

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

| COST (In Thousands)                             | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete | Total Cost |
|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| Total Program Element (PE) Cost                 | 31204             | 64808               | 86288               | 88153               | 31787               | 40321               | 37788               | 35947               | Continuing          | Continuing |
| 194 ENGINE DRIVEN GEN ED                        | 4817              | 7296                | 5248                | 6644                | 7412                | 9292                | 5491                | 5127                | Continuing          | Continuing |
| 429 RIGIDWALL SHELTER ED                        | 7738              | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 0                   | 6557       |
| 461 MARINE ORIEN LOG EQ ED                      | 10925             | 37046               | 61923               | 65935               | 3326                | 5175                | 5174                | 2989                | 0                   | 193891     |
| H01 COMBAT ENGINEER EQ ED                       | 800               | 4227                | 4190                | 4268                | 4678                | 4760                | 3320                | 3213                | 0                   | 30247      |
| H02 TACTICAL BRIDGING - ENGINEERING DEVELOPMENT | 968               | 1750                | 1946                | 1942                | 2442                | 1948                | 3380                | 3076                | Continuing          | 18070      |
| H14 MATERIALS HANDLING EQUIPMENT - ED           | 573               | 1519                | 492                 | 492                 | 490                 | 490                 | 491                 | 490                 | Continuing          | Continuing |
| L39 FIELD SUSTAINMENT SUPPORT ED                | 974               | 981                 | 8413                | 4647                | 9162                | 10397               | 9819                | 9825                | Continuing          | Continuing |
| L41 WATER AND PETROLEUM DISTRIBUTION - ED       | 3272              | 9315                | 1690                | 952                 | 950                 | 5400                | 3007                | 3570                | 0                   | Continuing |
| L42 CAMOUFLAGE SYSTEM ED                        | 314               | 329                 | 668                 | 1617                | 1654                | 1166                | 1887                | 1741                | Continuing          | Continuing |
| L43 ENGINEER SUPPORT EQUIPMENT - ED             | 823               | 2345                | 1226                | 1164                | 1183                | 1203                | 4728                | 5426                | Continuing          | Continuing |
| L46 MAINTENANCE SUPPORT EQUIPMENT               | 0                 | 0                   | 492                 | 492                 | 490                 | 490                 | 491                 | 490                 | 0                   | 2945       |

**A. Mission Description and Budget Item Justification:** This Program Element (PE) provides system development and demonstration for various projects included within the PE. Included within this PE is the development of military tactical bridging, materiel handling equipment, construction equipment, engineer support equipment, environmental equipment, water purification equipment, petroleum distribution equipment, mobile electric power and water craft.

This project supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

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

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

| <u><b>B. Program Change Summary</b></u> | FY 2002 | FY 2003 | FY 2004 | FY 2005 |
|---|---------|---------|---------|---------|
| Previous President's Budget (FY 2003)   | 29326   | 65857   | 28257   | 25044   |
| Current Budget (FY 2004/2005 PB)        | 31204   | 64808   | 86288   | 88153   |
| Total Adjustments                       | 1878    | -1049   | 58031   | 63109   |
| Congressional program reductions        |         |         |         |         |
| Congressional rescissions               |         | -372    |         |         |
| Congressional increases                 |         | 1143    |         |         |
| Reprogrammings                          | 2660    |         |         |         |
| SBIR/STTR Transfer                      | -782    | -1820   |         |         |
| Adjustments to Budget Years             |         |         | 58031   | 63109   |

FY04 & FY05 increases provided by the Army supports higher Army priorities.

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

February 2003

|   |                   |                     |                     |  |                     |                     |                     |                     |                              |            |
|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---------------------|---------------------|------------------------------|------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> |                   |                     |                     | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng</b> |                     |                     |                     |                     | <b>PROJECT</b><br><b>194</b> |            |
|   |                   |                     |                     | <b>Dev</b>   |                     |                     |                     |                     |                              |            |
| COST (In Thousands)   | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate  | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete          | Total Cost |
| 194 ENGINE DRIVEN GEN ED  | 4817              | 7296                | 5248                | 6644   | 7412                | 9292                | 5491                | 5127                | Continuing                   | Continuing |

**A. Mission Description and Budget Item Justification:** This project supports the Mobile Electric Power (MEP) program which is established to develop a Modernized, Standard Family of Mobile Electric Power Sources for All Services throughout the Department of Defense. Building on the device/component evaluations conducted in PE 0603804A project G11, this project supports the system development and demonstration of a series of innovative mobile electric power sources that are essential to the development and eventual fielding of modernized mobile electric power sources from 0.5 kW to 920 kW. These sources will ensure compliance with federally mandated environmental statutes and significantly lower noise and thermal signatures (thereby improving battlefield survivability), improve fuel and electrical efficiency, reduce weight, enhance portability, improve reliability and maintainability and reduce operational and support costs.

This system supports the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>   | FY 2002     | FY 2003     | FY 2004     | FY 2005     |
|---|-------------|-------------|-------------|-------------|
| Continue hardware system development and testing for 100/200kW TQG.   | 4817        | 200         | 0           | 0           |
| Complete testing and transition 100/200kW TQG to production and deployment.                                 | 0           | 3070        | 200         | 0           |
| Evaluate commercially available components for application to Advanced Medium Mobile Power Sources (AMMPS). | 0           | 1626        | 0           | 0           |
| Complete Performance Specification and MS B IPR package for AMMPS.  | 0           | 300         | 0           | 0           |
| Award two or more Phase I contracts for AMMPS and conduct Phase I testing.                                  | 0           | 0           | 5048        | 1670        |
| Award Phase II contract option for AMMPS.   | 0           | 0           | 0           | 4974        |
| Initiate 2kW Improvement Program  | 0           | 2100        | 0           | 0           |
| <b>Totals</b>   | <b>4817</b> | <b>7296</b> | <b>5248</b> | <b>6644</b> |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng**  
**Dev**

**PROJECT**  
**194**

| <b>B. Other Program Funding Summary</b>                    | <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> | <u>To Compl</u> | <u>Total Cost</u> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| 0603804A - Logistics and Engineer Equipment Adv<br>Dev G11 | 871            | 1480           | 1501           | 1477           | 2831           | 3426           | 4003           | 3204           | Continuing      | Continuing        |
| OPA3, MA9800 Generators and Associated<br>Equipment        | 60475          | 77038          | 62853          | 66485          | 71966          | 69901          | 89802          | 87365          | Continuing      | Continuing        |

**C. Acquisition Strategy:** Developmental items in this project will transition into procurement.

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

**February 2003**

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**194**

| 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 . 100/200kW TQG           | C-CPFF                 | Fermont, Bridgeport, CT        | 8618           | 200          | 2Q                 | 0            |                    | 0            |                    | Continue         | Continue   | 0                        |
| b . AMMPS(5-60kW)           | TBD                    | TBD                            | 4251           | 779          | 2Q                 | 4298         | 3Q                 | 4829         | 3Q                 | Continue         | Continue   | 0                        |
| c . 2kW Improvement Program | TBD                    | TBD                            | 0              | 1785         | 3Q                 | 0            |                    | 0            |                    | Continue         | Continue   | 0                        |
| Subtotal:                   |                        |                                | 12869          | 2764         |                    | 4298         |                    | 4829         |                    | Continue         | Continue   | 0                        |

| 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 . 100/200kW TQG           | In-house               | CECOM, Ft Belvoir, VA          | 985            | 250          | 2Q                 | 100          | 1Q                 | 0            |                    | Continue         | Continue   | 0                        |
| b . AMMPS(5-60kW)           | In-house               | CECOM, Ft Belvoir, VA          | 1425           | 200          | 2Q                 | 350          | 1Q                 | 395          | 1Q                 | Continue         | Continue   | 0                        |
| c . 2kW Improvement Program | In-house               | CECOM, Ft Belvoir, VA          | 0              | 65           | 2Q                 | 0            |                    | 0            |                    | Continue         | Continue   | 0                        |
| Subtotal:                   |                        |                                | 2410           | 515          |                    | 450          |                    | 395          |                    | Continue         | Continue   | 0                        |

| ARMY RDT&E COST ANALYSIS(R-3)            |                        |                                |                |              |   |              |                    |              | February 2003      |                  |            |                          |
|--|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                          |                        |                                |                |              | PE NUMBER AND TITLE                                   |              |                    |              |                    | PROJECT          |            |                          |
| 5 - System Development and Demonstration |                        |                                |                |              | 0604804A - Logistics and Engineer Equipment - Eng Dev |              |                    |              |                    | 194              |            |                          |
| 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 . 100/200kW                            | MIPR                   | Aberdeen Proving Ground, MD    | 2190           | 2570         | 1Q  | 0            |                    | 0            |                    | Continue         | Continue   | 0                        |
| b . AMMPS(5-60kW)                        | TBD                    | TBD                            | 230            | 697          | 2Q  | 0            |                    | 920          | 2Q                 | Continue         | Continue   | 0                        |
| c . 2kW Improvement Program              | MIPR                   | CECOM, Fort Belvoir, VA        | 0              | 250          | 4Q  | 0            |                    | 0            |                    | Continue         | Continue   | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                  |            |                          |
|  |                        |                                | 2420           | 3517         |   | 0            |                    | 920          |                    | Continue         | Continue   | 0                        |
| Subtotal:                                |                        |                                |                |              |   |              |                    |              |                    |                  |            |                          |
| 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 . 100/200kW                            | In-house               | CECOM, Ft Belvoir, VA          | 772            | 250          | 1Q  | 100          | 1Q                 | 0            |                    | Continue         | Continue   | 0                        |
| b . AMMPS(5-60kW)                        | In-house               | CECOM, Ft Belvoir, VA          | 907            | 250          | 1Q  | 400          | 1Q                 | 500          | 1Q                 | Continue         | Continue   | 0                        |
|  |                        |                                |                |              |   |              |                    |              |                    |                  |            |                          |
|  |                        |                                | 1679           | 500          |   | 500          |                    | 500          |                    | Continue         | Continue   | 0                        |
| Subtotal:                                |                        |                                |                |              |   |              |                    |              |                    |                  |            |                          |
| Project Total Cost:                      |                        |                                | 19378          | 7296         |   | 5248         |                    | 6644         |                    | Continue         | Continue   | 0                        |

## Schedule Profile Detail (R-4a Exhibit)

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**194**

| <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 AMMPS prototype testing  | 4Q             |                |                |                |                |                |                |                |
| Publish CBD Announcement requesting White Papers for 2kW Improvement Program  |                | 2Q             |                |                |                |                |                |                |
| Award 2kW Improvement Program contract  |                | 3Q             |                |                |                |                |                |                |
| Complete 100/200kW TQG Developmental Test                                     |                | 4Q             |                |                |                |                |                |                |
| Complete solicitation package for AMMPS                                       |                | 4Q             |                |                |                |                |                |                |
| Complete 100/200kW TQG Operational Test                                       |                |                | 1Q             |                |                |                |                |                |
| AMMPS Milestone B   |                |                | 1Q             |                |                |                |                |                |
| Transition 100/200kW TQG to Procurement (Milestone C)                         |                |                | 3Q             |                |                |                |                |                |
| Award two or more Phase I contracts for AMMPS prototype design and build      |                |                | 3Q             |                |                |                |                |                |
| Initiate Phase I testing of AMMPS   |                |                |                | 1Q             |                |                |                |                |
| Award Phase II contract for AMMPS family                                      |                |                |                | 3Q             |                |                |                |                |
| Initiate DT and OT for AMMPS  |                |                |                |                | 3Q             |                |                |                |
| Complete testing of Phase II AMMPS and prepare Milestone C package            |                |                |                |                |                | 4Q             |                |                |
| Begin preparation of Performance Specification for Man Portable Power Program |                |                |                |                |                |                | 1Q             |                |
| Transition AMMPS to Procurement (Milestone C)                                 |                |                |                |                |                |                | 1Q             |                |
| AMMPS Material Release  |                |                |                |                |                |                | 4Q             |                |
| Award MPP Phase I contracts   |                |                |                |                |                |                |                | 2Q             |

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

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**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**461**

| COST (In Thousands)        | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete | Total Cost |
|----------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| 461 MARINE ORIEN LOG EQ ED | 10925             | 37046               | 61923               | 65935               | 3326                | 5175                | 5174                | 2989                | 0                   | 193891     |

**A. Mission Description and Budget Item Justification:** This project supports the engineering and pre-production development of equipment for the Army's Logistics-Over-The-Shore (LOTS), In-theatre Port Control, Riverine logistics missions. Chief among this equipment is the Theater Support Vessel (TSV). The Objective TSV will operate at speeds up to four times greater than the current fleet. This will provide the Army with the capability to support operational maneuver from standoff distance; bypass land-based chokepoints, and reduce the logistics footprint in the Area of Responsibility. This ability to transport both troops and their equipment, and to provide an Enroute Mission Planning and Rehearsal System, does not exist today. This evolutionary acquisition features the current lease of a commercial fast ferry (in cooperation with the U.S. Navy (HSV-X1)), and a lease for another (more capable) fast ferry (TSV-1X), for Technology Demonstration purposes.

This project also supports the Harbormaster Command and Control Center (HCCC).

These systems support the Legacy-to-objective transition path of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>   | <b><u>FY 2002</u></b> | <b><u>FY 2003</u></b> | <b><u>FY 2004</u></b> | <b><u>FY 2005</u></b> |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Army Support for TSV lease/test program.  | 10925                 | 36546                 | 61923                 | 65935                 |
| Complete HCCC program documentation, i.e. Purchase Description, Modified Integrated Program Summary (MIPS). | 0                     | 500                   | 0                     | 0                     |
| <b>Totals</b>   | <b>10925</b>          | <b>37046</b>          | <b>61923</b>          | <b>65935</b>          |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng**  
**Dev**

**PROJECT**  
**461**

| <b>B. Other Program Funding Summary</b>                             | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> | <b>FY 2006</b> | <b>FY 2007</b> | <b>FY 2008</b> | <b>FY 2009</b> | <b>To Compl</b> | <b>Total Cost</b> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| RDTE, 0603804A,526, Marine Oriented Logistics, Advanced Development | 3232           | 3242           | 3759           | 3824           | 3996           | 3213           | 4521           | 4426           | Continuing      | Continuing        |
| OPA 3, M11200, Logistic Support Vessel (LSV)                        | 25817          | 10800          | 0              | 0              | 0              | 0              | 0              | 0              | 0               | 36617             |
| OPA 3, M11203, Theatre Support Vessel (TSV)                         | 0              | 0              | 0              | 0              | 33218          | 33197          | 356511         | 373005         | Continuing      | Continuing        |

**C. Acquisition Strategy:** TSV technical efforts will be conducted primarily with the Naval Surface Warfare Center (NSWC). NSWC can call on both in-house and contract resources (based on workload and expertise) to cover Army requirements. The Acquisition Strategy calls for evolutionary/spiral development of Commercial based technology with military adaptations, acquired competitive with dual domestic sourcing.

| ARMY RDT&E COST ANALYSIS(R-3)                               |  |                                |                |  |                    |              |                    | February 2003 |                    |                  |            |                          |
|---|--|--------------------------------|----------------|--|--------------------|--------------|--------------------|---------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |  |                                |                | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |                    |              |                    |               |                    | PROJECT<br>461   |            |                          |
| 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. TSV  | MIPR                                       | NSWC, Suffolk, VA              | 1783           | 2836   | 1-3Q               | 3000         | 2-3Q               | 2000          | 2-3Q               | Continue         | Continue   | Continue                 |
| b. HSV Lease  | Competitive FFP/Requirements Type Contract | Bollinger/INCAT                | 3931           | 1193   | 1-2Q               | 0            |                    | 0             |                    | 0                | 5124       | 0                        |
| c. TSV-X1 Lease   | Competitive Fixed Price Contract           | Bollinger/INCAT                | 0              | 11652  | 1Q                 | 0            |                    | 0             |                    | 0                | 11652      | 0                        |
| d. TSV-X1 Lease   | PWD  | TBD                            | 0              | 0  |                    | 58323        | 1-2Q               | 63335         | 1-2Q               | Continue         | 121658     | 0                        |
| e. TSV/HSV Modifications                                    | PWD  | TBD                            | 5021           | 20143  | 1-3Q               | 0            |                    | 0             |                    | Continue         | 25164      | Continue                 |
|   |  |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
|   |  |                                | 10735          | 35824  |                    | 61323        |                    | 65335         |                    | Continue         | Continue   | Continue                 |
| Subtotal:   |  |                                |                |  |                    |              |                    |               |                    |                  |            |                          |

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

**February 2003**

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**461**

| 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 . HCCC/Matrix Support | MIPR                   | TACOM NET, Warren, MI          | 0              | 5            | 2-3Q               | 0            |                    | 0            |                    | 0                | 5          | Continue                 |
| b . TSV/Matrix Support  | MIPR                   | TACOM Safety Office            | 0              | 70           | 2Q                 | 50           | 2-3Q               | 50           | 2-3Q               | Continue         | Continue   | Continue                 |
| c . HCCC                | MIPR                   | CASCOM                         | 0              | 15           | 2-3Q               | 0            |                    | 0            |                    | 0                | 15         | Continue                 |
| d . TSV                 | MIPR                   | DRM, Ft Eustis                 | 90             | 0            |                    | 0            |                    | 0            |                    | 0                | 90         | 0                        |
| e . TSV                 | MIPR                   | NSWC, West Bethesda, MD        | 100            | 0            |                    | 0            |                    | 0            |                    | 0                | 100        | 0                        |
| f . TSV/Matrix Support  | MIPR                   | TACOM, Environmental           | 0              | 125          | 2Q                 | 0            |                    | 0            |                    | 0                | 125        | 0                        |
|                         |                        |                                |                |              |                    |              |                    |              |                    |                  |            |                          |
| Subtotal:               |                        |                                | 190            | 215          |                    | 50           |                    | 50           |                    | Continue         | Continue   | Continue                 |

| ARMY RDT&E COST ANALYSIS(R-3)            |                        |   |                |              |   |              |                    |              | February 2003      |                  |            |                          |
|--|------------------------|---|----------------|--------------|---|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                          |                        |   |                |              | PE NUMBER AND TITLE                                   |              |                    |              |                    | PROJECT          |            |                          |
| 5 - System Development and Demonstration |                        |   |                |              | 0604804A - Logistics and Engineer Equipment - Eng Dev |              |                    |              |                    | 461              |            |                          |
| 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 . HCCC                                 | MIPR                   | TECOM , ATC, Aberdeen, MD                         | 50             | 50           | 2-3Q  | 0            |                    | 0            |                    | 0                | 100        | 730                      |
| b . TSV/Matrix Support                   | MIPR                   | LCCE, TACOM, Warren                               | 0              | 50           | 2-3Q  | 50           | 2-3Q               | 50           | 2-3Q               | Continue         | Continue   | Continue                 |
| Subtotal:                                |                        |   | 50             | 100          |   | 50           |                    | 50           |                    | Continue         | Continue   | Continue                 |
| 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 . HCCC/Matrix                          | MIPR                   | PM Force Projection R&D/TARDEC, TACOM, Warren, MI | 212            | 125          | 1-4Q  | 0            |                    | 0            |                    | 0                | 337        | Continue                 |
| b . TSV/In-house                         | MIPR                   | PM TSV, Warren, MI                                | 0              | 477          | 1-4Q  | 500          | 2-3Q               | 500          | 2Q                 | Continue         | Continue   | Continue                 |
| c . HCCC/In-house                        | MIPR                   | PM Force Projection , Warren, MI                  | 0              | 255          | 2-3Q  | 0            |                    | 0            |                    | 0                | 255        | Continue                 |
| d . HCCC                                 | Competitive FFP/PWD    | TBD   | 0              | 50           | 2-3Q  | 0            |                    | 0            |                    | 0                | 50         | 0                        |

|  |                      |
|--|----------------------|
| <b>ARMY RDT&amp;E COST ANALYSIS(R-3)</b> | <b>February 2003</b> |
|--|----------------------|

|   |  |                              |
|---|--|------------------------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> | <b>PROJECT</b><br><b>461</b> |
|---|--|------------------------------|

| IV. Management Services<br>(continued) | Contract<br>Method &<br>Type | Performing Activity &<br>Location | Total<br>PYs Cost | FY 2003<br>Cost | FY 2003<br>Award<br>Date | FY 2004<br>Cost | FY 2004<br>Award<br>Date | FY 2005<br>Cost | FY 2005<br>Award<br>Date | Cost To<br>Complete | Total<br>Cost | Target<br>Value of<br>Contract |
|--|------------------------------|-----------------------------------|-------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|---------------------|---------------|--------------------------------|
| Subtotal:                              |                              |                                   | 212               | 907             |                          | 500             |                          | 500             |                          | Continue            | Continue      | Continue                       |

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|                     |  |  |       |       |  |       |  |       |  |          |          |          |
|---------------------|--|--|-------|-------|--|-------|--|-------|--|----------|----------|----------|
| Project Total Cost: |  |  | 11187 | 37046 |  | 61923 |  | 65935 |  | Continue | Continue | Continue |
|---------------------|--|--|-------|-------|--|-------|--|-------|--|----------|----------|----------|

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## Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**461**

| <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> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Harbormaster Command & Control Center (HCCC) Contract Award |                | 1-4Q           |                |                |                |                |                |                |
| Spiral Developmental/Design Mods                            | 1-4Q           | 1-4Q           | 1-4Q           |                |                |                |                |                |
| Theater Support Vessel Joint Lease/Test program             | 1-4Q           | 1-4Q           | 1-4Q           | 1-4Q           |                |                |                |                |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**H01**

| COST (In Thousands)       | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete | Total Cost |
|---------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------|
| H01 COMBAT ENGINEER EQ ED | 800               | 4227                | 4190                | 4268                | 4678                | 4760                | 3320                | 3213                | 0                | 30247      |

**A. Mission Description and Budget Item Justification:** This project supports the System Development and Demonstration (SDD) of military tactical Construction Equipment (CE) used in support of horizontal construction missions. Equipment includes items such as: High Mobility Engineer Excavator; Deployable Universal Combat Earthmover; Tracked Tractor; Asphalt, Rock Crushing and Compaction Equipment; Scrapers, Scoop Loaders and Graders. These systems support Combat Heavy Engineer Battalions and Airborne/Air Assault units and the Army's Division Redesign Study (ADRS) which converts National Guard units from Combat to Combat Service Support (CSS) units. Although many military requirements are available on commercial products, military unique requirements such as speed, cross country mobility, crew protection, Nuclear, Biological and Chemical Protection (NBC), and transportability (air, sea, rail) result in modifications to commercially available products. SDD is required to reduce the risk associated with modification and redesign of equipment before entering into production.

This project supports the Objective Force of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>  | FY 2002    | FY 2003     | FY 2004     | FY 2005     |
|--|------------|-------------|-------------|-------------|
| Conducted market investigations and update specifications for procurements of CE.                                  | 291        | 447         | 457         | 470         |
| Supports development of acquisition documents required prior to Milestone "C" decisions.                           | 481        | 245         | 303         | 315         |
| Perform Non Developmental Item test and evaluations.   | 0          | 170         | 300         | 456         |
| R&D contracts execution for Objective High Mobility Engineer Excavator (OHMEE).                                    | 0          | 3345        | 1730        | 1427        |
| Continued Small Emplacement Excavator upgrade and Market Investigation for upgrade of Small Emplacement Excavator. | 28         | 0           | 0           | 0           |
| Prototype testing for OHMEE (6 prototypes).  | 0          | 20          | 1000        | 1000        |
| Cooperative Research with Industry.  | 0          | 0           | 400         | 600         |
| <b>Totals</b>  | <b>800</b> | <b>4227</b> | <b>4190</b> | <b>4268</b> |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**H01**

| <b>B. Other Program Funding Summary</b>                          | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> | <b>FY 2006</b> | <b>FY 2007</b> | <b>FY 2008</b> | <b>FY 2009</b> | <b>To Compl</b> | <b>Total Cost</b> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| OPA3, R02800, Scraper, Earthmoving 14-18 Cu                      | 0              | 0              | 0              | 0              | 0              | 14722          | 3098           | 7755           | Continuing      | Continuing        |
| OPA3, R03801, Grader, Mtd, Hvy                                   | 0              | 3688           | 0              | 5187           | 14536          | 14837          | 22355          | 10040          | Continuing      | Continuing        |
| OPA3, R05900, Interim High Mobility Engineer Excavator (IHMEE)   | 12846          | 4879           | 4842           | 0              | 0              | 0              | 0              | 0              | 0               | 22567             |
| OPA3, M08100, Plant, Asphalt Mixing                              | 1999           | 1952           | 1937           | 1257           | 0              | 0              | 7610           | 5881           | Continuing      | Continuing        |
| OPA3, ML5350, Item Less than \$5M (Construction Equipment)       | 6359           | 14963          | 6305           | 9061           | 7470           | 9212           | 9053           | 11770          | Continuing      | Continuing        |
| OPA3, R05900, Objective High Mobility Engineer Excavator (OHMEE) | 0              | 0              | 0              | 8100           | 8330           | 20416          | 21315          | 21825          | Continuing      | Continuing        |
| OPA3, M06400, Loader, Scoop 2.5 Cu Yd                            | 815            | 13414          | 5442           | 10300          | 10289          | 17050          | 19025          | 17630          | Continuing      | Continuing        |
| OPA3, R03900, Loader Scoop 4-5 Cu Yd                             | 1791           | 11266          | 2706           | 5813           | 0              | 0              | 0              | 0              | Continuing      | Continuing        |

**C. Acquisition Strategy:** Construction Equipment- All RDT&E followed by competitive procurement.

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

**February 2003**

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**H01**

| 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 . OHMEE              | MIPR                   | TACOM, Warren, MI              | 8533           | 245          | 1-4Q               | 303          | 1-4Q               | 315          | 1-4Q               | Continue         | Continue   | Continue                 |
| b . OHMEE SDD Contract | FFP                    | TBD                            | 839            | 3345         | 1-4Q               | 1730         | 1-4Q               | 1427         | 1-4Q               | Continue         | 7341       | Continue                 |
| c . Research Contracts | FFP                    | TBD                            | 0              | 0            |                    | 400          | 1-4Q               | 600          | 1-4Q               | Continue         | Continue   | Continue                 |
| Subtotal:              |                        |                                | 9372           | 3590         |                    | 2433         |                    | 2342         |                    | Continue         | Continue   | Continue                 |

| 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 . Market Investigations | MIPR                   | TARDEC, Warren, MI             | 872            | 254          | 1-4Q               | 261          | 1-4Q               | 270          | 1-4Q               | Continue         | Continue   | Continue                 |
| Subtotal:                 |                        |                                | 872            | 254          |                    | 261          |                    | 270          |                    | Continue         | Continue   | Continue                 |

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |                                |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |                                |                |              | PE NUMBER AND TITLE  |              |                    |              |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |                                |                |              | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | <b>H01</b>       |            |                          |
| 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 . Test and Prep                               | MIPR                   | APG, Aberdeen, MD              | 1121           | 20           | 1-4Q   | 1000         | 1-4Q               | 1000         | 1-4Q               | Continue         | Continue   | Continue                 |
| b . System and Component testing                | MIPR                   | APG, Aberdeen, MD              | 28             | 170          | 1-4Q   | 300          | 1-4Q               | 456          | 1-4Q               | Continue         | Continue   | Continue                 |
| Subtotal:                                       |                        |                                | 1149           | 190          |  | 1300         |                    | 1456         |                    | Continue         | Continue   | Continue                 |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 . Market Investigations                       | In-house               | PM CE, Warren, MI              | 150            | 193          | 1-4Q   | 196          | 1-4Q               | 200          | 1-4Q               | Continue         | Continue   | 0                        |
| Subtotal:                                       |                        |                                | 150            | 193          |  | 196          |                    | 200          |                    | Continue         | Continue   | 0                        |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| Project Total Cost:                             |                        |                                | 11543          | 4227         |  | 4190         |                    | 4268         |                    | Continue         | Continue   | Continue                 |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |

## Schedule Profile Detail (R-4a Exhibit)

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**H01**

| <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> |
|------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Log Demo               | 3Q             |                |                |                |                |                |                |                |
| Market Surveillance    | 1-4Q           |
| Market Investigations  | 1-4Q           |
| Acquisition documents  | 1-4Q           |
| OHMEE MS B             | 3Q             |                |                |                |                |                |                |                |
| OHMEE SDD Contracts    |                | 2Q             |                |                |                |                |                |                |
| OHMEE Testing          |                | 3Q             | 3-4Q           | 1Q             |                |                |                |                |
| NDI Investigations     |                | 1-4Q           |
| Coop Research Indsutry |                |                | 1-4Q           | 1-4Q           | 1-4Q           | 1-4Q           | 1-4Q           | 1-4Q           |
| OHMEE MS C             |                |                |                | 2Q             |                |                |                |                |

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

February 2003

|   |                   |                     |                     |  |                     |                     |                     |                     |                              |            |
|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---------------------|---------------------|------------------------------|------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> |                   |                     |                     | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |                     |                     |                     |                     | <b>PROJECT</b><br><b>H02</b> |            |
| COST (In Thousands)   | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate  | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete             | Total Cost |
| H02 TACTICAL BRIDGING - ENGINEERING DEVELOPMENT                           | 968               | 1750                | 1946                | 1942   | 2442                | 1948                | 3380                | 3076                | Continuing                   | 18070      |

**A. Mission Description and Budget Item Justification:** This project supports the engineering, system development and demonstration and transition to procurement of Objective Force tactical bridge systems. These systems include Line of Communication (LOC) bridges and military tactical bridge site mobility equipment. These systems are needed to meet requirements such as the Anchorage System (AS) for the Ribbon Bridge and Improved Ribbon Bridge (IRB), Access/Egress Roadway System (AE) for bridge approaches, and assessment of the Rapidly Emplaced Bridging System (REBS) for the Stryker Brigade Combat Team (SBCT).

This project supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

| <u>Accomplishments/Planned Program</u>  | FY 2002    | FY 2003     | FY 2004     | FY 2005     |
|---|------------|-------------|-------------|-------------|
| Upgraded Prototype Dry Support Bridge to production configuration for use as the manufacturing standard | 818        | 0           | 0           | 0           |
| Prepared performance specification for Bridge Anchorage System  | 150        | 0           | 0           | 0           |
| Prepare Market Survey for Line of Communication Bridge  | 0          | 145         | 0           | 0           |
| Procure representative samples of Improved Bridge Anchorage System and test                             | 0          | 350         | 0           | 0           |
| Perform Operational Testing on the REBS   | 0          | 1110        | 0           | 0           |
| Prepare Market Survey for Access/Egress System  | 0          | 145         | 0           | 0           |
| Procure representative samples of Line of Communication Bridge for development testing                  | 0          | 0           | 1100        | 0           |
| Procure representative samples of Access/Egress System for development testing                          | 0          | 0           | 846         | 0           |
| Conduct development testing for Line of Communication Bridge  | 0          | 0           | 0           | 1000        |
| Conduct development testing for Access/Egress System  | 0          | 0           | 0           | 942         |
| <b>Totals</b>   | <b>968</b> | <b>1750</b> | <b>1946</b> | <b>1942</b> |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng**  
**Dev**

**PROJECT**  
**H02**

| <b>B. Other Program Funding Summary</b>   | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> | <b>FY 2006</b> | <b>FY 2007</b> | <b>FY 2008</b> | <b>FY 2009</b> | <b>To Compl</b> | <b>Total Cost</b> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| OPA3, M26600 Float Bridge Bays            | 21204          | 22429          | 21442          | 24518          | 19635          | 0              | 0              | 0              | 0               | 109228            |
| OPA3, G82400 Dry Support Bridge           | 21408          | 46323          | 37676          | 28927          | 33605          | 33734          | 51815          | 48536          | Continuing      | Continuing        |
| OPA3, G82402 Rapidly Emplaced Bridgin Sys | 3994           | 9722           | 4863           | 4807           | 0              | 0              | 0              | 0              | 0               | 23386             |

**C. Acquisition Strategy:** Limited RDTE effort to support follow-on production.

| ARMY RDT&E COST ANALYSIS(R-3)                               |                        |  |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |                        |  |                |              | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |              |                    |              |                    | PROJECT<br>H02   |            |                          |
| 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 . Anchorage System Sample                                 | SS-FFP                 | Eisenwerke Kaiserslautern Gmbh, Kaiserslautern, GE | 0              | 50           | 2Q   | 0            |                    | 0            |                    | 0                | 50         | 50                       |
| b . PM/Matrix Support                                       | MIPR                   | TACOM, Warren, MI                                  | 1918           | 290          | 3Q   | 0            |                    | 0            |                    | Continue         | 2208       | 2323                     |
| c . LOC Sample  | TBD                    | TBD  | 0              | 0            |  | 1100         | 3Q                 | 0            |                    | Continue         | 1100       | 1100                     |
| d . Access/Egress Sample                                    | TBD                    | TBD  | 0              | 0            |  | 846          | 3Q                 | 0            |                    | Continue         | 846        | 879                      |
|   |                        |  |                |              |  |              |                    |              |                    |                  |            |                          |
| Subtotal:   |                        |  | 1918           | 340          |  | 1946         |                    | 0            |                    | Continue         | 4204       | 4352                     |
|   |                        |  |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 |
|   |                        |  |                |              |  |              |                    |              |                    |                  |            |                          |
| Subtotal:   |                        |  | 0              | 0            |  | 0            |                    | 0            |                    | 0                | 0          | 0                        |
|   |                        |  |                |              |  |              |                    |              |                    |                  |            |                          |

| ARMY RDT&E COST ANALYSIS(R-3)                                      |                        |                                |                |              |   |              |                    |              | February 2003      |                       |            |                          |
|--|------------------------|--------------------------------|----------------|--------------|---|--------------|--------------------|--------------|--------------------|-----------------------|------------|--------------------------|
| BUDGET ACTIVITY<br><b>5 - System Development and Demonstration</b> |                        |                                |                |              | PE NUMBER AND TITLE<br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | PROJECT<br><b>H02</b> |            |                          |
| 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 . Anchorage System   | MIPR                   | APG, Aberdeen, MD              | 0              | 300          | 3-4Q  | 0            |                    | 0            |                    | Continue              | 300        | 300                      |
| b . REBS   | MIPR                   | HQ OTC, Ft Hood, TX            | 0              | 1110         | 2Q  | 0            |                    | 0            |                    | 0                     | 1110       | 1110                     |
| c . Access/Egress  | MIPR                   | APG, Aberdeen, MD              | 0              | 0            |   | 0            |                    | 1000         | 3-4Q               | Continue              | 1000       | 1000                     |
| d . LOC  | MIPR                   | APG, Aberdeen, MD              | 0              | 0            |   | 0            |                    | 942          | 3-4Q               | Continue              | 942        | 975                      |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
|  |                        |                                | 0              | 1410         |   | 0            |                    | 1942         |                    | Continue              | 3352       | 3385                     |
| Subtotal:  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| 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 |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
|  |                        |                                | 0              | 0            |   | 0            |                    | 0            |                    | 0                     | 0          | 0                        |
| Subtotal:  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |
| Project Total Cost:  |                        |                                | 1918           | 1750         |   | 1946         |                    | 1942         |                    | Continue              | 7556       | 7737                     |
|  |                        |                                |                |              |   |              |                    |              |                    |                       |            |                          |

## Schedule Profile Detail (R-4a Exhibit)

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**H02**

| <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> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Anchorage System Performance Specification       | 3Q             |                |                |                |                |                |                |                |
| Procure Anchorage System Representatives Samples |                | 2Q             |                |                |                |                |                |                |
| REBS Testing                                     |                | 2Q             |                |                |                |                |                |                |
| Anchorage System Testing                         |                | 3-4Q           |                |                |                |                |                |                |
| LOC Market Investigation complete                |                | 3Q             |                |                |                |                |                |                |
| Access/Egress Market Investigation complete      |                | 3Q             |                |                |                |                |                |                |
| LOC Sample                                       |                |                | 3Q             |                |                |                |                |                |
| Access/Egress Sample                             |                |                | 3Q             |                |                |                |                |                |
| LOC Testing                                      |                |                |                | 3-4Q           |                |                |                |                |
| Access/Egress Testing                            |                |                |                | 3-4Q           |                |                |                |                |

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

February 2003

|   |                   |                     |                     |  |                     |                     |                     |                     |                              |            |
|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---------------------|---------------------|------------------------------|------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> |                   |                     |                     | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |                     |                     |                     |                     | <b>PROJECT</b><br><b>H14</b> |            |
| COST (In Thousands)   | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate  | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete             | Total Cost |
| H14 MATERIALS HANDLING EQUIPMENT - ED                                     | 573               | 1519                | 492                 | 492  | 490                 | 490                 | 491                 | 490                 | Continuing                   | Continuing |

**A. Mission Description and Budget Item Justification:** This project supports system development and demonstration of Material Handling Equipment (MHE) that support Combat Service Support units with MHE for world wide rapid movement of supplies including container handling equipment, forklifts, and other cargo handling related items. Necessary efforts include validating requirements, developing acquisition strategies, developing performance specifications and test and evaluation planning.

These efforts support the Legacy to Objective transition path of the Transformation Campaign Plan (TCP).

| <u>Accomplishments/Planned Program</u>  | FY 2002    | FY 2003     | FY 2004    | FY 2005    |
|---|------------|-------------|------------|------------|
| Programmatic support of All Terrain Lifting Army System (ATLAS) II.   | 0          | 50          | 100        | 100        |
| Prototype rebuild of 6K Variable Reach Rough Terrain Forklift Truck (VRRFTLT) for upgrade to 10K forklift.  | 248        | 680         | 0          | 0          |
| Lease or purchase of All Terrain Lifting Army System (ATLAS) II.  | 0          | 439         | 142        | 0          |
| Preparation of solicitation package for All Terrain Lifting Army System (ATLAS) II Prototypes.  | 241        | 100         | 0          | 0          |
| Completed market investigations.  | 25         | 0           | 0          | 0          |
| Engineering support of 6K Variable Reach Rough Terrain Forklift Truck (VRRFTLT) SLEP.   | 0          | 100         | 100        | 192        |
| Testing of rebuilt 6K Variable Reach Rough Terrain Forklift Truck (VRRFTLT) to convert 10K Variable Reach Rough Terrain Forklift Truck (VRRFTLT). | 0          | 150         | 150        | 200        |
| Conduct electro magnetic, environmental, effects testing on Rough Terrain Container Handler.  | 59         | 0           | 0          | 0          |
| <b>Totals</b>   | <b>573</b> | <b>1519</b> | <b>492</b> | <b>492</b> |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**H14**

| <b>B. Other Program Funding Summary</b>  | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> | <b>FY 2006</b> | <b>FY 2007</b> | <b>FY 2008</b> | <b>FY 2009</b> | <b>To Compl</b> | <b>Total Cost</b> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| RDTE, 0603804.DG14, Logistics Support Equipment, Advance                       | 193            | 187            | 197            | 197            | 196            | 196            | 196            | 196            | Continuing      | Continuing        |
| OPA3, M41200, Forklift, DE, PT, RT, 50K lbs.(RTCH)                             | 42751          | 47738          | 36237          | 36475          | 48918          | 44120          | 14642          | 0              | Continuing      | Continuing        |
| OPA3, M41800, All Terrain Lifting Army System (ATLAS)                          | 28616          | 24773          | 22422          | 23309          | 23156          | 23863          | 24261          | 24822          | Continuing      | Continuing        |
| OPA3, ML5365, Items Less Than \$5.0M Material Handling Equipment (MHE)         | 297            | 482            | 0              | 0              | 0              | 0              | 0              | 0              | Continuing      | Continuing        |
| OPA3, M41900, Material Handling Equipment (MHE) Extended Service Program (ESP) | 3300           | 2241           | 1329           | 1738           | 977            | 976            | 4872           | 4867           | Continuing      | Continuing        |

**C. Acquisition Strategy:** RDT&E Logistics Support Engineering Equipment - Competitive formal source selection for prototype equipment. ATLAS (All Terrain Lifting Army System) - The current contract was competitive award; FY03 follow-on will be sole source. Items less than \$5M - Competitive procurements for various MHEs. 6K VRRFTLT (Variable Reach Rough Terrain Forklift Truck) prototype rebuild to be sole source to original equipment manufacturer.

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |   |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|---|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |   |                |              | PE NUMBER AND TITLE  |              |                    |              |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |   |                |              | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | <b>H14</b>       |            |                          |
| 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 . PM/Matrix Support                           | In-House               | TACOM, Warren, MI                       | 421            | 85           | 1-4Q   | 0            |                    | 0            |                    | Continue         | 506        | Continue                 |
| b . TARDEC                                      | In-House               | TARDEC, Warren, MI                      | 275            | 65           | 1-4Q   | 0            |                    | 0            |                    | Continue         | 340        | Continue                 |
| c . ATLAS II Contract                           | CFP                    | TBD                                     | 241            | 439          | 3-4Q   | 142          | 1-2Q               | 0            |                    | Continue         | 822        | Continue                 |
| d . 6K VRRFTLT Contract                         | SSFP                   | TRAK International, Port Washington, WI | 248            | 680          | 2Q   | 0            |                    | 0            |                    | Continue         | 928        | Continue                 |
|   |                        |   |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |   | 1185           | 1269         |  | 142          |                    | 0            |                    | Continue         | 2596       | Continue                 |
| Subtotal:                                       |                        |   |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 . ATLAS                                       |                        |   | 0              | 50           | 1-2Q   | 100          | 1-2Q               | 100          | 1-2Q               | Continue         | Continue   | Continue                 |
| b . 6K VRRFTLT                                  |                        |   | 0              | 50           | 1-2Q   | 100          | 1-2Q               | 192          | 1-2Q               | Continue         | Continue   | Continue                 |
|   |                        |   |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |   | 0              | 100          |  | 200          |                    | 292          |                    | Continue         | Continue   | Continue                 |
| Subtotal:                                       |                        |   |                |              |  |              |                    |              |                    |                  |            |                          |

| ARMY RDT&E COST ANALYSIS(R-3)                               |                        |                                |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |                        |                                |                |              | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |              |                    |              |                    | PROJECT<br>H14   |            |                          |
| 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 . 6K VRRFTLT  | MIPR                   | APG, Aberdeen, MD              | 0              | 150          | 1-2Q   | 150          | 1-2Q               | 200          | 1-2Q               | Continue         | Continue   | Continue                 |
| b . RTCH  | MIPR                   | APG, Aberdeen, MD              | 59             | 0            |  | 0            |                    | 0            |                    | Continue         | 59         | Continue                 |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |                                | 59             | 150          |  | 150          |                    | 200          |                    | Continue         | Continue   | Continue                 |
| Subtotal:   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 |
|   |                        |                                | 0              | 0            |  | 0            |                    | 0            |                    | 0                | 0          | 0                        |
| Subtotal:   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| Project Total Cost:   |                        |                                | 1244           | 1519         |  | 492          |                    | 492          |                    | Continue         | Continue   | Continue                 |

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

February 2003

|   |                   |                     |                     |  |                     |                     |                     |                     |                              |            |  |
|---|-------------------|---------------------|---------------------|--|---------------------|---------------------|---------------------|---------------------|------------------------------|------------|--|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> |                   |                     |                     | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |                     |                     |                     |                     | <b>PROJECT</b><br><b>L39</b> |            |  |
| COST (In Thousands)   | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate  | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete          | Total Cost |  |
| L39 FIELD SUSTAINMENT SUPPORT ED  | 974               | 981                 | 8413                | 4647   | 9162                | 10397               | 9819                | 9825                | Continuing                   | Continuing |  |

**A. Mission Description and Budget Item Justification:** This project supports the System Development and Demonstration (SDD) of critical distribution and sustainment capabilities to include field shelters, showers, latrines, heaters, environmental control units, mortuary affairs, organizational equipment, and other combat service support equipment to improve unit sustainability and combat effectiveness. Project supports the demonstration of engineering development models and type classification of cargo parachutes, airdrop containers and other aerial delivery equipment to improve safety and efficiency of airborne operations. Project supports development of tactical field shelters including a series of Rigid Wall Shelters (RWS) and support equipment for Tactical Operation Centers with added capabilities and enhanced survivability. This project develops critical enablers that support the Quarter Master (QM) Force Transformation Strategy and The Army's Transformation Campaign Plan Axes I (Trained and Ready), Line of Operation 2 (Modernization) by maintaining readiness through fielding and integrating new equipment. Also Line of Operation 3 (Manning the Force) by ensuring Army forces are capable of rapid deployment through aerial delivery initiatives and by reducing sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands in lift, combat zone footprint, and costs for logistical support.

This project develops and demonstrates critical enablers that support the Legacy-to-Objective transition path of the Army's Transformation Campaign Plan.

| <b><u>Accomplishments/Planned Program</u></b>  | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> |
|--|----------------|----------------|----------------|----------------|
| System development and demonstration support for Large Capacity Field Heater (LCFH) Program.   | 416            | 142            | 330            | 0              |
| Prepare and update acquisition documentation for LCFH Program.   | 100            | 60             | 160            | 0              |
| Support for Developmental Test (DT) and Operational Test (OT) of LCFH.   | 0              | 248            | 260            | 0              |
| System development and demonstration support for Block upgrade for Improved Environmental Control Unit (IECU) Program.                                   | 288            | 124            | 145            | 145            |
| Support DT User Evaluation of block upgrade to IECU System Development and Demonstration models.   | 100            | 343            | 290            | 0              |
| Prepare and update acquisition documentation for IECU Program  | 70             | 64             | 150            | 0              |
| Award contract Option for 18k Vertical and 9k British Thermal Unit (BTU), 3-phase, Horizontal IECU Prototypes for formal developmental and user testing. | 0              | 0              | 0              | 490            |
| Initiate developmental and user testing of the Mobile Integrated Remains Collection System (MIRCS).  | 0              | 0              | 2500           | 0              |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng**  
**Dev**

**PROJECT**  
**L39**

| <u>Accomplishments/Planned Program (continued)</u>  | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> |
|---|----------------|----------------|----------------|----------------|
| Complete DT/OT and conduct Milestone C for MIRCS.   | 0              | 0              | 0              | 1462           |
| Complete Market Investigation and consolidate existing data to support a Milestone B Decision on the Ammunition Solar Cover. FY05 - Acquire Developmental Test (DT) and Operational Test (OT) prototypes. | 0              | 0              | 178            | 900            |
| Complete Developmental Test (DT) and Operational Test (OT) on the Enhanced Container Delivery System and prepare for Milestone C decision to transition into production.                                  | 0              | 0              | 1300           | 0              |
| Acquire 60kW Space Heater Convective Developmental Test (DT) and Operational Test (OT) prototypes. Conduct DT/OT. FY05 - Prepare for Milestone C decision to transition into production.                  | 0              | 0              | 1411           | 200            |
| Conduct DT and OT on Advanced Low Velocity Airdrop Capability (Light). FY05 - Prepare for Milestone C decision to transition into production.   | 0              | 0              | 1689           | 250            |
| Acquire Clothing Repair System Developmental Test (DT) and Operational Test (OT) prototypes. Conduct DT and OT and prepare for Milestone C decision for transition into production.                       | 0              | 0              | 0              | 1200           |
| <b>Totals</b>   | <b>974</b>     | <b>981</b>     | <b>8413</b>    | <b>4647</b>    |

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

February 2003

BUDGET ACTIVITY  
**5 - System Development and Demonstration**

PE NUMBER AND TITLE  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

PROJECT  
**L39**

| <b><u>B. Other Program Funding Summary</u></b>  | <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> | <u>To Compl</u> | <u>Total Cost</u> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| OPA3, MF9000, Environmental Control Units (ECU) | 7163           | 14423          | 13544          | 17377          | 10416          | 21353          | 28421          | 28206          | Continuing      | Continuing        |

**C. Acquisition Strategy:** Accelerate product development and testing to transition into Production.

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |                                |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |                                |                |              | PE NUMBER AND TITLE  |              |                    |              |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |                                |                |              | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | <b>L39</b>       |            |                          |
| 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 . Soldier Support Equipment                   | In-House               | PM FSS, Natick                 | 0              | 0            |  | 1025         | 1-4Q               | 445          | 1-4Q               | Continue         | Continue   | 3241                     |
| b . Soldier Support Equipment                   | In-House               | PM FSS, Belvoir                | 0              | 981          | 1-4Q   | 480          | 1-4Q               | 245          | 1-4Q               | Continue         | 1706       | 0                        |
| c . Soldier Support Equipment                   | Contracts              | Various                        | 974            | 0            |  | 3000         | 1-2Q               | 2363         | 1-2Q               | Continue         | 6337       | 0                        |
| Subtotal:                                       |                        |                                | 974            | 981          |  | 4505         |                    | 3053         |                    | Continue         | Continue   | 3241                     |
| 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 |
| Subtotal:                                       |                        |                                | 0              | 0            |  | 0            |                    | 0            |                    | 0                | 0          | 0                        |

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |                                |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |                                |                |              | PE NUMBER AND TITLE  |              |                    |              |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |                                |                |              | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | <b>L39</b>       |            |                          |
| 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 . Soldier Support Equipment                   | MIPR                   | DTC, MD and ATC, MD            | 0              | 0            |  | 600          | 1-4Q               | 150          | 1-4Q               | Continue         | Continue   | 130                      |
| b . Soldier Support Equipment                   | MIPR                   | Yuma Proving Ground, AZ        | 0              | 0            |  | 2208         | 1-4Q               | 694          | 1-4Q               | Continue         | 2902       | 76                       |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |                                | 0              | 0            |  | 2808         |                    | 844          |                    | Continue         | Continue   | 206                      |
| Subtotal:                                       |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 . Project Management Support                  |                        | PM FSS, Natick                 | 0              | 0            |  | 1100         | 1-4Q               | 750          | 1-4Q               | Continue         | Continue   | 0                        |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |                                | 0              | 0            |  | 1100         |                    | 750          |                    | Continue         | Continue   | 0                        |
| Subtotal:                                       |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| Project Total Cost:                             |                        |                                | 974            | 981          |  | 8413         |                    | 4647         |                    | Continue         | Continue   | 3447                     |

## Schedule Profile Detail (R-4a Exhibit)

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**L39**

| <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> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Conduct Milestone C Decision on the 9k, 18k, and 36k Improved Environmental Control Units (IECU).   |                |                | 4Q             |                |                |                |                |                |
| Conduct Milestone B Decision on the Ammunition Solar Cover.   |                |                | 3Q             |                |                |                |                |                |
| Conduct Milestone C Decision on the Large Capacity Field Heater .                                   |                |                | 2Q             |                |                |                |                |                |
| Complete Developmental and User testing on the Mobile Integrated Remains Collection System (MIRCS). |                |                |                | 2Q             |                |                |                |                |
| Conduct Milestone C Decision on the Mobile Integrated Remains Collection System (MIRCS) .           |                |                |                | 4Q             |                |                |                |                |
| Complete Developmental and User testing on the 60kW Space Heater Convective.                        |                |                | 4Q             |                |                |                |                |                |
| Conduct Milestone C Decision on the 60kW Space Heater Convective.                                   |                |                |                | 2Q             |                |                |                |                |
| Complete Developmental and User testing on the Advanced Low Velocity Airdrop Capability.            |                |                |                | 2Q             |                |                |                |                |
| Conduct Milestone C Decision on the Advanced Low Velocity Airdrop Capability (Light).               |                |                |                | 4Q             |                |                |                |                |
| Complete Developmental and User testing on the Clothing Repair System.                              |                |                |                | 4Q             |                |                |                |                |
| Conduct Milestone C Decision on the Enhanced Container Delivery System                              |                |                | 4Q             |                |                |                |                |                |
| Conduct Milestone C Decision on the Clothing Repair System.   |                |                |                |                | 2Q             |                |                |                |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**L41**

| COST (In Thousands)                       | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete | Total Cost |
|---|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------|
| L41 WATER AND PETROLEUM DISTRIBUTION - ED | 3272              | 9315                | 1690                | 952                 | 950                 | 5400                | 3007                | 3570                | 0                | Continuing |

**A. Mission Description and Budget Item Justification:** All services depend on ample supplies of clean fuel and water. The Army has the mission to supply fuel for all land-based forces, including the Marines and the Air Force, and must supply bulk drinking water to its soldiers. This System Development and Demonstration (SDD) program enables the Army to improve maneuver sustainment operations to meet the demands of the Stryker Brigade Combat Teams and the Objective Force. The mission includes receiving and transferring petroleum from trucks, ships, pipelines and permanent and temporary storage facilities; moving petroleum from storage to and within corps and division areas; fuel quality surveillance testing; and dispensing in support of tactical operations, including rapid refueling of aircraft. The Unit Water Pod System (CAMEL) displaces the water trailer and will be fielded first to the Stryker Brigade Combat Teams. Petroleum, Oils and Lubricant (POL) Quality Analysis System (PQAS) replaces the air mobile lab and reduces the number of operators. Furthermore, the mission covers purification, storage, distribution, and quality control of water. The Army cannot fight without clean fuel and water. These R&D missions support the development and enhancement of rapidly deployed Petroleum and Water equipment which enables the Army to achieve its transformation vision by providing it with the means to be highly mobile and self-sustaining in very hostile theatres of operation.

These systems support the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>   | <b><u>FY 2002</u></b> | <b><u>FY 2003</u></b> | <b><u>FY 2004</u></b> | <b><u>FY 2005</u></b> |
|---|-----------------------|-----------------------|-----------------------|-----------------------|
| Conduct Petroleum, Oils and Lubricant (POL) Quality Analysis System (PQAS) Pre-Planned Product Improvements (P3I).                      | 0                     | 100                   | 400                   | 425                   |
| Evaluated commercial water treatment components for P3I for water purification systems.   | 300                   | 0                     | 300                   | 0                     |
| Continue PQAS prototype fabrication and testing.  | 210                   | 1272                  | 0                     | 0                     |
| Developed POL Quality Surveillance Lab (PQSL) program management documents for milestone decision and conduct tradeoff analysis         | 106                   | 0                     | 0                     | 0                     |
| Rapidly Installed Fuel Transfer System (RIFTS) development, prototype design, fabrication, and test.                                    | 1316                  | 5758                  | 910                   | 454                   |
| Develop purchase description for Versatile Tank & Pump Unit (VTPU) and prepare program management documents.                            | 0                     | 200                   | 0                     | 0                     |
| Program management and support.   | 436                   | 85                    | 80                    | 73                    |
| Develop Load Handling System (LHS) Modular Fuel Farm (LMFF) prototype and conduct road test/stability test on existing prototype units. | 0                     | 200                   | 0                     | 0                     |

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

February 2003

|   |  |                              |
|---|--|------------------------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> | <b>PROJECT</b><br><b>L41</b> |
|---|--|------------------------------|

| <u>Accomplishments/Planned Program (continued)</u>   | <u>FY 2002</u> | <u>FY 2003</u> | <u>FY 2004</u> | <u>FY 2005</u> |
|--|----------------|----------------|----------------|----------------|
| Complete 1500 Tactical Water Purification System (TWPS) SDD effort and conduct Operational Test (OT).  | 80             | 1000           | 0              | 0              |
| Lightweight Water Purifier (LWP) Operational Test (OT).  | 0              | 700            | 0              | 0              |
| Conducted Heavy Expanded Mobile Tactical Truck (HEMTT)-Load Handling System (LHS) Compatible Water Tankrack (HIPPO) technical and operational testing. | 414            | 0              | 0              | 0              |
| Unit Water Pod System (CAMEL) coupled simulation testing.  | 125            | 0              | 0              | 0              |
| Initiated SDD contract for CAMEL.  | 275            | 0              | 0              | 0              |
| Tested and evaluation on the CAMEL.  | 10             | 0              | 0              | 0              |
| <b>Totals</b>  | <b>3272</b>    | <b>9315</b>    | <b>1690</b>    | <b>952</b>     |

| <u>B. Other Program Funding Summary</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> | <u>To Compl</u> | <u>Total Cost</u> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| RDTE, 0603804/K41, Logistics and Engineer Equipment - Advanced Development | 2234           | 4334           | 477            | 478            | 475            | 4395           | 3456           | 3375           | Continuing      | Continuing        |
| OPA 3, R67500, Quality Surveillance Equipment                              | 1441           | 7319           | 0              | 0              | 0              | 0              | 0              | 0              | Continuing      | Continuing        |
| OPA 3, R05200, Water Purification Systems                                  | 21279          | 11993          | 10001          | 3973           | 11356          | 7071           | 0              | 0              | Continuing      | Continuing        |
| OPA 3, MA6000, Distribution Systems, Petroleum & Water                     | 23443          | 35280          | 43350          | 50117          | 62232          | 64116          | 59069          | 41938          | Continuing      | Continuing        |

**C. Acquisition Strategy:** Development of and transition to competitive procurement for most items under this project. Exceptions include the use of procurement 8A Disadvantaged Set Aside for the HIPPO and Small Business Set Aside for the CAMEL.

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

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**L41**

| 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 . PQAS                   | In-House               | TARDEC, Warren, MI                   | 777            | 100          | 2Q                 | 400          | 1Q                 | 425          | 1Q                 | Continue         | 1702       | Continue                 |
| b . PQAS                   | MIPR                   | Rock Island Arsenal, Rock Island, IL | 2074           | 300          | 2Q                 | 0            |                    | 0            |                    | Continue         | 2374       | Continue                 |
| c . PQSL                   | In-House               | TARDEC, Warren, MI                   | 213            | 0            |                    | 0            |                    | 0            |                    | 0                | 213        | 213                      |
| d . RIFTS                  | In-House               | TARDEC, Warren, MI                   | 481            | 124          | 2Q                 | 214          | 1-4Q               | 150          | 1-4Q               | Continue         | 969        | Continue                 |
| e . RIFTS                  | C-CPFF                 | Various                              | 3362           | 5558         | 2Q                 | 296          | 2Q                 | 254          | 2Q                 | Continue         | 9470       | Continue                 |
| f . 1500 GPH TWPS          | Task Order Contract    | ICI, Dayton, OH                      | 365            | 0            |                    | 0            |                    | 0            |                    | 0                | 365        | 365                      |
| g . 1500 GPH TWPS hardware | C-CPFF                 | SFA, Inc, Frederick, MD              | 4240           | 0            |                    | 0            |                    | 0            |                    | 0                | 4240       | 4240                     |
| h . Water Purification P31 | In-House               | TARDEC, Warren, MI                   | 190            | 0            |                    | 50           | 1Q                 | 0            |                    | 0                | 240        | 190                      |
| i . Water Purification P31 | Purchase Orders        | TBD                                  | 100            | 0            |                    | 150          | 1-3Q               | 0            |                    | 0                | 250        | 100                      |
| j . CAMEL                  | Purchase Order         | SWRI, San Antonio, TX                | 125            | 0            |                    | 0            |                    | 0            |                    | 0                | 125        | 125                      |
| k . LWP                    | MIPR                   | TEXCOM, Ft. Hood, TX                 | 0              | 700          | 2Q                 | 0            |                    | 0            |                    | Continue         | Continue   | Continue                 |

| ARMY RDT&E COST ANALYSIS(R-3)                               |                        |                                  |                |  |                    |              |                    | February 2003 |                    |                  |            |                          |
|---|------------------------|----------------------------------|----------------|--|--------------------|--------------|--------------------|---------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |                        |                                  |                | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |                    |              |                    |               | PROJECT<br>L41     |                  |            |                          |
| I. Product Development<br>(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 |
| l. HIPPO  | FFP                    | Mil-Mar Century Corp, Dayton, OH | 740            | 0  |                    | 0            |                    | 0             |                    | 0                | 740        | 740                      |
| m. CAMEL  | CPFF                   | TBD                              | 614            | 0  |                    | 0            |                    | 0             |                    | 0                | 614        | 739                      |
| n. VTPU   | In-House               | TARDEC                           | 0              | 78   | 2Q                 | 0            |                    | 0             |                    | 0                | 78         | 0                        |
|   |                        |                                  |                |  |                    |              |                    |               |                    |                  |            |                          |
| Subtotal:   |                        |                                  | 13281          | 6860   |                    | 1110         |                    | 829           |                    | Continue         | Continue   | Continue                 |
|   |                        |                                  |                |  |                    |              |                    |               |                    |                  |            |                          |
| 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. PQAS   | In-House               | TACOM, Warren, MI                | 130            | 34   | 2Q                 | 0            |                    | 0             |                    | Continue         | 164        | Continue                 |
| b. PQSL   | In-House               | TACOM, Warren, MI                | 40             | 0  |                    | 0            |                    | 0             |                    | 0                | 40         | 40                       |
| c. Water Purification P3I                                   | MIPR                   | CHPPM, APG, MD                   | 25             | 0  |                    | 0            |                    | 0             |                    | 0                | 25         | 25                       |
| d. Water Purification P3I                                   | In-House               | TACOM, Warren, MI                | 50             | 0  |                    | 0            |                    | 0             |                    | 0                | 50         | 50                       |
| e. LMFF   | In-House               | TACOM, Warren, MI                | 0              | 50   | 2Q                 | 0            |                    | 0             |                    | Continue         | Continue   | Continue                 |
| f. HIPPO  | FFP                    | TBD                              | 250            | 0  |                    | 0            |                    | 0             |                    | 0                | 250        | 250                      |

| ARMY RDT&E COST ANALYSIS(R-3)                               |                        |                                |                |  |                    |              |                    | February 2003 |                    |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--|--------------------|--------------|--------------------|---------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |                        |                                |                | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |                    |              |                    |               | PROJECT<br>L41     |                  |            |                          |
| II. Support Cost<br>(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 |
| g . CAMEL   | In-House               | TARDEC, Warren, MI             | 147            | 0  |                    | 0            |                    | 0             |                    | 0                | 147        | 147                      |
| h . CAMEL   | MIPR                   | APG, Aberdeen, MD              | 10             | 0  |                    | 0            |                    | 0             |                    | 0                | 10         | 10                       |
| i . RIFTS   | In-House               | TACOM, Warren, MI              | 0              | 76   | 2Q                 | 100          | 2Q                 | 50            | 2Q                 | 0                | 226        | 0                        |
| j . VTPU  | CPFF                   | TBD                            | 0              | 122  | 2Q                 | 0            |                    | 0             |                    | 0                | 122        | 0                        |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| Subtotal:   |                        |                                | 652            | 282  |                    | 100          |                    | 50            |                    | Continue         | Continue   | Continue                 |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| 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 . PQAS DT/OT  | MIPR                   | TECOM, Aberdeen, MD            | 498            | 545  | 2Q                 | 0            |                    | 0             |                    | Continue         | 1043       | Continue                 |
| b . PQAS  | MIPR                   | APG, Aberdeen, MD              | 0              | 393  | 2-3Q               | 0            |                    | 0             |                    | 0                | 393        | 25                       |
| c . PQAS IOT&E  | MIPR                   | TEXCOM, Ft. Hood, TX           | 0              | 0  |                    | 0            |                    | 0             |                    | Continue         | 0          | Continue                 |
| d . RIFTS   | MIPR                   | TECOM, Aberdeen, MD            | 291            | 0  |                    | 300          | 3Q                 | 0             |                    | 0                | 591        | Continue                 |
| e . 1500 GPH TWPS   | MIPR                   | NFESC, Port Huaneme, CA        | 340            | 0  |                    | 0            |                    | 0             |                    | 0                | 340        | 340                      |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |

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

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**L41**

| III. Test and Evaluation<br>(continued) | Contract<br>Method &<br>Type | Performing Activity &<br>Location | Total<br>PYs Cost | FY 2003<br>Cost | FY 2003<br>Award<br>Date | FY 2004<br>Cost | FY 2004<br>Award<br>Date | FY 2005<br>Cost | FY 2005<br>Award<br>Date | Cost To<br>Complete | Total<br>Cost | Target<br>Value of<br>Contract |
|---|------------------------------|-----------------------------------|-------------------|-----------------|--------------------------|-----------------|--------------------------|-----------------|--------------------------|---------------------|---------------|--------------------------------|
| f . Water Purification P3I              | In-House                     | TARDEC, Warren, MI                | 200               | 0               |                          | 100             | 1Q                       | 0               |                          | 0                   | 300           | 200                            |
| g . Water Purification P3I              | MIPR                         | Dugway PG, Dugway,<br>MD          | 200               | 0               |                          | 0               |                          | 0               |                          | 0                   | 200           | 200                            |
| h . Water Purification P3I              | MIPR                         | NFESC, Port Hueneme,<br>CA        | 35                | 0               |                          | 0               |                          | 0               |                          | 0                   | 35            | 35                             |
| i . 1500 GPH TWPS                       | MIPR                         | ATC, APG, MD                      | 71                | 0               |                          | 0               |                          | 0               |                          | 0                   | 71            | 71                             |
| j . 1500 GPH TWPS                       | MIPR                         | TEXCOM, Ft. Hood,<br>TX           | 10                | 1000            | 2-3Q                     | 0               |                          | 0               |                          | Continue            | 1010          | Continue                       |
| k . LMFF                                | MIPR                         | APG, Aberdeen, MD                 | 0                 | 150             | 2Q                       | 0               |                          | 0               |                          | Continue            | Continue      | Continue                       |
| l . HIPPO                               | MIPR                         | APG, Aberdeen, MD                 | 64                | 0               |                          | 0               |                          | 0               |                          | 0                   | 64            | 64                             |
| m . CAMEL                               | MIPR                         | YPG, Yuma, AZ                     | 254               | 0               |                          | 0               |                          | 0               |                          | 0                   | 254           | 254                            |
|   |                              |                                   |                   |                 |                          |                 |                          |                 |                          |                     |               |                                |
| Subtotal:                               |                              |                                   | 1963              | 2088            |                          | 400             |                          | 0               |                          | Continue            | Continue      | Continue                       |

|  |                      |
|--|----------------------|
| <b>ARMY RDT&amp;E COST ANALYSIS(R-3)</b> | <b>February 2003</b> |
|--|----------------------|

|   |  |                              |
|---|--|------------------------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> | <b>PROJECT</b><br><b>L41</b> |
|---|--|------------------------------|

| 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 . PQSL                       | In-House               | TARDEC, Warren, MI             | 155            | 0            |                    | 0            |                    | 0            |                    | 0                | 155        | 155                      |
| b . Program Management Support | In-House               | TACOM, Warren, MI              | 877            | 85           | 2Q                 | 80           | 1Q                 | 73           | 1Q                 | Continue         | 1115       | Continue                 |
| Subtotal:                      |                        |                                | 1032           | 85           |                    | 80           |                    | 73           |                    | Continue         | 1270       | Continue                 |

Remarks: Not Applicable

|                     |  |  |       |      |  |      |  |     |  |          |          |          |
|---------------------|--|--|-------|------|--|------|--|-----|--|----------|----------|----------|
| Project Total Cost: |  |  | 16928 | 9315 |  | 1690 |  | 952 |  | Continue | Continue | Continue |
|---------------------|--|--|-------|------|--|------|--|-----|--|----------|----------|----------|

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## Schedule Profile Detail (R-4a Exhibit)

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**L41**

| <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> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Conduct PQAS P3I.   |                | 1-4Q           | 1-4Q           | 1-4Q           |                |                |                |                |
| Continue PQAS prototype fabrication and testing.  |                | 1-4Q           |                |                |                |                |                |                |
| Evaluate commercial water treatment components for P3I for water purification systems.          | 1-4Q           |                |                |                |                |                |                |                |
| Develop PQSL program management documents for milestone decision and conduct tradeoff analysis. | 1-3Q           |                |                |                |                |                |                |                |
| RIFTS development, prototype design, fabrication, and test.                                     | 1-4Q           | 1-4Q           | 1-4Q           | 1-4Q           |                |                |                |                |
| Develop VTPU specification and prepare program management documents.                            |                | 1-4Q           |                |                |                |                |                |                |
| Develop LMFF prototype and conduct road test/stability test on existing prototype units.        | 2-4Q           | 1-4Q           |                |                |                |                |                |                |
| Complete 1500 TWPS SDD effort and conduct OT.   | 2-4Q           | 1-2Q           |                |                |                |                |                |                |
| CAMEL coupled simulation testing.   | 1-3Q           |                |                |                |                |                |                |                |
| LWP OT  |                | 1-2Q           |                |                |                |                |                |                |
| Program Management  | 1-4Q           | 1-4Q           |                |                |                |                |                |                |
| Conduct HIPPO technical and operational testing   | 4Q             |                |                |                |                |                |                |                |
| Initiate SDD for CAMEL  | 4Q             |                |                |                |                |                |                |                |
| CAMEL test and evaluation   | 4Q             |                |                |                |                |                |                |                |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**L42**

| COST (In Thousands)      | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete | Total Cost |
|--------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------|
| L42 CAMOUFLAGE SYSTEM ED | 314               | 329                 | 668                 | 1617                | 1654                | 1166                | 1887                | 1741                | Continuing       | Continuing |

**A. Mission Description and Budget Item Justification:** This project provides for development and demonstration of camouflage equipment that will transition to procurement at a low cost; low observable systems for suppression of visual, near-infrared, thermal, radar, and acoustic signatures of highly mobile and semi-mobile weapon assets. This program procures and fields a critical capability that supports the Army's Transformation Campaign Plan Axes I (Trained and Ready), Line of Operation 2 (Modernization and Re-capitalization) by maintaining readiness through fielding and integrating new equipment; Axes II (Transforming and Operational Force), Line of Operation 9 (Deploying and Sustaining) by reducing sustainment requirements, related Combat Support/Combat Service Support (CS/CSS) demands on lift, combat zone footprint, and costs for logistical support. Also Line of Operation 10 (Develop and Acquire Advanced Technology) by reducing vulnerability to detection by advanced sensors.

This system supports the Legacy-to-Objective transition path of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>  | FY 2002    | FY 2003    | FY 2004    | FY 2005     |
|--|------------|------------|------------|-------------|
| Milestone C approved for Ultra Lightweight Camouflage Net System (ULCANS) Desert Radar Scattering, Desert Radar Transparent, and Woodland Radar Transparent. | 314        | 0          | 0          | 0           |
| Initiate development, complete Developmental Test/Operational Test (DT/OT), and conduct Milestone C on Arctic/Snow ULCANS variants.                          | 0          | 329        | 668        | 0           |
| Initiate development and testing of Urban Camouflage System.   | 0          | 0          | 0          | 300         |
| Begin development to counter emerging technologies in FY 2005 for all variants, Woodland, Desert, Snow, Urban and Aviation.                                  | 0          | 0          | 0          | 1317        |
| <b>Totals</b>  | <b>314</b> | <b>329</b> | <b>668</b> | <b>1617</b> |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**L42**

| <b>B. Other Program Funding Summary</b>   | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> | <b>FY 2006</b> | <b>FY 2007</b> | <b>FY 2008</b> | <b>FY 2009</b> | <b>To Compl</b> | <b>Total Cost</b> |
|---|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-------------------|
| RDTE, 0602712.AH35, Camouflage Technology | 2262           | 2417           | 2643           | 2735           | 2830           | 2881           | 2945           | 3012           | Continuing      | Continuing        |

**C. Acquisition Strategy:** Develop camouflage systems for Services and transition developmental items into procurement with a competitive awarded. Continual upgrade to counter technology improvements of sensors, and to counter new emerging technologies. Continual leveraging of technology with other special operations programs.

| ARMY RDT&E COST ANALYSIS(R-3)                               |                        |                                |                |  |                    |              |                    | February 2003 |                    |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--|--------------------|--------------|--------------------|---------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY<br>5 - System Development and Demonstration |                        |                                |                | PE NUMBER AND TITLE<br>0604804A - Logistics and Engineer Equipment - Eng Dev |                    |              |                    |               | PROJECT<br>L42     |                  |            |                          |
| 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 . ULCANS Artic/Snow                                       | CPFF                   | CECOM, FT Monmouth             | 0              | 144  | 2-3Q               | 100          | 1-2Q               | 0             |                    | 0                | 244        | 0                        |
| b . ULCANS Urban  | CPFF                   | CECOM, FT Monmouth             | 0              | 0  |                    | 0            |                    | 300           | 1-4Q               | Continue         | Continue   | 0                        |
| c . ULCANS Technology Insertion                             | CPFF                   | CECOM, FT Monmouth             | 0              | 144  | 1-4Q               | 100          | 1-4Q               | 750           | 1-4Q               | Continue         | Continue   | 0                        |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| Subtotal:   |                        |                                | 0              | 288  |                    | 200          |                    | 1050          |                    | Continue         | Continue   | 0                        |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| 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 |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| Subtotal:   |                        |                                | 0              | 0  |                    | 0            |                    | 0             |                    | 0                | 0          | 0                        |
|   |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |                                |                |              |  |              |                    |              | February 2003      |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--------------|--|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |                                |                |              | PE NUMBER AND TITLE  |              |                    |              |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |                                |                |              | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |              |                    |              |                    | <b>L42</b>       |            |                          |
| 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 . ULCANS, Artic/Snow                          | MIPR                   | TECOM, WSMR                    | 15             | 41           | 1-2Q   | 50           | 1-2Q               | 0            |                    | 0                | 106        | 0                        |
| b . ULCANS, Urban                               |                        |                                | 0              | 0            |  | 50           | 1-4Q               | 102          | 2-3Q               | Continue         | 152        | 0                        |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |                                | 15             | 41           |  | 100          |                    | 102          |                    | Continue         | 258        | 0                        |
| Subtotal:                                       |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| 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 . Engineering Support                         | MIPR                   | CECOM, FT Belvoir              | 199            | 0            |  | 238          | 1-4Q               | 335          | 1-4Q               | Continue         | 772        | 0                        |
| b . Program Support                             | Contract               | Radian, INC                    | 100            | 0            |  | 130          | 1-4Q               | 130          | 1-4Q               | Continue         | Continue   | 0                        |
|   |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
|   |                        |                                | 299            | 0            |  | 368          |                    | 465          |                    | Continue         | Continue   | 0                        |
| Subtotal:                                       |                        |                                |                |              |  |              |                    |              |                    |                  |            |                          |
| Project Total Cost:                             |                        |                                | 314            | 329          |  | 668          |                    | 1617         |                    | Continue         | Continue   | 0                        |

**Schedule Profile Detail (R-4a Exhibit)**

**February 2003**

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**L42**

| <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 Desert Ultra Lightweight Camouflage Net System (ULCAN) testing, Milestone C. | 2Q             |                |                |                |                |                |                |                |
| Begin development and testing of Snow ULCAN.  |                | 2Q             |                |                |                |                |                |                |
| Finalize testing of Snow ULCAN, test report, Milestone C.                             |                |                | 4Q             |                |                |                |                |                |
| Technology Enhancement to Woodland ULCAN/Desert                                       |                |                | 4Q             |                |                |                |                |                |
| Begin development of Aviation ULCAN.  |                |                |                | 1Q             |                |                |                |                |
| Test Aviation ULCAN/Milestone C.  |                |                |                |                | 2Q             |                |                |                |
| Begin development of Urban ULCAN.   |                |                |                | 1Q             |                |                |                |                |
| Test Urban ULCAN, Milestone C.  |                |                |                |                | 3Q             |                |                |                |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**L43**

| COST (In Thousands)                 | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to Complete | Total Cost |
|-------------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|------------|
| L43 ENGINEER SUPPORT EQUIPMENT - ED | 823               | 2345                | 1226                | 1164                | 1183                | 1203                | 4728                | 5426                | Continuing       | Continuing |

**A. Mission Description and Budget Item Justification:** This project supports systems development and demonstration within the Engineer Support Equipment (ESE) arena for small boats, diving equipment, well drilling modules, woodworking shops, tool outfits, large power generator plants, electrical distribution systems, and floodlights, which are used for field operations in support of the Objective Force. This project also develops Maintenance equipment associated with Sets, Kits, Outfits and Tools (SKOTs).

This project supports the Objective Force of the Transformation Campaign Plan (TCP).

| <b><u>Accomplishments/Planned Program</u></b>   | <b>FY 2002</b> | <b>FY 2003</b> | <b>FY 2004</b> | <b>FY 2005</b> |
|---|----------------|----------------|----------------|----------------|
| Conducted market investigation, develop performance specifications and conduct preproduction award effort for diving equipment.         | 104            | 606            | 562            | 740            |
| Conduct preproduction award effort for well drilling module.  | 719            | 0              | 0              | 0              |
| Award System Development & Demonstration contract for well drilling module.   | 0              | 1013           | 0              | 0              |
| Conduct prototype testing of well drilling module.  | 0              | 0              | 250            | 0              |
| Conduct market investigation, engineering effort, and develop performance specifications for woodworking shop.                          | 0              | 168            | 0              | 0              |
| Fabrication of prototype for woodworking shop.  | 0              | 208            | 0              | 0              |
| Conduct market investigation, engineering effort, and develop performance specifications for maintenance equipment (tools).             | 0              | 162            | 0              | 0              |
| Conduct market investigation, engineering effort, and develop performance specifications for Organizational / General Purpose Shop Set. | 0              | 128            | 294            | 294            |
| Conduct Life Cycle Market Investigations for Engineer Support Equipment (ESE) Sets, Kits, Out fits and Tools (SKOTs).                   | 0              | 60             | 120            | 130            |
| <b>Totals</b>   | <b>823</b>     | <b>2345</b>    | <b>1226</b>    | <b>1164</b>    |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**

**PROJECT**  
**L43**

| <b><u>B. Other Program Funding Summary</u></b>                           | <b><u>FY 2002</u></b> | <b><u>FY 2003</u></b> | <b><u>FY 2004</u></b> | <b><u>FY 2005</u></b> | <b><u>FY 2006</u></b> | <b><u>FY 2007</u></b> | <b><u>FY 2008</u></b> | <b><u>FY 2009</u></b> | <b><u>To Compl</u></b> | <b><u>Total Cost</u></b> |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------|--------------------------|
| OPA 3, ML5325, Items Less than \$5.0M<br>(Engineering Support Equipment) | 0                     | 7704                  | 8345                  | 8122                  | 8127                  | 6514                  | 15464                 | 13682                 | Continuing             | Continuing               |

**C. Acquisition Strategy:** Programs will progress from System Development and Demonstration (SDD) and transition into production.

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

February 2003

BUDGET ACTIVITY

PE NUMBER AND TITLE

PROJECT

**5 - System Development and Demonstration**

**0604804A - Logistics and Engineer Equipment - Eng Dev**

**L43**

| 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 . Diving equipment product development                      | IN-HOUSE                        | Rock Island Arsenal, Rock Island, IL | 249            | 606          | 2Q                 | 562          | 2Q                 | 740          | 2Q                 | Continue         | Continue   | Continue                 |
| b . Generator production development                          | IN-HOUSE                        | CECOM, Ft Belvoir, VA                | 319            | 0            |                    | 0            |                    | 0            |                    | 0                | 319        | 319                      |
| c . Well drilling module product development                  | IN-HOUSE                        | TACOM, Warren, MI                    | 719            | 0            |                    | 0            |                    | 0            |                    | 0                | 719        | 721                      |
| d . Well drilling System Development & Demonstration contract | Competitive Cost Plus Fixed Fee | TBD                                  | 0              | 1013         | 3Q                 | 0            |                    | 0            |                    | 0                | 1013       | 1026                     |
| e . Woodworking shop product development                      | IN-HOUSE                        | Rock Island Arsenal, Rock Island, IL | 0              | 376          | 1-4Q               | 0            |                    | 0            |                    | 0                | 376        | 376                      |
| f . Maintenance Equipment (Tools)                             | IN-HOUSE                        | Rock Island Arsenal, Rock Island, IL | 0              | 162          | 1-4Q               | 0            |                    | 0            |                    | 0                | 162        | 162                      |
| g . Organizational / General Purpose Shop Set                 | IN-HOUSE                        | Rock Island Arsenal, Rock Island, IL | 0              | 128          | 1-4Q               | 294          | 1-4Q               | 294          | 1-4Q               | Continue         | Continue   | Continue                 |
| h . Life Cycle Market Investigations for ESE SKOTs            | IN-HOUSE                        | Rock Island Arsenal, Rock Island, IL | 0              | 60           | 1-4Q               | 120          | 1-4Q               | 130          | 1-4Q               | Continue         | Continue   | Continue                 |

| ARMY RDT&E COST ANALYSIS(R-3)                   |                        |                                |                |  |                    |              |                    | February 2003 |                    |                  |            |                          |
|---|------------------------|--------------------------------|----------------|--|--------------------|--------------|--------------------|---------------|--------------------|------------------|------------|--------------------------|
| BUDGET ACTIVITY                                 |                        |                                |                | PE NUMBER AND TITLE  |                    |              |                    |               |                    | PROJECT          |            |                          |
| <b>5 - System Development and Demonstration</b> |                        |                                |                | <b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> |                    |              |                    |               |                    | <b>L43</b>       |            |                          |
| I. Product Development<br>(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 |
|   |                        |                                | 1287           | 2345   |                    | 976          |                    | 1164          |                    | Continue         | Continue   | Continue                 |
| Subtotal:                                       |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| 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 |
|   |                        |                                | 0              | 0  |                    | 0            |                    | 0             |                    | 0                | 0          | 0                        |
| Subtotal:                                       |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |
| 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 . Well drilling module testing                | MIPR                   | APG, Aberdeen, MD              | 0              | 0  |                    | 250          | 3Q                 | 0             |                    | 0                | 250        | 250                      |
|   |                        |                                | 0              | 0  |                    | 250          |                    | 0             |                    | 0                | 250        | 250                      |
| Subtotal:                                       |                        |                                |                |  |                    |              |                    |               |                    |                  |            |                          |

|  |                      |
|--|----------------------|
| <b>ARMY RDT&amp;E COST ANALYSIS(R-3)</b> | <b>February 2003</b> |
|--|----------------------|

|   |  |                              |
|---|--|------------------------------|
| <b>BUDGET ACTIVITY</b><br><b>5 - System Development and Demonstration</b> | <b>PE NUMBER AND TITLE</b><br><b>0604804A - Logistics and Engineer Equipment - Eng Dev</b> | <b>PROJECT</b><br><b>L43</b> |
|---|--|------------------------------|

| 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 |
|-------------------------|------------------------|--------------------------------|----------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|------------------|------------|--------------------------|
|                         |                        |                                | 0              | 0            |                    | 0            |                    | 0            |                    | 0                | 0          | 0                        |
| Subtotal:               |                        |                                |                |              |                    |              |                    |              |                    |                  |            |                          |

|                     |  |  |      |      |  |      |  |      |  |          |          |          |
|---------------------|--|--|------|------|--|------|--|------|--|----------|----------|----------|
| Project Total Cost: |  |  | 1287 | 2345 |  | 1226 |  | 1164 |  | Continue | Continue | Continue |
|---------------------|--|--|------|------|--|------|--|------|--|----------|----------|----------|

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## Schedule Profile Detail (R-4a Exhibit)

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng Dev**      **PROJECT**  
**L43**

| <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> |
|--|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Award System Development & Demonstration contract for well drilling module |                | 3Q             |                |                |                |                |                |                |
| Conduct testing for well drilling module                                   |                |                | 3Q             |                |                |                |                |                |
| Conduct market investigation and testing for diving equipment              | 1-4Q           | 2Q             | 2Q             | 2Q             |                |                |                |                |
| Conduct market investigation for woodworking shop                          |                | 1-2Q           |                |                |                |                |                |                |
| Fabrication of prototype of woodworking shop                               |                | 2-4Q           |                |                |                |                |                |                |
| Conduct Life Cycle Market Investigations for ESE SKOTs                     |                | 1-4Q           |                |                |                |                |                |                |
| Conduct Market investigation for Organizational / General Purpose Shop Set |                | 1-4Q           | 1-2Q           |                |                |                |                |                |
| Conduct Market investigation for maintenance equipment (Tools)             |                | 1-4Q           |                |                |                |                |                |                |
| Pre Production analysis of Organizational / General Purpose Shop Set       |                |                | 2-4Q           | 1-4Q           |                |                |                |                |

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

February 2003

**BUDGET ACTIVITY**  
**5 - System Development and Demonstration**

**PE NUMBER AND TITLE**  
**0604804A - Logistics and Engineer Equipment - Eng**  
**Dev**

**PROJECT**  
**L46**

| COST (In Thousands)               | FY 2002<br>Actual | FY 2003<br>Estimate | FY 2004<br>Estimate | FY 2005<br>Estimate | FY 2006<br>Estimate | FY 2007<br>Estimate | FY 2008<br>Estimate | FY 2009<br>Estimate | Cost to<br>Complete | Total Cost |
|-----------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------|
| L46 MAINTENANCE SUPPORT EQUIPMENT | 0                 | 0                   | 492                 | 492                 | 490                 | 490                 | 491                 | 490                 | 0                   | 2945       |

**A. Mission Description and Budget Item Justification:** Not applicable for this item.

**Accomplishments/Planned Program** Not applicable for this item.

**B. Other Program Funding Summary:** Not applicable for this item.

**C. Acquisition Strategy:** Not applicable for this item.