

UNCLASSIFIED

ARMY RDT&E BUDGET ITEM JUSTIFICATION (R-2 Exhibit)	DATE February 1999
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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing
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COST (<i>In Thousands</i>)	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
Total Program Element (PE) Cost	74656	65460	68946	69038	71743	75872	76024	79899	Continuing	Continuing
DV02 Test Directorates	34158	40620	43202	44037	46540	48227	47870	49654	Continuing	Continuing
D001 OPTEC IOTE	19921	20041	19799	18954	18703	21010	20595	21922	Continuing	Continuing
D985 Concepts Evaluations of Materiel	15681	0	0	0	0	0	0	0	0	15681
D987 OPTEC Instrumentation & Development	4896	4799	5945	6047	6500	6635	7559	8323	Continuing	Continuing

A. Mission Description and Budget Item Justification: This program funds the operational testing of developmental materiel systems. Project DV02 provides for the recurring costs of operating the test activities of the U.S. Army Operational Test and Evaluation Command (OPTEC). Project D001 provides for direct operational and joint test costs incurred by OPTEC including Multi-Service, Army After Next (AAN), First Digitized Division and Automated Information Systems (AIS). Excludes funding for Acquisition Category I (ACAT I) major weapon and Automated Information Systems, which are programmed within the PE funding development for each system. Project D985 enables U.S. Army Training and Doctrine Command (TRADOC) battle labs and schools to evaluate emerging technologies and other equipment to help define Army mission needs and operational requirements. Projects selected for funding are relatively low cost conceptual evaluations, with high potential for warfighting return on investment. Program provides direct support to battle lab minor Advanced Warfighting Experiments (AWEs). Program is also a first look at emerging technologies that have the potential to support the Army's Force XXI design needs. Project D987 provides for development and acquisition of non-major and sustaining instrumentation necessary to attain and maintain the data collection and analysis capability to conduct credible and robust operational tests as demanded by the DoD and Congress. It provides for replacement and improvements of existing obsolete inventory and for the development of new technologies to keep abreast of new weapon advancements.

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B. Program Change Summary	<u>FY 1998</u>	<u>FY 1999</u>	<u>FY 2000</u>	<u>FY 2001</u>
Previous President's Budget (FY 1999 PB)	76807	66320	64156	57651
Appropriated Value	81672	66320		
Adjustments to Appropriated Value				
a. Congressional General Reductions	-4865	-860		
b. SBIR / STTR	-1617			
c. Omnibus or Other Above Threshold Reductions	-534			
d. Below Threshold Reprogramming				
e. Rescissions				
Adjustments to Budget Years Since FY 1999 PB			+4790	+11387
Current Budget Submit (FY 2000 / 2001 PB)	74656	65460	68946	69038

Change Summary Explanation:

Funding: FY 2000 funding was increased to correct a shortfall in Project D001 OPTEC IOTE to fund Multi-Service Joint Tests, including: Joint Warfighter, Joint Theater Distribution , Joint Close Air Support, Joint Shipboard Helicopter Integration Process, Joint Cruise Missile Defense, Joint Electronic Combat Test Using Simulation, Joint Suppression of Enemy Air Defense, Live Fire Exercise, and Joint Missile Alert Broadcast.

Funding: FY 2001 funding was increased to correct a shortfall in Project DV02 and a shortfall in Project D001 to fund Warfighters' Simulation 2000, Battlefield Combat Identification System, Airborne Reconnaissance Low, Tactical Unmanned System, Unmanned Aerial Vehicle Payloads and IEW Tactical Proficiency Trainer Directorates.

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BUDGET ACTIVITY 6 - Management and Support				PE NUMBER AND TITLE 0605712A Support of Operational Testing				PROJECT DV02		
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
DV02 Test Directorates	34158	40620	43202	44037	46540	48227	47870	49654	Continuing	Continuing
<p>Mission Description and Justification: This project finances recurring costs, including civilian pay, support contracts, temporary duty, supplies and equipment of subordinate elements of the Test and Experimentation Command (TEXCOM): Airborne and Special Operations Test Directorate, Fort Bragg, NC; Air Defense Test Directorate, Fort Bliss, TX; Fire Support Test Directorate, Fort Sill, OK; and the Intelligence and Electronic Warfare Test Directorate, Fort Huachuca, AZ, and test directorates located at Fort Hood, TX (Aviation; Close Combat; Engineer/Combat Support; Command, Control, and Communications; Information Mission Area; Advanced Concepts). The primary mission of these test directorates is to conduct operational testing of developmental materiel and force development test and experimentation (FDTE). The FY 1998 program included the transfer of manpower and funds for the Test and Evaluation Coordination Offices (TECOs), Operational Threat Support Activity (OTSA), Test and Evaluation Support Activity and other test support from the OMA appropriation. Increase in FY 1999 completes the transfer of manpower and funds for OTSA and test support from the OMA appropriation.</p> <p>FY 1998 Accomplishments:</p> <ul style="list-style-type: none"> • 15675 Operational costs including 175 civilian authorizations at Fort Hood, TX Test Directorates (includes Test and Evaluation Support Activity) • 2353 Operational costs including 28 civilian authorizations at Fort Sill, OK Test Directorate • 2993 Operational costs including 35 civilian authorizations at Fort Huachuca, AZ Test Directorate • 2412 Operational costs including 40 civilian authorizations at Fort Bragg, NC Test Directorate • 2975 Operational costs including 38 civilian authorizations at Fort Bliss, TX Test Directorate • 6183 Operational costs including 9 civilian authorizations at Operational Threat Support Activity, Fort Bliss, TX • 1567 Operational costs including 18 civilian authorizations at Test and Evaluation Coordination Offices <p>Total 34158</p> <p>FY 1999 Planned Program:</p> <ul style="list-style-type: none"> • 17033 Operational costs including 161 civilian authorizations at Fort Hood, TX Test Directorates (includes Test and Evaluation Support Activity) • 2488 Operational costs including 28 civilian authorizations at Fort Sill, OK Test Directorate • 3162 Operational costs including 34 civilian authorizations at Fort Huachuca, AZ Test Directorate • 2523 Operational costs including 40 civilian authorizations at Ft. Bragg, NC Test Directorate • 3171 Operational costs including 37 civilian authorizations at Fort Bliss, TX Test Directorate • 10367 Operational costs including 18 civilian authorizations at Operational Threat Support Activity, Fort Bliss, TX • 1557 Operational costs including 18 civilian authorizations at Test and Evaluation Coordination Offices • 319 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs <p>Total 40620</p>										
Project DV02			Page 3 of 15 Pages				Exhibit R-2A (PE 0605712A)			

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BUDGET ACTIVITY 6 - Management and Support		February 1999
PE NUMBER AND TITLE 0605712A Support of Operational Testing		PROJECT DV02
FY 2000 Planned Program:		
•	17892	Operational costs including 161 civilian authorizations at Fort Hood, TX Test Directorates (includes Test and Evaluation Support Activity)
•	2604	Operational costs including 28 civilian authorizations at Fort Sill, OK Test Directorate
•	3327	Operational costs including 34 civilian authorizations at Fort Huachuca, AZ Test Directorate
•	2683	Operational costs including 40 civilian authorizations at Fort Bragg, NC Test Directorate
•	3319	Operational costs including 37 civilian authorizations at Fort Bliss, TX Test Directorate
•	11696	Operational costs including 18 civilian authorizations at Operational Threat Support Activity, Fort Bliss, TX
•	1681	Operational costs including 18 civilian authorizations at Test and Evaluation Coordination Offices
Total	43202	
FY 2001 Planned Program:		
•	18430	Operational costs including 161 civilian authorizations at Fort Hood, TX Test Directorates (includes Test and Evaluation Support Activity)
•	2669	Operational costs including 28 civilian authorizations at Fort Sill, OK Test Directorate
•	3383	Operational costs including 34 civilian authorizations at Fort Huachuca, AZ Test Directorate
•	2718	Operational costs including 40 civilian authorizations at Fort Bragg, NC Test Directorate
•	3364	Operational costs including 37 civilian authorizations at Fort Bliss, TX Test Directorate
•	11748	Operational costs including 18 civilian authorizations at Operational Threat Support Activity, Fort Bliss, TX
•	1725	Operational costs including 18 civilian authorizations at Test and Evaluation Coordination Offices
Total	44037	

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D001
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COST (<i>In Thousands</i>)	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
D001 OPTEC IOTE	19921	20041	19799	18954	18703	21010	20595	21922	Continuing	Continuing

Mission Description and Justification: This project funds the direct costs of planning and conducting operational testing on major and non-major materiel systems (ACAT II-IV), including Multi-Service systems (all ACATs), Joint Tests (JT), Army After Next (AAN), First Digitized Division (FDD) and Automated Information Systems (AIS). It funds those costs directly attributable to conducting early user tests and evaluations (EUTE), limited user tests (LUT), or initial operational tests and evaluations (IOTE) on major and non-major materiel systems. Test funding for ACAT I systems is programmed within the PE funding the development of each system. Operational testing is conducted under conditions as close as possible to those encountered in actual combat with typical user troops trained to employ the system. OPTEC provides Army leadership with an independent test and evaluation of effectiveness, suitability, and survivability of the system.

FY 1998 Accomplishments:

- 2 ASCIET 97 (JT) - All Services Combat Identification Evaluation Team
- 54 MICAD (IOTE) – Multipurpose Integrated Chemical Agent Alarm
- 23 TYQ-69, CCS (IOTE) – AN/TYQ-69 Communication Control Set
- 2 P3I BIDS (IOTE) – Pre-Planned Product Improvement, Biological Integrated Detection System
- 2912 FBCB2 (LUTE) – Force XXI Battle Command, Brigade and Below
- 2327 FBCB2 (IOTE) – Force XXI Battle Command, Brigade and Below
- 715 LW (IOTE) - Land Warrior
- 5 SEP 97-1 (IOTE) – SHORTSTOP Electronic Protection System
- 10 CHATS (DT/OT) – Counter-Intelligence HUMINT Automated Tool Set
- 465 BIDS P3I (LUT) – Biological Integrated Detection System Pre-Planned Product Improvement
- 80 JWF (JT) - Joint Warfighter
- 3 JECSIM (JT) – Joint Electronic Combat Test Using Simulation
- 20 JADS ETE PH II (JT) – Joint Advanced Distributed Simulation Phase II
- 320 JSEAD LIVEX 98 (JT) – Joint Suppression of Enemy Air Defense
- 1191 JCSAR (JT) – Joint Combat Search and Rescue
- 524 JCALS (IOTE) – Joint Computer-aided Acquisition and Logistic Support
- 186 ECV (LUT) – Expanded Capability Vehicle
- 22 LRAS3 (IOTE) – Long Range Scout Surveillance System
- 2234 ISYSCON (IOTE) – Integrated System Control
- 448 PKG 11 – AFATDS (LUT) – Package 11 – Advanced Field Artillery Tactical Data System

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D001
FY 1998 Accomplishments: (continued)		
•	65 SIRFC (DT/OT) – Suite Integrated Radio Frequency Countermeasures	
•	35 RSCCE (IOTE) – Replacement Satellite Configuration Control Element	
•	1 IVMMD (IOTE) – Interim Vehicle Mounted Mine Detector	
•	119 IFCS ESIT (LUT) – Improved Fire Control System Extended System Integration Test	
•	2944 CCTT (IOTE) – Close Combat Tactical Trainer	
•	24 USL (IOTE) – Universal Static Line	
•	213 LADS (EU) – Laundry Advanced System	
•	62 HAB (IOTE) – Heavy Assault Bridge	
•	19 SSP (IOTE) – Strategic Sealift Program	
•	10 CSEL (IOTE) – Combat Survivor Evader Locator	
•	946 GBCS-LIGHT (IOTE) – Ground Based Common Sensor-Light	
•	77 AMPS (IOTE) – Aviation Mission Planning System	
•	47 UH-60Q (IOTE) – Utility Helicopter 60Q	
•	1 MDS (IOTE) – Modular Decontamination System	
•	70 JTT (IOTE) – Joint Tactical Terminal	
•	3 CBPS (IOTE) – Chemically and Biologically Protected Shelter	
•	645 MICAD PH II (IOTE) – Multipurpose Integrated Chemical Agent Alarm, Phase II	
•	1 IMBC (LUT) – Improved Mortar Ballistic Computer	
•	379 NBCRS (LUT) – Nuclear, Biological and Chemical Reconnaissance System	
•	509 ASV (IOTE) – Armored Security Vehicle	
•	46 CABS UH-60 (IOTE) – Cockpit Airbag System UH-60	
•	4 JSLIST ((IOTE) – Joint Service Lightweight Integrated Suit Technology	
•	150 ATNAVICS (DT/OT) – Air Traffic Navigation, Integration and Coordination System	
•	128 JCALS (LUT) – Joint Computer-aided Acquisition and Logistics Support	
•	21 ER-MLRS (IOTE) – Extended Range – Multiple Launch Rocket System	
•	1198 M270A1 (IOTE) – M270A1 Multiple Launch Rocket System	
•	222 SOFTACS/STAR-T (IOTE) – Special Operations Forces Tactical Assured Connectivity System/SHF Tri-Band	
•	8 BFIST (XM7) (IOTE) – Bradley Fire Support Team (XM7)	
•	3 MACS (IOTE) – Modular Artillery Charge System	
•	52 UAV TCS (IOTE) – Unmanned Aerial Vehicle Tactical Control System	
•	2 CP LR-BSDS (IOTE) – Counterproliferation Long Range Biological Standoff Detection System	
•	2 JBPDS (IOTE) – Joint Biological Point Detection System	
Project D001	<i>Page 6 of 15 Pages</i>	Exhibit R-2A (PE 0605712A)

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D001
FY 1998 Accomplishments: (continued)		
•	5 SEPS (IOTE) – Shortstop Electronic Protection System	
•	156 NAVWAR GPS (IOTE) – Navigation Warfare Global Positioning System	
•	2 NTDR (IOTE) – Near Term Digital Radio	
•	176 GRCS SYS II (LUT) – Guardrail/Common Sensor System II	
•	1 JCAD (IOTE) – Joint Chemical Agent Detector	
•	1 JSLSCAD (IOTE) – Joint Services Lightweight Stand-off Chemical Agent Detector	
•	2 HDSB (IOTE) – Heavy Dry Support Bridge	
•	1 FF (EUTE) – Fire Finder AN/TPQ-39	
•	10 C130J (IOTE) – C130J Airdrop Qualification	
•	13 M270 ESIT (LUT) – M270A1 Multiple Launch Rocket System, Extended System Integration Test	
•	5 C2V (IOTE) – Command and Control Vehicle	
Total	19921	
FY 1999 Planned Program:		
•	1973 FBCB2 (IOTE) – Force XXI Battle Command, Brigade and Below	
•	231 C130 J (IOTE) – C130J Airdrop Qualification	
•	2077 LRAS3 (IOTE) – Long Range Advanced Scout Surveillance System	
•	1156 PKG 11 – AFATDS (LUT) – Package 11 - Advanced Field Artillery Tactical Data System	
•	2651 SSP (IOTE) – Strategic Sealift Program	
•	1625 JWF (JT) – Joint Warfighter	
•	537 JTD (JT) – Joint Theater Distribution	
•	305 JCAS (JT) – Joint Close Air Support	
•	350 JSHIP (JT) – Joint Shipboard Helicopter Integration Process	
•	250 JECSIM (JT) - Joint Electronic Combat Test Using Simulation	
•	2 JADS ETE PH IV (JT) – Joint Advanced Distributed Simulation End-to-End Test Phase IV	
•	5 JADS ETE PH III (JT) – Joint Advanced Distributed Simulation End-to-End Test Phase III	
•	510 JSEAD LIVEX (JT) – Joint Suppression of Enemy Air Defense, Live Fly Exercise	
•	5 JCSAR (JT) – Joint Combat Search and Rescue	
•	471 A2C2S (IOTE) – Army Airborne Command and Control System	
•	106 AMPS (IOTE) – Aviation Mission Planning System	
•	614 ASV (IOTE) – Armored Security Vehicle	
•	81 SIRFC (DT/OT) – Suite Integrated Radio Frequency Countermeasures	
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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	
		PROJECT D001
FY 1999 Planned Program: (continued)		
•	346 ATNAVICS (DT/OT) – Air Traffic Navigation, Integration and Coordination System	
•	64 LW (LUT) – Land Warrior	
•	78 JTAGS (DT/OT) – Joint Tactical Ground Station	
•	2133 ER-MRLS (IOTE) – Extended Range – Multiple Launch Rocket System	
•	3053 M270A1 (IOTE) - M270A1 Multiple Launch Rocket System	
•	332 M270A1 MIFEX (LUT) - M270A1 Multiple Launch Rocket System	
•	407 M270A1 ESIT (LUT) - M270A1 Multiple Launch Rocket System	
•	148 MACS (IOTE) – Modular Artillery Charge System	
•	531 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs	
Total	20041	
FY 2000 Planned Program:		
•	119 SSP (IOTE) – Strategic Sealift Program	
•	7182 FBCB2 (IOTE) – Force XXI Battle Command, Brigade and Below	
•	68 ER-MLRS (IOTE) – Extended Range-Multiple Launch Rocket System	
•	310 M270A1 (IOTE) – M270A1 Multiple Launch Rocket System	
•	107 MACS (IOTE) – Modular Artillery Charge System	
•	163 CK (DT/OT) – Containerized Kitchen	
•	400 TC-AIMS-II (IOTE) – Transportation Coordinator’s Automated Information for Movement System II	
•	1196 A2C2S (IOTE) – Army Airborne Command and Control System	
•	147 AMPS (IOTE) – Aviation Mission Planning System	
•	3426 SIRFC (IOTE) – Suite of Integrated Radio Frequency Countermeasures	
•	449 SIRFC (LUT) – Suite of Integrated Radio Frequency Countermeasures	
•	1450 LW (LUT) – Land Warrior	
•	1425 JWF (JT) – Joint Warfighter	
•	570 JTD (JT) – Joint Theater Distribution	
•	605 JCAS (JT) – Joint Close Air Support	
•	650 JSHIP (JT) – Joint Shipboard Helicopter Integration Process	
•	10 JCMD (JT) – Joint Cruise Missile Defense	
•	2 JECSIM (JT) – Joint Electronic Combat Test Using Simulation	
•	510 JSEAD LIVEX (JT) – Joint Suppression of Enemy Air Defense, Live Fly Exercise	
•	1000 JMABS (JT) – Joint Missile Alert Broadcast System	
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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D001
FY 2000 Planned Program: (continued)		
•	10 GPS-JBE (JT) – GPS in a Joint Battlespace Environment	
Total	19799	
FY 2001 Planned Program:		
•	3788 LW (LUT) – Land Warrior	
•	20 GRCS SYS II (LUT) – Guardrail/Common Sensor System II	
•	300 TC-AIMS-II (IOTE) – Transportation Coordinator’s Automated Information for Movement System II	
•	232 MEPS (IOTE) – Military Eye Protection System	
•	250 CSEL (IOTE) – Combat Survivor Evader Locator Excursion	
•	3000 JWF (JT) – Joint Warfighter	
•	570 JTD (JT) – Joint Theater Distribution	
•	1000 JMABS (JT) – Joint Missile Alert Broadcast System	
•	200 JCMD (JT) – Joint Cruise Missile Defense	
•	650 JSHIP (JT) – Joint Shipboard Helicopter Integration Process	
•	200 GPS-JBE (JT) – GPS in a Joint Battlespace Environment	
•	605 JCAS (JT) – Joint Close Air Support	
•	1395 NAVWAR GPS (IOTE) – Navigation Warfare Global Positioning System	
•	490 ATPS (IOTE) – Advanced Tactical Parachute System	
•	2852 WARSIM 2000 (IOTE) – Warfighters’ Simulation 2000	
•	2599 BCIS (IOTE) – Battlefield Combat Identification System	
•	530 ARL (LUT) – Airborne Reconnaissance Low	
•	68 TUS (LUT) – Tactical Unmanned System	
•	200 UAV PAYLOAD (LUT) – Unmanned Aerial Vehicle Payloads	
•	5 IEWTPT (LUT) – IEW Tactical Proficiency Trainer	
Total	18954	

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D985
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COST (<i>In Thousands</i>)	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
D985 Concepts Evaluations of Materiel	15681	0	0	0	0	0	0	0	0	15681

Mission Description and Justification: The Concept Experimentation Program (CEP) is a key innovative tool which provides TRADOC battle labs and schools the ability to capitalize on emerging technologies, emerging warfighting concepts, and new materiel initiatives. Funds are used to acquire, lease or fabricate equipment to conduct experiments to determine military utility or potential to satisfy Army Doctrine, Training, Leader Development, Organization, Materiel and Soldiers (DTLOMS) needs. TRADOC battle labs build on initiatives with greatest potential payoff. Program is also used as a first look at emerging technologies and emerging warfighting concepts that have the potential to support the Army's Force XXI design needs. As the Army moves toward Force XXI, the critical task of designing the force around information requires major investment in information-age capabilities. Constructive, virtual, and live simulations are used to examine warfighting concepts across DTLOMS domains. They cover all aspects of command and control, lethality, survivability, and tempo and are essential to technology insertion in future Army systems and force structure. Beginning in FY1999 funding restructured to PE 0605326A, Project D308, Concept Experimentation Program.

FY 1998 Accomplishments:

- 150 Voice-Data Repeater
- 8 Digital Aircraft Weighing Scale
- 248 Manned and Unmanned Aerial Platform Operations on the Digital Battlefield
- 33 Aviation Ground Recovery System
- 77 Tele-Operation of the M1 Panther
- 178 Teleops – D7G for Obstacle Clearing
- 51 Engineer C4I
- 110 Range Estimation with Seismic Sensors for Early Detection
- 194 Smart Bridge
- 85 Nonlethal Alternatives for Anti-personnel Landmines
- 306 Operational Concept & Demo of the C2 Tactical Trainer (C2TT)
- 340 Crusader Operations on the Digitized Battlefield
- 199 Striker Acoustic Cueing Sensor (SACS)
- 148 Training FS Skills with Infoscope Tech vs. GUARD FIST
- 98 Enhanced Fire Support Simulations
- 123 SOF Digital Fire Support Connectivity
- 83 Voice Recognition Technology for AFATDS

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D985
<p>FY 1998 Accomplishments: (continued)</p> <ul style="list-style-type: none"> • 90 3 Dimensional Night Vision Goggles (3D NVG) • 192 Data Display Integration Technology Evaluation • 136 Dismounted Combat Identification Phase V • 74 Small, Hands Free, Squad Radio for Restricted or Urban Terrain • 310 Signal Support for Force XXI TOC • 213 Warfighter Information Network Support for the CSS C4I • 140 Battlefield Video Teleconferencing (BVTC) • 95 Information Protection (Intrusion/Detection) • 270 Next Generation Semi-Autonomous Recon Operations in the Digital Battlefield • 294 Multi-Agent Fire Control System • 140 Mounted Warrior Capability Assessment) • 85 Future Scout and Cavalry System Sensor Suite Configuration • 37 Pen Based Law Enforcement Systems (PBLES) • 85 Dynamically Distributed Overlays (DDO) • 300 Joint Collaborative Target System (JCTS) • 80 Automated Intelligence Preparation of the Battlefield / Automated DS • 105 USMC C3I Interoperability • 205 Automated Commander's Critical Information Requirements (AUTO CCIR) • 300 Small Lightweight Intercept Device (SLID) • 100 All Radiation Anti-Missile System • 300 SWORD Radar • 162 Rapid Optical Beam Steering System (ROBS) • 291 Course of Action War Gaming Tool • 233 Prototype ABCS Simulation Interface Support • 240 Tactical Class I Automation • 535 ICS3 Maintenance Model Embedded Training • 200 Forward Repair System – Heavy) • 240 Movement Tracking System + Radio Frequency ID + ICS3 (MRI-E) • 240 Wartime Usage of C/E Rechargeable Batteries • 170 Deployment Information Support System (DISS) • 136 Vehicle Integrated Mobile Electrical Power Source 		
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FY 1998 Accomplishments: (continued)

- 200 ASL Mobility
- 425 Battle Lab Experimentation
- 6627 Continued Division XXI AWE Support. Experimentation to examine Division level digital connectivity to validate digital training products. Simulation and analysis to validate DTLOMS insights that will fuel Army investments in FY 99-FY 06.

Total 15681

FY 1999 Planned Program: Program restructured to PE 0605326A

FY 2000 Planned Program: Program restructured to PE 0605326A

FY 2001 Planned Program: Program restructured to PE 0605326A

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COST (<i>In Thousands</i>)	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
D987 OPTEC Instrumentation & Development	4896	4799	5945	6047	6500	6635	7559	8323	Continuing	Continuing

Mission Description and Justification: This project provides for the technical upgrade and maintainability of essential instrumentation to achieve cost effective data collection, telemetry, and processing capability for support of robust and credible operational tests as required by the DoD and Congress. Increased sophistication of new weapon and communication and control systems demands the ability to capture test data at greater rates and increased volumes and then to reduce the information rapidly to only those essential to effectively evaluate the test. As digitization of the battlefield continues, this effort allows OPTEC to modernize and develop its non-major instrumentation allowing it to be less intrusive, more reliable and more robust in terms of integrating combat simulation capability into operational tests. The goal is to expand measurement and test control capability while still reducing future test costs. This project supports multiple efforts associated with MAIS and separate, independent initiatives that lead to improved command and control, increased mobility, expanded remote data collection at various tactical sites with transmit capability to central receiving, control, and evaluation stations at various test directorates, new instrumentation capability in support of Real-Time Casualty Assessment (RTCA) which measures simulated attrition of forces during simulated battlefield engagements. These directorates are located at Fort Hood, TX; Fort Bliss, TX; Fort Huachuca, AZ; Fort Sill, OK; and Fort Bragg, NC.

FY 1998 Accomplishments:

- 634 Video Telemetry and Recording System (Technical Insertion – Performance Increase)
 - 400 Multimedia Data Transfer System (Technical Insertion – Performance Increase)
 - 362 High-Speed Telemetry System (Quick Reaction in Support of Critical Operational Test)
 - 300 Radio Frequency Monitoring System (Technical Insertion – Performance Increase)
 - 765 Telemetry System Upgrade (Product Improvement)
 - 150 Command Audio / Visual Upgrade (Product Improvement)
 - 500 Image System Upgrade (Product Improvement)
 - 198 Test View and Visualization (Technical Insertion – Performance Increase)
 - 568 Improved Field Data Collector Enhancements (Product Improvement)
 - 430 Simulation Support Modules (Technical Insertion – Performance Increase)
 - 125 Video Tracking System (Quick Reaction in Support of Critical Operational Test)
 - 325 Mobile Automated Instrumentation Suite (MAIS) After Action Review (Technical Insertion – Performance Increase)
 - 39 Data Collection Vehicles (Product Improvement)
 - 100 Improved Field Data Collector/Advanced Field Artillery Tactical Data System Interface (Quick Reaction in Support of Critical Operational Test)
- Total 4896

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BUDGET ACTIVITY 6 - Management and Support	PE NUMBER AND TITLE 0605712A Support of Operational Testing	PROJECT D987
FY 1999 Planned Program:		
•	420 Multimedia Data Transfer System (Technical Insertion – Performance Increase)	
•	530 Automated Intelligence / Electronic Warfare Test System (Product Improvement)	
•	508 Video Telemetry and Recording System (Technical Insertion – Performance Increase)	
•	296 Simulation Support Modules (Technical Insertion – Performance Increase)	
•	2500 Improved Field Data Collector Enhancements (Product Improvement)	
•	318 Video Telemetry System (Product Improvement)	
•	100 TEXCOM Common Data Transfer Initiative (Technical Insertion – Performance Increase)	
•	127 Small Business Innovation Research/Small Business Technology Transfer (SBIR/STTR) Programs	
Total	4799	
FY 2000 Planned Program:		
•	1200 Improved Field Data Collector Enhancements (Technical Insertion – Performance Increase)	
•	527 Multimedia Data Transfer System (Technical Insertion – Performance Increase)	
•	600 Common Data Transfer System (Technical Insertion – Performance Increase)	
•	718 High Speed Telemetry System (Technical Insertion – Performance Increase)	
•	587 Video Telemetry Recording System (Technical Insertion – Performance Increase)	
•	225 Geometric Pointing System (Technical Insertion – Performance Increase)	
•	720 GPS Modernization (Technical Insertion – Performance Increase)	
•	218 Image Doc Upgrade (Technical Insertion – Performance Increase)	
•	300 Video tracking System Modification (Product Improvement – Performance Increase)	
•	850 Automated Intel/Electronic Warfare Test System (Product Improvement)	
Total	5945	
FY 2001 Planned Program:		
•	800 Improved Field Data Collector Enhancements (Technical Insertion – Performance Increase)	
•	250 Multimedia Data Transfer System (Technical Insertion – Performance Increase)	
•	650 Common Data Transfer System (Technical Insertion – Performance Increase)	
•	807 High Speed Telemetry System (Technical Insertion – Performance Increase)	
•	494 Mobile Integrated Non-Intrusive Command, Control and Communication Instrumentation (Technical Insertion – Performance Increase)	
•	350 Geometric Pointing System (Technical Insertion – Performance Increase)	
•	400 Enhanced Telemetry and Display System (Product Improvement)	
•	325 Video Tracking System Modification in Service (Technical Insertion – Performance Increase)	

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BUDGET ACTIVITY **6 - Management and Support** PE NUMBER AND TITLE **0605712A Support of Operational Testing** PROJECT **D987**

FY 2001 Planned Program: (continued)

- 620 Secure Wide-Band Satellite Common Link System (Technical Insertion – Performance Increase)
 - 75 Information Warfare Suite (Technical Insertion – Performance Increase)
 - 200 Communication Assets (Technical Insertion – Performance Increase)
 - 500 Synthetic Jamming (Technical Insertion – Performance Increase)
 - 350 Electro-Optics Facility Instrumentation (Technical Insertion – Performance Increase)
 - 226 Air Defense Artillery Test Directorate Player and Event Tracking System (Technical Insertion – Performance Increase)
- Total 6047

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