to compare standard procedural training with innovative problem solving for managing large amounts of information. <ul style="list-style-type: none"> - Define characteristics of virtual environments for realistic portrayal of conditions in the dismounted soldier's environment. 										
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<p>FY 2000 Planned Program: (continued)</p> <ul style="list-style-type: none"> - Prepare final report on the effects of stabilizing the assignments of key battalion staff members. - Identify performance measurement technologies for determining training outcomes in advanced aircraft qualification courses. - Develop prototype 21st century NCO performance measures. - Develop models that incorporate realistic computer-generated forces in virtual and constructive simulations. - Implement and evaluate instructional feature and training strategy enhancements to the MOUT/contingency operations trainer. - Conduct trend analysis on computer experiences and skills possessed by the typical Infantry soldier and leader. - Identify individual and team leadership characteristics likely to be required over the next 5-25 years for effective management of change in volatile, unstructured, complex, and ambiguous environments. <p>235 - Small Business Innovative Research/Small Business Technology Transfer Programs (SBIR/STTR)</p> <p>Total 12005</p> <p>FY 2001 Planned Program:</p> <ul style="list-style-type: none"> • 11869 - Develop, demonstrate, and evaluate extended instructional modules for versatile thinking skills required by division staff. - Document lessons learned on cognitive skill enrichment for command and staff. - Examine simulator training task requirements for future Army aircraft. - Determine the relationships between 21st century NCO attributes and mission performance measures to identify best predictors of success. - Incorporate prototype system for computer recognition of human gestures into VE for dismounted soldier training and mission rehearsal. - Develop “best practices” for leading organizational change at different command levels. - Assess effectiveness of virtual environment (VE) interface improvements for training and mission rehearsal. - Develop preliminary training methods to enhance the processing/integration of visual, aural, and digital information by Infantry small unit leaders. <p>Total 11869</p>		
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B. Program Change Summary	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget (<u>FY 2000/2001</u> PB)	8533	12071	11904
Appropriated Value	8602	12071	
Adjustments to Appropriated Value			
a. Congressional General Reductions	-69		
b. SBIR / STTR	-148		
c. Omnibus or Other Above Threshold Reductions		-36	
d. Below Threshold Reprogramming	-102		
e. Rescissions	-34	-30	
Adjustments to Budget Years Since <u>FY 2000/2001</u> PB			-35
Current Budget Submit (<u>FY 2001</u> PB)	8249	12005	11869