

# DEPARTMENT OF THE ARMY

## Procurement Programs



Committee Staff Procurement Backup Book  
FY 2001 Budget Estimate

### **OTHER PROCUREMENT, ARMY ACTIVITIES 3/4, OTHER SUPPORT EQUIPMENT AND INITIAL SPARES**

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APPROPRIATION

February 2000

## Index for OTHER PROCUREMENT, ARMY - Activities 3 & 4

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115	GENERATOR, SMOKE, MECH M58	M99107	56232127.01P	7
116	M6 DISCHARGE	G71300	56500127.01P	10
117	ITEMS LESS THAN \$5M (SMOKE & OBSCURANTS)	ML5310	56472127.01P	11
118	HEAVY DRY SUPT BRIDGE SYSTEM	G82400	52831155.01P	12
119	RIBBON BRIDGE	MA8890	53542155.01P	17
120	FLOAT BRIDGE PROPULSION	M27200	56300155.01P	22
121	KIT, STANDARD TELEOPERATING	R80500	52880147.01P	25
122	METALLIC MINE DETECTOR, VEHICLE MOUNTED	M80100	52885122.01P	26
123	EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT (EOD EQUIP)	MA9200	55900100.01P	27
124	<\$5M Countermine Equipment (MA7700)	MA7700	50000122.01P	30
125	BN COUNTERMINE SIP	X01100	56000101.01P	31
126	ENVIRONMENTAL CONTROL UNITS	MF9000	50208152.01P	35
127	FIRETRUCKS	MA9600	57098101.01P	40
128	LAUNDRIES, SHOWERS AND LATRINES	M82700	58380149.01P	43
129	FLOODLIGHT SET, ELEC, TRL MTD, 3 LIGHTS	M72100	58476152.01P	49
130	SOLDIER ENHANCEMENT	MA6800	58796131.01P	50
131	LIGHTWEIGHT MAINTENANCE ENCLOSURE (LME)	MA8061	58798149.01P	51
132	FORCE PROVIDER	M80200	58860149.01P	52
133	FIELD FEEDING AND REFRIGERATION	M65800	59120149.01P	58
134	AIR DROP PROGRAM	MA7804	59140149.01P	63
135	CAMOUFLAGE: ULCANS	MA7900	59400156.01P	65
136	ITEMS LESS THAN \$5.0M (ENGINEER SUPPORT EQUIPMENT)	MA8050	59536101.01P	69
137	FAMILY OF TANK ASSEMBLIES, FABRIC, COLLAPSIBLE	M19000	50410101.01P	72
138	QUALITY SURVEILLANCE EQUIPMENT	MB6400	50719101.01P	76
139	DISTRIBUTION SYS, PET & WATER	M60300	54722101.01P	80
140	PUMPS, WATER AND FUEL	M61200	55028101.01P	85

## Index for OTHER PROCUREMENT, ARMY - Activities 3 & 4

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142	INLAND PETROLEUM DISTRIBUTION SYSTEM	MA5120	57186101.01P	91
143	ITEMS LESS THAN \$5.0M (POL)	ML5330	59034101.01P	96
144	WATER PURIFICATION SYS	R05100	50998101.01P	99
145	ITEMS LESS THAN \$5.0M (WATER EQ)	ML5335	59510101.01P	105
146	COMBAT SUPPORT MEDICAL	MN1000	57500109.01P	108
147	SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP)	M61500	50532100.01P	123
148	WELDING SHOP, TRAILER MTD	M62700	52252100.01P	128
149	ITEMS LESS THAN \$5.0M (MAINT EQ)	ML5345	59562100.01P	134
150	STEAM CLEANER, TRAILER MOUNTED	S60200	59600100.01P	142
151	MISSION MODULES - ENGINEERING	R02000	51974155.01P	143
152	ROLLER, VIBRATORY, SELF-PROPELLED (CCE)	R03300	53414101.01P	146
153	COMPACTOR, HIGH SPEED	R06600	53760101.01P	151
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159	CRUSHING/SCREENING PLANT, 150 TPH	M07000	56438101.01P	187
160	CONST EQUIP SLEP	M05500	59120101.01P	191
161	ITEMS LESS THAN \$5.0M (CONST EQUIP)	ML5350	59462101.01P	195
162	PUSHER TUG, SMALL	M44500	51782101.01P	198
163	FLOATING CRANE, 100-250 TON	M32400	53042101.01P	203
164	LOGISTIC SUPPORT VESSEL (LSV)	M11200	53462101.01P	208
165	LOGISTICS SUPPORT VESSEL (ESP)	M11201	53463101.01P	213
166	CONTAINERIZED MAINTENANCE FACILITY	M11300	54400101.01P	217
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<b>Blin</b>	<b>Nomenclature</b>	<b>SSN</b>	<b>Filename</b>	<b>Page Number</b>
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170	GENERATORS AND ASSOCIATED EQUIP	MA9800	50426151.01P	234
171	ROUGH TERRAIN CONTAINER HANDLER, 53,000 LBS	M41200	55382101.01P	268
172	ALL TERRAIN LIFTING ARMY SYSTEM	M41800	57240101.01P	273
173	ROUGH TERRAIN CONTAINER CRANE	X00900	57846101.01P	278
174	ITEMS LESS THAN \$5.0M (MHE)	ML5365	59254101.01P	283
175	COMBAT TRAINING CENTERS SUPPORT	MA6600	51780113.01P	286
176	TRAINING DEVICES, NONSYSTEM	NA0100	52062113.01P	303
177	CLOSE COMBAT TACTICAL TRAINER	NA0170	56542113.01P	328
178	AVIATION COMBINED ARMS TACTICAL TRAINER (AVCATT)	NA0173	56800113.01P	334
179	FIRE SUPPORT COMBINED ARMS TACTICAL TRAINER	NA0174	56610113.01P	338
180	CALIBRATION SETS EQUIPMENT	N10000	50100147.01P	344
181	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)	MB4000	50200147.01P	351
182	TEST EQUIP MODERNIZATION (TEMOD)	N11000	50600147.01P	373
183	ARMY DIAGNOSTICS IMPROVEMENT PROGRAM (ADIP)	N11400	50640147.01P	382
184	RECONFIGURABLE SIMULATORS	KA6000	50020113.01P	390
185	PHYSICAL SECURITY SYSTEMS (OPA3)	MA0780	50050153.01P	391
186	SYSTEM FIELDING SUPPORT (OPA-3)	MA0070	50120156.01P	400
187	BASE LEVEL COM'L EQUIPMENT	MB7000	50312156.01P	401
188	MODIFICATION OF IN-SVC EQUIPMENT (OPA-3)	MA4500	51110156.01P	402
189	PRODUCTION BASE SUPPORT	MA0450	51222144.01P	421
190	BUILDING, PRE-FAB, RELOCATABLE	MA9160	51500156.01P	422
191	SPECIAL EQUIPMENT FOR USER TESTING	MA6700	51572113.01P	425
192	MA8975	MA8975	59219156.01P	431
194	INITIAL SPARES - TSV	DS1000	50201107.01P	432
195	INITIAL SPARES - C&E	BS9100	50202107.01P	433
196	INITIAL SPARES - OTHER SUPPORT EQUIP	MS3500	50203107.01P	435

DEPARTMENT OF THE ARMY  
 FY 00/01 PROCUREMENT PROGRAM

EXHIBIT P-1  
 February 1999

Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **3. \*\*OTHER SUPPORT EQUIPMENT\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
	<b>**CHEMICAL DEFENSIVE EQUIPMENT**</b>								
114	GEN SMOKE MECH: MTRZD DUAL PURPOSE M56 (MX0600)			75	14,909	17	6,259	48	11,369
115	GENERATOR, SMOKE, MECH M58 (M99107)	A		28	10,481		3,405		5,585
116	M6 DISCHARGER (G71300)					1,878	3,025		
117	ITEMS LESS THAN \$5.0M (SMOKE OBSCURANT) (ML5310)				4,572				
	<b>SUB-ACTIVITY TOTAL</b>				<b>29,962</b>		<b>12,689</b>		<b>16,954</b>
	<b>**BRIDGING EQUIPMENT**</b>								
118	HEAVY DRY SUPPORT BRIDGE SYSTEM (G82400)					3	15,326	4	19,224
119	RIBBON BRIDGE (MA8890)				9,558		25,345		15,669
120	FLOAT BRIDGE PROPULSION (M27200)							5	1,942
	<b>SUB-ACTIVITY TOTAL</b>				<b>9,558</b>		<b>40,671</b>		<b>36,835</b>
	<b>**ENGINEER (NON CONSTRUCTION) EQUIPMENT**</b>								
121	KIT, STANDARD TELEOPERATING (R80500)					15	3,956	2	688
122	METALLIC MINE DETECTOR, VEHICLE MOUNTED (M80100) (M80100)			2	3,726				

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EXHIBIT P-1  
February 1999

Appropriation: \*\*OTHER PROCUREMENT, ARMY\*\*

Activity: 3. \*\*OTHER SUPPORT EQUIPMENT\*\*

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
123	EXPLOSIVE ORDNANCE DISPOSAL EQPMT (EOD EQPMT) (MA9200)						8,899		5,206
124	<\$5M, COUNTERMINE EQUIPMENT (MA7700)	A							993
125	BN COUNTERMINE SIP (X01100) (EOD EQPMT) (MA9200)			1,520			8,862		7,442
<b>SUB-ACTIVITY TOTAL</b>					<b>5,246</b>		<b>21,717</b>		<b>14,329</b>
<b>**COMBAT SERVICE SUPPORT EQUIPMENT**</b>									
126	ENVIRONMENTAL CONTROL UNITS (MF9300)	A		138	6,057	120	5,955	150	6,348
127	FIRETRUCKS (MA9600)	A			16,513				
128	LAUNDRIES, SHOWERS AND LATRINES (M82700)				7,121		9,802		12,580
129	FLOODLIGHT SET, ELEC, TRL MTD, 3 LIGHTS (M72100)			58	1,893	84	2,360		
130	SOLDIER ENHANCEMENT (MA6800)				4,711		3,571		3,984
131	LIGHTWEIGHT MAINTENANCE ENCLOSURE (LME) (MA8061)					171	3,690	160	1,999

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EXHIBIT P-1  
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Appropriation: \*\*OTHER PROCUREMENT, ARMY\*\*

Activity: 3. \*\*OTHER SUPPORT EQUIPMENT\*\*

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
132	FORCE PROVIDER (M80200)	A		4	23,841	3	31,189	3	22,263
133	FIELD FEEDING AND REFRIGERATION (M65800)	A			12,397		8,617		11,976
134	AIR DROP PROGRAM (MA7804)						3,357		3,971
135	CAMOUFLAGE: ULCANS (MA7900)	A					12,869		
136	ITEMS LESS THAN \$5.0M (CSS-EQ) (ML5325)	A			6,447		2,543		1,909
	<b>SUB-ACTIVITY TOTAL</b>				<b>78,980</b>		<b>83,953</b>		<b>65,030</b>
	<b>**PETROLEUM EQUIPMENT**</b>								
137	FAMILY OF TANK ASSEMBLIES FABRIC, COLLAPSIBLE (M19000)	A			8,891		11,201		2,489
138	QUALITY SURVEILLANCE EQUIPMENT (MB6400)						6,225		7,120
139	DISTRIBUTION SYS, PET & WATER (M60000)	A			5,879		12,583		13,516
140	PUMPS, WATER AND FUEL (M61200)				337	146	3,680		
141	HOSELINE OUTFIT FUEL HANDLING (M90800) (MA5120)	A						50	5,878
142	INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)	A			8,232		6,826		5,618

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Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **3. \*\*OTHER SUPPORT EQUIPMENT\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
143	ITEMS LESS THAN \$5.0M (POL) (ML5330)	A			4,595		3,866		
	<b>SUB-ACTIVITY TOTAL</b>				----- 27,934		----- 44,381		----- 34,621
	<b>**WATER EQUIPMENT**</b>								
144	WATER PURIFICATION SYS (R05100)	A					10,352		40,727
145	ITEMS LESS THAN \$5.0M (WATER EQ) (ML5335)	A			1,898		1,729		
	<b>SUB-ACTIVITY TOTAL</b>				----- 1,898		----- 12,081		----- 40,727
	<b>**MEDICAL EQUIPMENT**</b>								
146	COMBAT SUPPORT MEDICAL (MN1000)				25,465		34,940		31,567
	<b>SUB-ACTIVITY TOTAL</b>				----- 25,465		----- 34,940		----- 31,567
	<b>**MAINTENANCE EQUIPMENT**</b>								
147	SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP) (M61500)	A		140	7,792	135	7,778	169	9,650
148	WELDING SHOP, TRAILER MTD (M62700)	A		64	3,004	95	6,046	144	6,042
149	ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)	A			4,315		3,072		5,078

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EXHIBIT P-1  
February 1999

Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **3. \*\*OTHER SUPPORT EQUIPMENT\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
150	STEAM CLEANER, TRAILER MOUNTED (S60200)					47	1,243		
	<b>SUB-ACTIVITY TOTAL</b>								
	<b>**CONSTRUCTION EQUIPMENT**</b>								
151	MISSION MODULES-ENGINEERING (R02000)				4,319		5,473		1,489
152	ROLLER, VIBRATORY, SELF-PROPELLED (CCE) (R03300)	A					10,197	70	4,671
153	COMPACTOR, HIGH SPEED (R06600)					67	12,274		
154	LOADERS (R04500)	A				27	7,704	5	1,444
155	HYDRAULIC EXCAVATOR (X01500)	B		32	7,797	34	8,265	35	8,282
156	DEPLOYABLE UNIVERSAL COMBAT EARTH MOVERS (M10600)			24	9,245	43	16,579	34	14,146
157	CRANES (M06700)	A			19,332		21,756		6,089
158	TRUCK, DUMP, 20T (CCE) (R03000)	A		67	13,128				
159	CRUSHING/SCREENING PLANT, 150 TPH (M07000)	A		4	8,127	4	7,328		89

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FY 00/01 PROCUREMENT PROGRAM

EXHIBIT P-1  
February 1999

Appropriation: \*\*OTHER PROCUREMENT, ARMY\*\*

Activity: 3. \*\*OTHER SUPPORT EQUIPMENT\*\*

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
160	CONSTRUCTION EQUIPMENT SLEP (M05500)								1,986
161	ITEMS LESS THAN \$5.0M (CONST EQUIP) (ML5350)	A			2,020		6,223		2,635
	<b>SUB-ACTIVITY TOTAL</b>				<b>63,968</b>		<b>95,799</b>		<b>40,831</b>
	<b>**RAIL FLOAT CONTAINERIZATION EQUIPMENT**</b>								
162	SMALL TUG (M44500)			3	8,476		8,909		
163	FLOATING CRANE, 100-250 TON (M32400)	B		1	15,216				
164	LOGISTICS SUPPORT VESSEL (LSV) (M11200)	B					18,844		
165	LOGISTICS SUPPORT VESSEL (ESP) (M11201)							1	6,638
166	CONTAINERIZED MAINTENANCE FACILITY (M11300)			3	5,230				
167	CAUSEWAY SYSTEMS (R97500)	A			16,856		16,669		17,227
168	RAILWAY CAR, FLAT, 89 FOOT (M37000)	A		120	13,579	45	4,929		
169	ITEMS LESS THAN \$5.0M (FLOAT/RAIL) (ML5355)				2,247		6,808		6,722
	<b>SUB-ACTIVITY TOTAL</b>				<b>61,604</b>		<b>56,159</b>		<b>30,587</b>

Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **3. \*\*OTHER SUPPORT EQUIPMENT\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
	<b>**GENERATORS**</b>								
170	GENERATORS AND ASSOCIATED EQUIP (MA9800)	A		65,552		79,589		85,886	
	<b>SUB-ACTIVITY TOTAL</b>			----- 65,552		----- 79,589		----- 85,886	
	<b>**MATERIAL HANDLING EQUIPMENT**</b>								
171	ROUGH TERRAIN CONTAINER HANLER 53000 LB (M41200)	A		18	20,416			77	40,031
172	ALL TERRAIN LIFTING ARMY SYSTEM (M41800)			171	18,805	196	23,469	196	24,407
173	ROUGH TERRAIN CONTAINER CRANE (X00900)	A		2	1,124	22	10,883	4	2,056
174	ITEMS LESS THAN \$5.0M (MHE) (ML5365)	A			1,732		1,756		1,231
	<b>SUB-ACTIVITY TOTAL</b>				----- 42,077		----- 36,108		----- 67,725
	<b>**TRAINING EQUIPMENT**</b>								
175	CTC INSTRUMENTATION SUPPORT (MA6601)				47,884		17,374		81,845
176	TRAINING DEVICES, NONSYSTEM (NA0100)				56,529		72,532		91,937
177	SIMNET/CLOSE COMBAT TACTICAL TRAINER (NA0170)	A			87,946		64,713		81,160
178	AVIATION COMBINED ARMS TACTICAL TRAINER (AVCATT)(NA0173)								14,744

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Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **3. \*\*OTHER SUPPORT EQUIPMENT\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
179	FIRE SUPPORT COMBINED ARMS TACTICAL TRAINER (NA0174)	B			15,728		24,414		1,457
	<b>SUB-ACTIVITY TOTAL</b>				----- 208,087		----- 179,033		----- 271,143
	<b>**TEST MEAS &amp; DIAG EQUIP (TMDE)**</b>								
180	CALIBRATION SETS EQUIPMENT (N10000)				9,751		11,358		18,828
181	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE) (MB4000)				69,374		61,723		65,381
182	TEST EQUIPMENT MODERNIZATION (TEMOD) (N11000)				13,920		14,196		18,738
183	ARMY DIAGNOSTIC IMPROVEMENT PROGRAM (ADIP) (N11100)						5,172		17,300
	<b>SUB-ACTIVITY TOTAL</b>				----- 93,045		----- 92,449		----- 120,247
	<b>**OTHER SUPPORT EQUIPMENT**</b>								
184	RECONFIGURABLE SIMULATORS (KA6000)				747		2,398		2,330
185	PHYSICAL SECURITY SYSTEMS (OPA3) (MA0780)	A			14,807		19,597		18,856
186	SYSTEM FIELDING SUPPORT (OPA-3) (MA0070)				7,994				

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 FY 00/01 PROCUREMENT PROGRAM

EXHIBIT P-1  
 February 1999

Appropriation: \*\*OTHER PROCUREMENT, ARMY\*\*

Activity: 3. \*\*OTHER SUPPORT EQUIPMENT\*\*

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
187	BASE LEVEL COM'L EQUIPMENT (MB7000)				18,763		6,740		7,399
188	MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) (MA4500)				22,728		41,501		28,008
189	PRODUCTION BASE SUPPORT (OTHER) (MA0450)				2,242		2,407		2,367
190	BUILDING, PREFAB, RELOCATABLE (MA9160)				15,000				
191	SPECIAL EQUIPMENT FOR USER TESTING (MA6700)				14,611		16,775		24,344
192	MA8975 (MA8975)				5,941		4,387		2,332
193	CLOSED ACCOUNT ADJUSTMENTS (MA9999)				2,345				
	<b>SUB-ACTIVITY TOTAL</b>				<b>105,178</b>		<b>93,805</b>		<b>85,636</b>
	<b>ACTIVITY TOTAL</b>				<b>833,665</b>		<b>901,513</b>		<b>962,888</b>

DEPARTMENT OF THE ARMY  
 FY 00/01 PROCUREMENT PROGRAM

EXHIBIT P-1  
 February 1999

Appropriation: **\*\*OTHER PROCUREMENT, ARMY\*\***

Activity: **4. \*\*INITIAL SPARES\*\***

LINE NO.	ITEM NOMENCLATURE	ID	(DOLS) FY 00 UNIT COST	FY 99		FY 00		FY 01	
				QTY	COST	QTY	COST	QTY	COST
				(7)	(8)	(9)	(10)	(11)	(12)
	<b>**INITIAL SPARES OPA1**</b>								
194	INITIAL SPARES - TSV (DS1000)				158		72		
	<b>SUB-ACTIVITY TOTAL</b>				<b>158</b>		<b>72</b>		
	<b>**INITIAL SPARES OPA2**</b>								
195	INITIAL SPARES - C&E (BS9100)				58,119		43,088		42,401
	<b>SUB-ACTIVITY TOTAL</b>				<b>58,119</b>		<b>43,088</b>		<b>42,401</b>
	<b>**INITIAL SPARES OPA3**</b>								
196	INITIAL SPARES - OTHER SUPPORT EQUIP (MS3500)				717		879		639
	<b>SUB-ACTIVITY TOTAL</b>				<b>717</b>		<b>879</b>		<b>639</b>
	<b>ACTIVITY TOTAL</b>				<b>58,994</b>		<b>44,039</b>		<b>43,040</b>

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: GEN SMK MECH:MTRZD DUAL PURP M56 (M99103)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	77	66	61	75	17	48	84	74	110	93		705
Gross Cost	17.5	12.4	12.1	14.9	6.3	11.4	20.7	18.0	25.7	25.6	0.0	164.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	17.5	12.4	12.1	14.9	6.3	11.4	20.7	18.0	25.7	25.6	0.0	164.6
Initial Spares												
Total Proc Cost	17.5	12.4	12.1	14.9	6.3	11.4	20.7	18.0	25.7	25.6	0.0	164.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The M56, mounted on the High Mobility Multipurpose Wheeled Vehicle M1113 (HMMWV), disseminates smoke on the move and from stationary positions to defeat enemy sensors and smart munitions such as tank thermal sights, guided munitions, directed energy weapons, and other systems operating in the visual through far-infrared regions of the electromagnetic spectrum. The system uses a turbine engine as a power source to disseminate large area obscurant clouds. The visual screening module is capable of vaporizing fog oil for up to 90 minutes and the infrared module is capable of disseminating a particulate material to provide 30 minutes of screening. A pre-planned product improvement (P3I) for millimeter wave obscurant will be capable of producing a 30 minute MMW screen. The M56 will operate in support of light and airborne maneuver units.

**JUSTIFICATION:**  
 The FY01 program initiates a new production contract and allows for the maintenance of industrial capability.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: GEN SMK MECH:MTRZD DUAL PURP M56 (M99103)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
Contract, Production	A				10669	75	142	2763	17	163	8612	48	179
Engineering Change Proposals (ECP)	A				274			34			96		
Depot Maintenance Work Requirement	A				250			55			55		
Government Furnished Equipment	A				253			170			480		
Driver's Vision Enhancer	A				1183			338			953		
Engineering Support	A				1580			740			900		
Driver's Vision Enhancer Testing	A				700								
System Fielding Support (SEE NOTE ON P5A)	A							2159			273		
<b>TOTAL</b>					<b>14909</b>			<b>6259</b>			<b>11369</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: GEN SMK MECH:MTRZD DUAL PURP M56 (M99103)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Contract, Production										
FY 99	RST, Westminster MD	C/FPM5(5)	SBCCOM	Dec-98	Jul-99	75	142	YES		
FY 00	RST, Westminster MD	C/FPM5(O)	SBCCOM	Nov-99	Jul-00	17	163	YES		
FY 01	TBS	C/FPM5(1)	SBCCOM	Jan-01	Jan-02	48	179	YES		

**REMARKS:** FY00 contract was an OPTION on an existing 5 year multiyear contract which ended in FY99. Unit price negotiated for FY00 contract option was increased from FY99 because of increased costs from the original negotiated price in FY95. FY01 is the first year of a new contractual effort. The current Government cost estimate is based upon the FY00 cost. The final determination as to whether FY01 will be a single year or multi-year contract will not be made until proposals are received and cost/benefit determined from actual data.

**SPECIAL NOTE: SYSTEM FIELDING SUPPORT FUNDS IDENTIFIED FOR THE M56 SUPPORT ALL SMOKE SYSTEMS (M56, M58, AND LVOSS). FUNDS WILL BE DISTRIBUTED AS REQUIRED IN THE YEAR OF EXECUTION.**







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: GENERATOR, SMOKE, MECH M58 (M99107)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	45	40	27	28			35	29	37	37		278
Gross Cost	12.3	11.5	8.4	10.5	3.4	5.6	10.7	9.6	12.5	12.4	0.0	96.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	12.3	11.5	8.4	10.5	3.4	5.6	10.7	9.6	12.5	12.4	0.0	96.8
Initial Spares												
Total Proc Cost	12.3	11.5	8.4	10.5	3.4	5.6	10.7	9.6	12.5	12.4	0.0	96.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION**  
 The M58 is a mechanized, large-area, multi-spectral smoke and obscurant system which integrates smoke generator components into a modified M113A3 Armored Personnel Carriers (APC) chassis. The system includes a Drivers Vision Enhancer (DVE) and gas particulate filter unit for Chem/Bio protection. Fabrication of unique parts and assemblies and the integration of above Government Furnished Equipment (GFE) are done at Anniston Army Depot (ANAD). Beginning FY02 production of a new model M58 system is planned that will have mobility equal to the mechanized forces which it supports, and will also incorporate the capability for millimeter wave (MMW) obscurant generation. The improved system will be capable of generating visual, infrared and millimeter wave obscuration to meet all Army requirements.

**JUSTIFICATION**  
 The FY01 funding supports the final phase of a systems integration program to install and test 2 prototypes with the smoke generator components integrated on a different chassis other than the M113A3. Beginning in FY00, no M113A3 chassis were available for retrofit to the M58 system.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: GENERATOR, SMOKE, MECH M58 (M99107)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Smoke Generator Components Engineering Change Proposals (ECP)		A				3202	28	114						
M58 Application Kit Engineering Change Proposals (ECP)		A				1503	28	54						
M58 System Conversion		A				400	28	14						
Drivers Vision Enhancer/Cdr Display		A				604	28	22						
SINCGARS Installation Kit		A												
Gas Particulate Filter Unit (GPFU)		A				48	28	2						
Manuals		A												
Engineering Support - OGA		A				271								
Engineering Support		A				674								
Systems Integration Effort		A												
Engineering Support						1028			1300			2223		
OGA and Test						144			180			695		
Test Support Components						259			159					
Smoke System Components						729								
Contract Support						1619			1766			2667		
<b>TOTAL</b>						<b>10481</b>			<b>3405</b>			<b>5585</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: GENERATOR, SMOKE, MECH M58 (M99107)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Smoke Generator Components FY99	RST, Westminster MD	C/FPM4 (4)	SBCCOM	Dec-98	Mar-00	28	114			
Drivers' Vision Enhancer/Cdr Display (M58) FY99	Raytheon, Dallas TX	C/FPM2 (2)	CECOM	Jan-99	Jun-00	28	22			
Gas Particulate Filter Unit (GPFU) FY99	Chula Vista, CA	C/FPM4 (4)	TACOM/ACALA	Nov-98	Oct-99	28	2			
M58 Application Kit FY99	Anniston Army Depot, Alabama	DMWR	SBCCOM	Dec-98	Dec-99	28	54			
M58 System Conversion (Shown on P-21) FY99	Anniston Army Depot, Alabama	DMWR	SBCCOM	Dec-99	Jun-00	28	14			

**REMARKS:** The two prototype systems delivered with FY00 and FY01 integration effort will be refurbished and available for issue to the field at the end of the integration effort.

The systems integration program began in FY99 to accelerate acceptance, testing and fielding of the System Improved M58.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: M6 DISCHARGER (G71300)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					1878				518	706		3102
Gross Cost	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.1	1.4	0.0	5.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.1	1.4	0.0	5.5
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.0	1.1	1.4	0.0	5.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The M6 Discharger will provide armored host vehicles with concealment from threat surveillance, target acquisition, and weapons guidance systems by projecting the 66mm family of smoke grenades. Each M6 discharger consists of a 4 grenade launch tube module which is designed for use on any vehicle platform. Each tube of the M6 Discharger can be separately fired on command. The system provides up to 360 degrees coverage, overhead screening protection, and can interface with the Vehicle Integrated Defense System (VIDS) control.

**Exhibit P-40, Budget Item Justification Sheet**

Date: January 2000

Appropriation / Budget Activity/Serial No: P-1 Item Nomenclature:  
 OTHER PROCUREMENT / 3 / Other Support Equipment ITEMS LESS THAN \$5M (SMOKE & OBSCURANTS) ML5310

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	2.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	2.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Initial Spares												
Total Proc Cost	0.0	0.0	2.1	4.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.7
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The Items Less Than \$5M line procured the Light Vehicle Obscurant Smoke System (LVOSS) in FY98/99. The LVOSS is a self-defense smoke/obscurant device externally mounted on the light vehicles. LVOSS counters threat weapon systems operating in the visual and near infrared portions of the electromagnetic spectrum. LVOSS launcher hardware consists of the M7 Lightweight Discharger and either a M304/M305/M310 Installation Kit. The M7 Discharger is made from a light weight material (Xenoy) and has four launch tubes capable of firing grenades in a sixty degree arc. The installation kits contain an arming and firing unit (A/FU), wiring harness and mounting hardware. The M304 Installation Kit is compatible with the Infantry Tube-launched Optical-tracked Wire-guided (TOW) equipped HMMWV (M966). The M305 and M310 Installation Kits mount the A/FU, wiring harness and four M7 dischargers to the M1025 series HMMWV and M1114 HMMWV used by the Military Police. LVOSS components are integrated as a complete system and operated from within the vehicle via the A/FU. The host vehicle will retain its combat load and operational capabilities in mobility, firepower and communications when configured with the LVOSS.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: HEAVY DRY SUPT BRIDGE SYSTEM (G82400)

Program Elements for Code B Items: 604804 H01 Logistics and Engineer Equipment - Engineering Development  
 Code: Code:  
 Other Related Program Elements: Ribbon Bridge (MA8890)

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					3	4	4	8	8	8		35
Gross Cost	0.0	0.0	0.0	0.0	15.3	19.2	20.6	44.5	45.0	44.9	0.0	189.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	15.3	19.2	20.6	44.5	45.0	44.9	0.0	189.5
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	15.3	19.2	20.6	44.5	45.0	44.9	0.0	189.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Heavy Dry Support Bridge (HDSB) is a mobile, rapidly erected, sectionalized military bridging system. The quantity shown is for bridge sets, which consists of the bridge, a Palletized Load System (PLS) chassis dedicated launcher, M1076 PLS Trailers, and Flatracks. The HDSB complements the Ribbon Bridge modernization program under SSN MA8890, which includes the M1977 Common Bridge Transporters (CBTs) (M26800), Interior Bays (M26600), Ramp Bays (M26700), and Bridge Erection Boats (M23600). The HDSB bridge sections will be transported by M1977 Common Bridge Transporters (CBTs) using both the trailers and the flatracks. The HDSB is a major component of the Multi-Role Bridge Company (MRBC). The HDSB will allow the crossing of up to a 40-meter gap or two 20-meter gaps at a Military Load Class (MLC) 96 wheeled and MLC 70 tracked. The bridge will have a minimum 4-meter road width and a rapid emplacement time in 90 minutes or less, with little or no site preparation and will require 14 soldiers or less to construct the bridge. The currently fielded Medium Girder Bridge is aging and cannot withstand MLC 96W/70T crossings, which is required when a Heavy Equipment Transporter (HET) is hauling an Abrams tank.

**JUSTIFICATION:** The FY01 funding procures four bridges and launchers and associated trailers and flatracks to continue filling Force Package 1 requirements. The AAO for this system is as follows: Bridge - 133ea, Launchers - 105ea

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: HEAVY DRY SUPPORT BRIDGE (G82400)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Vehicle													
Bridge	B						6171	3	2057	8228	4	2057	
Launcher	B						4875	3	1625	6500	4	1625	
Trailer	A									1001	20	50	
Flatrack	A									159	14	11	
AN/VIC-3	B						1300	31	42				
<b>SUBTOTAL</b>							<b>12346</b>			<b>15888</b>			
2. ECPs							374			476			
3. Testing, PVT APG							159			1855			
4. Documentation							1276			206			
5. Quality Assurance Support In-House							121			214			
6. System Fielding Support							244			14			
7. Engineering Support In-House							61			114			
8. PM Support							745			457			
Notes:													
Production Verification Test (PVT) / M III TC STD for bridge/launcher and AN/VIC-3 scheduled for FY02.													
<b>TOTAL</b>							<b>15326</b>			<b>19224</b>			

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: HEAVY DRY SUPPORT BRIDGE (G82400)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Bridge										
FY 00	TBS	C/MYP	TACOM	May-00	Aug-00	3	2057	Yes		Nov 99
FY 01	TBS	Call-up	TACOM	Dec-00	Dec-01	4	2057			
Launcher										
FY 00	TBS	C/MYP	TACOM	May-00	Aug-00	3	1625	Yes		Nov 99
FY 01	TBS	Call-up	TACOM	Dec-00	Dec-01	4	1625			
Trailer										
FY 01	Oshkosh Truck Corp. Oshkosh, WI	Option	TACOM	Dec-00	Jun-01	20	50	Yes		
Flatrack										
FY 01	TBS	SS/FFP	TACOM	Nov-00	Jun-01	14	11	Yes		May 00
AN/VIC-3										
	Northrup Grumman, Inc. Defense Systems Division Rolling Meadows, IL	SS/FFP	CECOM	Jun-00	Mar-01	31	42	No	Apr-00	Apr 00

**REMARKS:** PLS Chassis, Trailer, Flatrack, and AN/VIC-3 are GFE to the Launcher contractor. AN/VIC-3 unit of measure is bridge sets, which is 12 intercoms per bridge set.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: RIBBON BRIDGE (MA8890)

Program Elements for Code B Items: 604804 H01 Logistics and Engineer Equipment - Engineering Development  
 Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	272.6	4.4	4.0	9.6	25.3	15.7	27.9	33.8	40.3	39.3	0.0	472.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	272.6	4.4	4.0	9.6	25.3	15.7	27.9	33.8	40.3	39.3	0.0	472.8
Initial Spares												
Total Proc Cost	272.6	4.4	4.0	9.6	25.3	15.7	27.9	33.8	40.3	39.3	0.0	472.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Ribbon Bridge consists of Bridge Bays (M26600 and M26700), Bridge Erection Boats (M23600), and Transporters (M26800). These components are required to transport, launch, erect and retrieve a floating bridge up to 200 meters long per bridge company. Ribbon Bridges have a Military Load Capacity of MLC 96 and are used to transport weapon systems, troops and supplies over water when permanent bridges are not available. The Ribbon Bridge Bays, Erection Boats, and Transporters are components of the Multi-Role Bridge Company (MRBC). The Ribbon Bridge provides the capability for a continuous floating roadway or raft to be constructed for transporting assault and tactical vehicles across streams and rivers that cannot be forded.

**JUSTIFICATION:** FY01 funding continues procurement of the M1977 Common Bridge Transporter (CBT) and associated M15 Bridge Adaptor Pallets (BAPs), and Ribbon Bridge Interior Bays and Ramp Bays. Ribbon Bridge AAOs are as follows: CBT- 1052ea, Bridge Bays - 1186ea

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: RIBBON BRIDGE (MA8890)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Vehicle														
Common Bridge Transporter		A			4400	92	48	17492	87	201	3013	17	177	
Bridge Adapter Pallet		A			3868	105	37	1882	51	37	3218	86	37	
Interior Bays		B						2024	18	112	3599	32	112	
Ramp Bays		B						1170	9	130	1690	13	130	
<b>SUBTOTAL</b>					<b>8268</b>			<b>22568</b>			<b>11520</b>			
2. Engineering Changes					110			673			384			
3. Government Testing - APG					65						1832			
4. Documentation								308			231			
5. Engineering Support Government					109			373			318			
6. Quality Assurance Support					201			180			198			
7. Special Tools								73			68			
8. System Fielding Support					386			460			427			
9. Project Mgmt Support					419			710			691			
Note: Production Verification Test (PVT)/M III Type Classification (TC STD) for IRB ramps and bays scheduled in FY02.														
<b>TOTAL</b>					<b>9558</b>			<b>25345</b>			<b>15669</b>			

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: RIBBON BRIDGE (MA8890)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
<b>Common Bridge Transporter</b>											
FY 99	Oshkosh Truck Corp	SS/FFP	TACOM	Aug-99	Sep-99	85	48	Yes			
FY 99	Oshkosh, WI	Option	TACOM	Jan-00	Aug-00	7	48	Yes			
FY 00	"	Option	TACOM	Jan-00	Sep-00	87	201	Yes			
FY 01	"	Option	TACOM	Dec-00	Aug-01	17	177	Yes			
<b>Bridge Adapter Pallet</b>											
FY 99	Bombardier Transportation.	C/FFP	TACOM	Jun-99	Feb-00	105	37	Yes			
FY 00	Kingston, Canada	Option	TACOM	Jun-00	Jan-01	51	37	Yes			
FY 01		Option	TACOM	Dec-00	Aug-01	86	37	Yes			
<b>Interior Bays</b>											
FY 00	TBS	C/MYP	TACOM	Apr-00	Jul-00	18	112	YES			
FY 01	TBS	Call-up	TACOM	Apr-01	Oct-01	32	112	YES			
<b>Ramp Bays</b>											
FY 00	TBS	C/MYP	TACOM	Apr-00	Jul-00	9	130	YES			
FY 01	TBS	Call-up	TACOM	Apr-01	Oct-01	13	130	YES			

REMARKS: Beginning in FY 00, CBT procurement costs include the cost of the HEMTT chassis.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FLOAT BRIDGE PROPULSION (M27200)

Program Elements for Code B Items: 604804 H02 Bridge Site Mobility  
 Code:  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty						5	4	13	20	20		62
Gross Cost	0.0	0.0	0.0	0.0	0.0	1.9	1.9	4.4	7.2	7.1	0.0	22.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	1.9	1.9	4.4	7.2	7.1	0.0	22.6
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	1.9	1.9	4.4	7.2	7.1	0.0	22.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Ribbon Bridge consists of Bridge Bays (M26600), Float Bridge Propulsion (Bridge Erection Boats (BEB)) (M27200), and Transporters (M26800). These components are required to transport, launch, erect and retrieve a floating bridge up to 200 meters long per bridge company. Ribbon Bridges have a Military Load Capacity of MLC 96 and are used to transport weapon systems, troops and supplies over water when permanent bridges are not available. The Ribbon Bridge Bays, Bridge Erection Boats (BEB) , and Transporters are components of the Multi-Role Bridge Company (MRBC). The Ribbon Bridge provides the capability for a continuous floating roadway or raft to be constructed for transporting assault and tactical vehicles across streams and rivers that cannot be forded. The BEB procurement will start in FY01 and a five-year multiyear program will procure 61 boats. Existing BEBs are aging and nearing the end of their useful life, creating readiness concerns for MRBC units.

**JUSTIFICATION:** FY01 funding initiates the BEB replacement program and buys five Bridge Erection Boats to replace overaged boats that no longer meet user requirements.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FLOAT BRIDGE PROPULSION (M27200)			Weapon System Type:			Date: February 2000			
<b>OPA Cost Elements</b>		ID	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware														
Bridge Erection Boat												1005	5	201
<b>SUBTOTAL</b>												<b>1005</b>		
2. Engineering Changes												30		
3. Government Testing Aberdeen Test Center												200		
4. Documentation												196		
5. Engineering Support Government												112		
6. Quality Assurance Support												51		
7. Project Mgmt Support												348		
<b>TOTAL</b>												<b>1942</b>		

**Exhibit P-5a, Budget Procurement History and Planning**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FLOAT BRIDGE PROPULSION (M27200)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$OOO	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
FY01	TBD	C/MYP	TACOM	Apr-01	Dec-01	5	201	No	Oct 00	Jan 01	

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: KIT, STANDARD TELEOPERATING (R80500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					15	2	9					26
Gross Cost	0.0	0.0	0.0	0.0	4.0	0.7	2.4	0.0	0.0	0.0	0.0	7.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	4.0	0.7	2.4	0.0	0.0	0.0	0.0	7.1
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	4.0	0.7	2.4	0.0	0.0	0.0	0.0	7.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION.** Vehicle Teleoperation (VT) capability occurs when a Standardized Robotic System (SRS) kit is installed in any existing military vehicle. The SRS, when installed, allows the vehicle to be controlled either normally, by having the driver in the vehicle, or remotely. During normal operation, the VT capability is transparent to the driver. When operated remotely, all driving and payload functions are controlled from a remote location. Eighty percent of the SRS will be common for all vehicles on which it may be mounted; the primary difference is the number and capability of actuators to control driving and payload functions. The SRS is composed of the following major parts: 1) Operator Control Unit (OCU) - a standard vehicle mounted/man portable control unit that offers the interface between the operator and the remote vehicle; 2) Vehicle Control Unit (VCU) - the controlling processor located on the remote vehicle which controls driving and payload functions; 3) High Integration Acutators (HIA) - to acuate driving and payload controls on the vehicle in such a manner as to be transparent to manned operation; 4) System Input/Output (SIO) - handles all input/output for other than actuators; 5) Video Multiplexer Unit (VMU) - handles driving and payload related video throughput between vehicle and Radio Unit (RU); 6) Pan/Tilt Unit (PTU) - controls camera/sensor motion, transmitting information to the VCU; and 7) Radio Units (RU) - transport video, telemetry, and safety data between the OCU and VCU.

**JUSTIFICATION.** FY01 funds will procure additional SRS kits. Developmental SRS kits have remotely detonated hundreds of anti-personnel and anti-tank mines in Bosnia during Operations Joint Endeavor and Joint Guard--keeping American soldiers out of harms way. The Combat Engineer Table of Equipment (TOE) redesign includes VT systems at all levels of organization. The capability of rapidly equipping an engineer unit with a teleoperation capability requires earliest possible procurement. This procurement will allow engineer units to operate heavy machinery or other vehicles in extremely hazardous environments. Current need is stated for remote minefield clearing and proofing, but the capability can be used for clearing firelanes and earthworks in flooded or other hazardous environments.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: METALLIC MINE DETECTOR, VEHICLE MOUNTED (M80100)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			7	2								9
Gross Cost	0.0	0.0	12.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	12.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Initial Spares												
Total Proc Cost	0.0	0.0	12.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The Interim Vehicle Mounted Mine Detection System (IVMMD) provides the U.S.Army with the capability to detect metal cased antitank mines on routes. The system gives the Army critical capabilities to conduct route clearing missions in wartime, stabilization operations and humanitarian/peacekeeping missions. The system will allow U.S. Forces to maintain mobility along critical routes of communications. The IVMMD is the first vehicle mounted mine detection system fielded by the U.S.Army. The IVMMD will be fielded to selected units as an interim system for use in other than war operations where U.S. troops may be involved. It significantly reduces the exposure of soldiers to hostile fire and greatly increases route clearance missions in all tactical environments over hand held systems.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT (E (MA9200))

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	9.0	5.2	3.3	2.5	1.8	0.9	0.0	22.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	9.0	5.2	3.3	2.5	1.8	0.9	0.0	22.7
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	9.0	5.2	3.3	2.5	1.8	0.9	0.0	22.7
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides for procurement of explosive ordnance disposal (EOD) equipment. This equipment is for initial issue shortages or to replace overaged and uneconomically repairable assets. This equipment is used by EOD personnel to render safe unexploded ordnance and improvised devices throughout the world. This equipment provides the capability to examine, identify, and render safe ordnance effectively and safely.

**JUSTIFICATION:** The FY01 funds are required to procure EOD equipment. These requirements include interchange, readiness fixing, and replacement of uneconomically repairable/unsupportable assets. The EOD equipment is urgently needed to fill unit requirements throughout the active Army, National Guard, and Army Reserve Units for rendering safe unexploded ordnance and improvised explosive devices. The equipment will increase operational capabilities of EOD units as well as enhance safety of EOD personnel.

- a. Radiographic Tool Set (commonly called the x-ray tool set) is used by EOD personnel to take x-ray pictures of foreign ordnance items and suspected improvised explosive devices (IEDs). The x-ray film of the internal components of the suspect object allows the soldier to identify hazards and determine EOD procedures to be used.
- b. Advanced Radiographic System (ARS) is used by explosive ordnance disposal (EOD) soldiers to obtain a radiographic computer image of the internal components of munition fuzes, light cased unexploded ordnance (UXO) items and suspected improvised explosive devices (IEDs). The ARS enhances the capabilities of the present X-Ray tool set and increases operational safety by reducing the exposure to the hazardous item.

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT (E (MA9200))
Program Elements for Code B Items	Code	Other Related Program Elements
<p>c. Tool Kit Supplemental Field Maintenance is a basic tool kit used by EOD units for removal and destruction of ordnance.</p> <p>d. Remote Ordance Neutralization System (RONS) is an upgrade of the present robot used by EOD soldiers to enable more operations on hazardous unexploded ordnance (HUO) and IED's to be performed at a safer remote distance.</p> <p>e. Swept Frequency Acoustic Interferometer (SFAI) is a 1-person portable computerized field-worthy, non-invasive, ultrasonic inspection system to identify solid and liquid munitions filler. This is used by EOD personnel to identify hazards and determine safe procedures.</p> <p>f. The Small Caliber Dearmer (SCD) is a set of breeches, different length barrels, and positioning stand capable of firing 9MM or .22 cal long range ammunition. The SCD provides the EOD soldier the capability to render safe small firing devices and fuzes.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: EXPLOSIVE ORDNANCE DISPOSAL EQUIPMENT (EOD EQUIP) (MA9200)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Radiographic Tool Set	G037							1054	117	9	1422	158	9
2. Advanced Radiographic System (ARS)	A010							2937	218	13	1050	50	21
3. Tool Kit Supplemental Field Maintenance	G784							503	55	9	220	23	10
4. Remote Ordnance Neutralization System (RONS)	PEND							495	3	165	330	2	165
5. Swept Frequency Acoustic Interferometer (SFAI)	PEND										2064	129	16
6. Small Caliber Dearmer	PEND										120	100	1
7. HMMWV Laser Ordnance Neutralization System (HLONS)								3910					
<b>TOTAL</b>								<b>8899</b>			<b>5206</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT/3/Other Support Equipment

P-1 Item Nomenclature:

< \$5M Countermine Equipment (MA7700)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.9	4.9	4.9	0.0	18.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.9	4.9	4.9	0.0	18.8
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	1.0	3.0	4.9	4.9	4.9	0.0	18.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

Under \$5M Countermine Equipment provides the U.S. Army with a capability to improve countermine capabilities for stability and support operations (S&SO). Specifically focused upon improving critical capabilities of area clearance missions. These items are an assortment of countermine tools that allows the warfighter to select the best tool for the terrain, environment and mission. These tools are Non Developmental Items that are available for rapid procurement.

**JUSTIFICATION:**

Funds for FY01 procures commercially available metal detector that has a better capability than the current AN/PSS-12 mine detector.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: BN COUNTERMINE SIP (X01100)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	2.4	1.5	8.9	7.4	0.0	0.0	0.0	2.2	0.0	22.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	2.4	1.5	8.9	7.4	0.0	0.0	0.0	2.2	0.0	22.4
Initial Spares												
Total Proc Cost	0.0	0.0	2.4	1.5	8.9	7.4	0.0	0.0	0.0	2.2	0.0	22.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This funding provides for the procurement, application, and fielding costs associated with the System Improvement Plan Kit for the Battalion Countermine Set used on M1 Series tanks. This kit includes: changes to the M1 Mine Clearing Blade System including wiring harness improvements, travel lock upgrades, strengthened moldboard extensions, a plowing level indicator, and a centerline deflector kit; improvements to the M1 Mine Clearing Roller System including an improved quick release system, a simplified magnetic dogbone assembly, and a soft soil/sand kit; and a complete redesign of a cleared lane minefield marking system.

**JUSTIFICATION:** FY01 funds will support an improvement for the Roller Quick Release system which is flagged as a safety issue. Numerous safety and mission reliability issues have been addressed. Failures in any of these components would not only result in mission failure but could result in catastrophic damage to the host vehicle and injury/death to the vehicle's crew. All other changes (i.e. level indicators, centerline deflectors, soft soil/sand kit) will enhance mission capability and reliability.

**Exhibit P-40M Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment  
P-1 Item Nomenclature BN COUNTERMINE SIP (X01100)

Program Elements for Code B Items Code A Other Related Program Elements

Description		Fiscal Years									
OSIP NO.	Classification	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
Countermine Battalion Set Improvement Kit											
1-99-05-4557	OP	2.4	1.5	8.9	7.4	0.0	0.0	0.0	0.0	0.0	20.2
Totals		2.4	1.5	8.9	7.4	0.0	0.0	0.0	0.0	0.0	20.2

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Countermine Battalion Set Improvement Kit 1-99-05-4557

**MODELS OF SYSTEMS AFFECTED:** Countermine Battalion Set Improvement Kit 1-99-05-4557

**DESCRIPTION / JUSTIFICATION:**

Procurement, application, and fielding of the System Improvement Plan Kit to the Battalion Countermine Set used on M1 Series tanks. This kit includes: changes to the M1 Mine Clearing Blade System including wiring harness improvements, travel lock upgrades, strengthened moldboard extensions, the addition of a plowing level indicator, and the addition of a centerline deflector kit; improvements to the M1 Mine Clearing Roller System including an improved quick release system, a simplified magnetic dogbone assembly, and the addition of a soft soil/sand kit; and a complete redesign of a cleared lane minefield marking system. These changes will enhance set and mission reliability and reduce the possibility of host vehicle damage as well as injury or death to the crew of said vehicle.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

	<b>Planned</b>	<b>Accomplished</b>
Technical Data Package (TDP) Validation and Certification	Sep-97	Sep-97
Award Contract for the First of Seven Modification (MOD) Kits	Feb-98	Feb-98

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>																				
<b>Inputs</b>			1002	1002			501			160	371	165	66	15	15	15				
<b>Outputs</b>			10	65	596	96	597	196	196	206	283	320	219	169	105	105	90	51	8	

  

Pr Yr	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
<b>Inputs</b>																		3312
<b>Outputs</b>																		3312

**METHOD OF IMPLEMENTATION:** Contract/Unit Applied ADMINISTRATIVE LEADTIME: 8 Months PRODUCTION LEADTIME: 8 Months

Contract Dates: FY 1999 Feb 00 FY 2000 Mar 00 FY 2001 Dec 01

Delivery Date: FY 1999 Aug 00 FY 2000 Sep 00 FY 2001 Jun 02

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Countermine Battalion Set Improvement Kit 1-99-05-4557

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits	2004	0.9	1002	1.4	100	6.9	206	5.4												3312	14.6
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits	1002	1.5	1002	0.1																2004	1.6
FY 1999 Eqpt -- Kits					501	2.0														501	2.0
FY 2000 Eqpt -- Kits					100		501													601	
FY 2001 Eqpt -- Kits							206	2.0												206	2.0
FY 2002 Eqpt -- kits																					
FY 2003 Eqpt -- kits																					
FY 2004 Eqpt -- kits																					
FY 2005 Eqpt -- kits																					
TC Equip-Kits																					
Total Installment	1002	1.5	1002	0.1	601	2.0	707	2.0												3312	5.6
Total Procurement Cost		2.4		1.5		8.9		7.4													20.2

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ENVIRONMENTAL CONTROL UNITS (MF9000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	241.7	1.5	2.8	6.1	6.0	6.3	7.1	16.5	8.9	8.9	0.0	305.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	241.7	1.5	2.8	6.1	6.0	6.3	7.1	16.5	8.9	8.9		305.8
Initial Spares												
Total Proc Cost	241.7	1.5	2.8	6.1	6.0	6.3	7.1	16.5	8.9	8.9		305.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This budget line represents the Army's family of Environmental Control Units (ECU's) which consist of Air Conditioners (AC's),SSN (MF9303), the Army Space Heater (ASH), SSN (MF9301), and the Large Capacity Field Heater (LCFH), SSN (MF9302). Air Conditioners provide both cooling and electrical heating for controlled environmental concept. They range in size from 9,000 to 60,000 British thermal units per hour (BTUH) and are powered by a wide range of common currents supplied for various systems either by mobile electric power systems or hardwired into existing facilities. AC's also provide dehumidification and filtering of air in support of environmentally sensitive electronic equipment in mobile shelters and vans. Critical electronic equipment housed within systems produces heat that must be controlled for proper operation of this equipment. AC's support 181 separate tactical weapon systems. The majority of the weapon systems are command, control, and communication oriented. The other applications include support equipment, satellite communications, intelligence gathering systems, petroleum and water logistics laboratories, electronic shop sets, Test Measurement and Diagnostic Equipment (TMDE), aviation shop sets and topographic support sets.

The Army Space Heater (ASH) is electrically powered requiring a maximum of 3 kilowatts of external power. It is thermostatically controlled using either diesel or jet petroleum (JP-8) fuels to produce heat. The ASH is mobile and will deliver clean, heated or vented air through sealed, detachable, flexible ducts. It is suitable for arctic use. The main mission is to heat maintenance tents in cold environments so that soldiers can safely repair a wide variety of equipment such as trucks, tanks, helicopters, Hawk, Patriot, and Multiple Launch Rocket Systems. Additionally, it supports field artillery and medical units.

The Large Capacity Field Heater(LCFH) will be used to preheat and defrost aircraft and to heat large maintenance structures and aviation maintenance shelters. It is thermostatically controlled and uses either diesel or jet petroleum (JP-8) fuels to produce heat. The LCFH is mobile and delivers both heated and re-circulated fresh and vented air through sealed, detachable, flexible ducts. It is suitable for use in temperate and arctic environments.

**Exhibit P-40C Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No.  
OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature  
ENVIRONMENTAL CONTROL UNITS (MF9000)

Program Elements for Code B Items

Code

Other Related Program Elements

JUSTIFICATION: FY01 funds will support Air Conditioners that are required as a component or separately authorized in support of fielded tactical weapon systems. They are required to fill existing shortages or provide replacement for assets that are overaged, nonsupportable and nonrepairable. ACs are critical to the system they support. Without these ACs, critical systems become incapable of performing their mission. Additionally on a continuing basis, ACs are required to fill urgent shortages on new fieldings of high priority weapon systems. FY 01 funds will procure 100 Army Space Heaters to support critical mission essential Aviation, Armor, and Artillery Contingency Forces. This heater is a non-development item that will replace the current 250,000 BTU gasoline engine driven (GED) heater. It will correct the deficiencies found in the 250,000 BTUH GED heater, specifically gasoline will be replaced by diesel fuel, meeting the DOD regulations to have one fuel on the battlefield. It will be safer for personnel operating equipment in enclosed areas because it reduces carbon monoxide emissions. The ASH is a stand alone item that supports the function of providing heat for maintenance, operations, and comfort. 50 LCFH heaters will also be procured as an initial buy to support the Army heater modernization effort. The purpose of the LCFH program is to replace outdated field heaters which currently are used to supply air to personnel and equipment in moderate and extreme cold environmental locations world-wide. The current field heaters(400K BTUH), which utilize 1960s technology, are inefficient, heavy, unsafe, loud, and operate on gasoline which is no longer available through the DLA petroleum system. The LCFH program will utilize state-of-the-art technology to overcome the deficiencies of the current field heaters while meeting DOD policy of one-fuel-forward (JP-8).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ENVIRONMENTAL CONTROL UNITS (MF9000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
Air Conditioner, 9000 BTU C/V (M910)	A				175	50	4						
Air Conditioner, 9000 BTU C/H (M916)	A				1800	600	3	600	200	3	600	200	3
Air Conditioner, 36000 BTU C/V (M813)	A				400	50	8						
Air Conditioner, 36000 BTU C/H (M811)	A				900	150	6	900	150	6	600	100	6
Air Conditioner, 9000 BTU C/H (M915)	A							565	75	8	950	125	8
Air Conditioner, 60000 BTU C/V (M895)	A							650	50	13	650	50	13
Army Space Heater (ASH)	A				947	138	7	1000	100	10	750	100	8
Large Capacity Field Heater (LCFH)	A										500	50	10
Government Engineering					1151			1408			1470		
System Technical Support					114			100			100		
Software					570			732			728		
<b>TOTAL</b>					<b>6057</b>			<b>5955</b>			<b>6348</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ENVIRONMENTAL CONTROL UNITS (MF9000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Air Conditioner, 9000 BTU C/V (M910) FY 99	Environmental Systems, Jackson, FL	C/FP	CECOM	Jun-99	Jul-00	50	4	YES		
Air Conditioner, 9000 BTU C/H (M916) FY 99	Environmental Systems, Jackson, FL	C/FP	CECOM	Apr-99	Apr-00	600	3	YES		
FY 00	Environmental Systems, Jackson, FL	C/FP	CECOM	Apr-00	Apr-01	200	3	YES		
FY 01	Environmental Systems, Jackson, FL	C/FP	CECOM	Nov-00	Aug-01	200	3	YES		
Air Conditioner, 36000 BTU C/V (M913) FY 99	Environmental Systems, Jackson, FL	C/FP	CECOM	Jun-99	Jun-01	50	8	YES		
Air Conditioner, 36000 BTU C/H (M811) FY 99	Environmental Systems, Jackson, FL	C/FP	CECOM	Jun-99	Sep-00	150	6	YES		
FY 00	Environmental Systems, Jackson, FL	C/FP	CECOM	Jul-00	Apr-01	150	6	YES		
FY 01	Environmental Systems, Jackson, FL	C/FP	CECOM	Jan-01	Oct-01	100	6	YES		
Air Conditioner, 9000 BTU C/H (M915) FY 00	TBS	C/FP	CECOM	Jan-00	Apr-01	75	8	YES		Nov 01
FY 01	TBS	C/FP	CECOM	Feb-01	Jul-01	125	8	YES		
Air Conditioner, 60000 BTU C/V (M825) FY 00	TBS	C/FP	CECOM	May-00	Jul-01	50	13	NO	Mar-00	Mar 00
FY 01	TBS	C/FP	CECOM	Apr-01	Sep-01	50	13	YES		

REMARKS:

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ENVIRONMENTAL CONTROL UNITS (MF9000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Army Space Heater (ASH)										
FY 99	Engineering Air Sys., St. Louis, MO	CFP Opt	CECOM	Mar-99	Feb-00	138	7	YES		
FY 00	Engineering Air Sys., St. Louis, MO	CFP Opt	CECOM	Feb-00	Jun-00	28	7	YES		
FY 00	TBS	CFP	CECOM	Jul-00	Jul-01	72	8	YES		Apr 00
FY 01	TBS	CFP Opt	CECOM	Oct-00	Sep-01	100	8	YES		
Large Capacity Field Heater (LCFH)										
FY 01	TBS	CFP	CECOM	Jul-01	Nov-02	50	10	YES		Apr 01

**REMARKS:** Army Space Heater: FY 00 procurement of 28 units represents final deliveries on contract DAAB07-97-C-E008. The additional procurement of 72 units in FY 00 represents an initial procurement placed against a new requirements contract to be awarded July 00.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FIRETRUCKS (MA9600)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1063											1063
Gross Cost	142.2	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	142.2	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.7
Initial Spares												
Total Proc Cost	142.2	0.0	0.0	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	158.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: These vehicles are of standard commercial design with only slight modifications. This vehicle includes Pumper Trucks, Structural Pumps, Ladder Trucks, Brush/Mini Pumper Trucks, Hazmat/Rescue Trucks, Brush Tankers, Airfield Crash Trucks and Multi-purpose fire trucks.

NOTE: See Item 10, OPA 1, for FY00-05

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FIRETRUCKS (MA9600)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Ladder Truck	A				2444	5	489						
2. Structural Pumper	A				7429	35	212						
3. Rescue Pumper	A				450	2	225						
4. Airfield Crash Truck	A				3550	11	323						
5. Brush/Mini Pumper	A				587	4	147						
6. Hazmat/Rescue Truck	A				2053	12	171						
TOTAL					16513								



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: LAUNDRIES, SHOWERS AND LATRINES (M82700)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	7.1	9.8	12.6	15.4	20.7	9.3	0.0	0.0	74.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	7.1	9.8	12.6	15.4	20.7	9.3	0.0	0.0	74.9
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	7.1	9.8	12.6	15.4	20.7	9.3	0.0	0.0	74.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Unit/organizational and field service equipment for enhancement of soldier efficiency, effectiveness, and sustainability. The Laundry Advanced System (LADS) is an advanced water recycling mobile field laundry. It consists of two laundry drums, water recycling equipment and a 30 Kw generator mounted on an M-871 semi-trailer which can be towed by a five ton tractor. The LADS launders clothing at approximately four times the capacity of the current M-85 field laundry and recycles 99% of the water now used by four M-85s. LADS is fully programmable and performs washing, extracting and drying cycles all in the same drum. The Containerized Self Service Laundry (CSSL) consists of commercial washing and drying equipment integrated into a standard ISO shipping container with an attached sorting/folding area in a tent. This system allows soldiers to machine wash thier own clothing. The Containerized Shower (CS) consists of twelve shower stalls housed in a standard 20' ISO shipping container. The CS will support up to 250 soldiers per day with near garrison quality shower facilities in a field environment.

**JUSTIFICATION:** FY01 funding allows the continuation of the LADS production to replace the current over-age, no longer supportable M-85 laundry.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: LAUNDRIES, SHOWERS AND LATRINES (M82700)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Laundry Advanced System (M82701) Hardware					6316	14	451	7710	17	454	12409	27	460
Containerized Self Service Laundry (M82703) Hardware								925	12	77			
Containerized Shower (M82704) Hardware								863	15	58			
Engineering Support					215			153			100		
Testing					60			10					
Interim Contractor Logistics					160								
Quality Assurance					100								
Manuals								10					
PM Support					270			131			71		
<b>TOTAL</b>					<b>7121</b>			<b>9802</b>			<b>12580</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: LAUNDRIES, SHOWERS AND LATRINES (M82700)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Laundry Advanced System M82701)	Guild Associates, Dublin, OH	C/CPIF Req5(1)	SBCCOM, Natick, MA	Jan-99 Jan-00 Jan-01	Aug-99	14	451	No	NA	NA
FY 99					Apr-00	17	454			
FY00					Apr-01	27	460			
Containerized Self Service Laundry (M82703)	Tobyhanna Army Depot, PA	MIPR	SBCCOM, Natick, MA	Jan-00	May-00	12	77	Yes	NA	NA
FY00										
Containerized Shower (M82704)	TBS	C/FP	SBCCOM, Natick, MA	Jan-00	Jul-00	15	58	No	NA	NA
FY00										

REMARKS:







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FLOODLIGHT SET, ELEC, TRL MTD, 3 LIGHTS (M72100)

Program Elements for Code B Items:				Code:	Other Related Program Elements:							
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				58	84		65	255	248	240		950
Gross Cost	0.0	0.0	0.0	1.9	2.4	0.0	1.3	4.2	4.2	4.1	0.0	18.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	1.9	2.4	0.0	1.3	4.2	4.2	4.1	0.0	18.1
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	1.9	2.4	0.0	1.3	4.2	4.2	4.1	0.0	18.1
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Floodlight Set consists of four halogen bulbs on top of a telescopic mask which is mounted on a High Mobility Trailer (HMT). The system is powered by an on-board 5 KW Tactical Quite Generator (TQG). The light system can also be operated from an external commercial power source. This program is needed to provide lighting support for all types of active Army, National Guard, and Reserve units.

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

SOLDIER ENHANCEMENT (MA6800)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	30.5	0.0	1.6	4.7	3.6	4.0	3.1	3.1	5.8	6.1	0.0	62.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	30.5	0.0	1.6	4.7	3.6	4.0	3.1	3.1	5.8	6.1	0.0	62.4
Initial Spares												
Total Proc Cost	30.5	0.0	1.6	4.7	3.6	4.0	3.1	3.1	5.8	6.1	0.0	62.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Soldier Enhancement Program procures items to ensure combat Soldiers increase their lethality, survivability, mobility, command and control and sustainment. The M25 Stabilized Binocular provides the Soldier, both mounted and dismounted, with enhanced target acquisition capability by providing them with high magnification (14X), line of sight. The M25 is a high powered hand held binocular which uses a gyro stabilizer to compensate for the resolution degrading effects of using a hand held higher power optic and/or in moving vehicular scenarios.

**JUSTIFICATION:** FY01 continues procurement of the XM25 Stabilized Binocular. This procurement allows the Soldier to do target identification and battle damage assessment at extended ranges and increased on-the-move sighting capability. The XM25 has twice the magnification of the Army's standard M22 binoculars.

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

LIGHTWEIGHT MAINTENANCE ENCLOSURE (LME) (MA8061)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

PE: 0603747A/PE: 0604713A

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					171	160	500	560	525	525		2441
Gross Cost	0.0	0.0	0.0	0.0	3.7	2.0	5.6	6.7	6.4	6.4	0.0	30.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	3.7	2.0	5.6	6.7	6.4	6.4	0.0	30.9
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	3.7	2.0	5.6	6.7	6.4	6.4	0.0	30.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Lightweight Maintenance Enclosure is a rapidly deployable, lightweight shelter for maintenance functions across the battlefield. It will be used by maintenance units for maintenance missions that include tactical wheeled and track vehicles, aviation assets, and missile system maintenance. This is the first new maintenance tent to be fielded in the Army in over 40 years.

**JUSTIFICATION:** FY01 funding will procure a replacement for the FRITSCHE tent which has exceeded it's life expectancy. The LME provides an enhanced capability at 2/3 the cost and half the weight of the FRITSCHE tent.

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

FORCE PROVIDER (M80200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty		8	2	4	3	3	3					23
Gross Cost	0.0	47.2	10.6	23.8	31.2	22.3	20.8	0.0	0.0	0.0	0.0	155.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	47.2	10.6	23.8	31.2	22.3	20.8	0.0	0.0	0.0	0.0	155.9
Initial Spares												
Total Proc Cost	0.0	47.2	10.6	23.8	31.2	22.3	20.8	0.0	0.0	0.0	0.0	155.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This system is a fully engineered, deployable "tent city," that provides high quality climate-controlled billeting, dining, shower, latrine, laundry, morale welfare and recreation facilities and equipment in transportable modules capable of supporting up to 3000 troops. The Force Provider mission includes rest and refit for combat weary soldiers, theater reception/redeployment, intermediate staging base operations, humanitarian aid and disaster relief and other military operations such as base camps for peacekeeping/enforcement missions worldwide in theaters with immature infrastructure. Fully containerized for rapid deployment, Force Provider is transportable by rail, sea, roadway, and C-130, C-141, C-17 or C-5A aircraft. With the addition of Cold Weather Kits (CWK), the module is deployable in temperatures of -50 degrees Fahrenheit.

**JUSTIFICATION:** FY 01 funding is required to procure and assemble three modules with generators and two Cold Weather Kits (CWK).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FORCE PROVIDER (M80200)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware (Module w/Generators)					16861	3	5620	11029	2	5515	17296	3	5765
Hardware (Module w/o Generators)					4675	1	4675	13193	3	4398			
Cold Weather Kit (CWK) Hardware								4781	3	1594	3044	2	1522
PM Support					375			425			692		
Engineering Support					589			622			402		
ILS					1341			1139			829		
<b>TOTAL</b>					23841			31189			22263		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FORCE PROVIDER (M80200)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware/Assembly FY 98 Module w/o Generators	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-98	Mar-00	2	3718	YES	NO	
FY 99 Module w/Generators w/o Generators	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-99	Dec-00	3 1	5620 4675	YES YES	NO NO	
FY 00 Module w/Generators w/o Generators	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-00	Dec-01	2 3	5515 4398	YES YES	NO NO	
FY 01 Module w/Generators	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-01	Dec-02	3	5765	YES	NO	
Hardware -* Cold Weather Kit FY00	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-00	Dec-01	3	1594	YES	NO	
FY01	Defense Depot Albany, GA	MIPR	SBCCOM	Jan-01	Dec-02	2	1522	YES	NO	

**REMARKS:** FY 98 deliveries slipped due to Defense Distribution Depot, Albany, GA late procurement of water connection kits. The new Estimated Delivery Date is March 00.  
\*Quantities are non-additive.







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FIELD FEEDING AND REFRIGERATION (M65800)

Program Elements for Code B Items: Code: Other Related Program Elements: PE: 0604713A/PE: 0603747A

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	12.4	8.6	12.0	8.9	21.7	21.6	21.3	0.0	106.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	12.4	8.6	12.0	8.9	21.7	21.6	21.3	0.0	106.6
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	12.4	8.6	12.0	8.9	21.7	21.6	21.3	0.0	106.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides equipment to conduct tactical food service operations, preparation, serving and cleanup, to feed soldiers appetizing and nutritious meals in the field. Items include refrigeration equipment, field kitchens, and food sanitation equipment. In conjunction with food service personnel and field rations, this equipment comprises the Army Field Feeding System. Refrigeration units and insulated containers are for storage of perishable items including food and medical supplies, and temperature sensitive materials such as batteries and photographic equipment. The Food Sanitation Center is used by Field Services Companies to clean and sanitize cooking pots, pans and utensils. The Containerized Kitchen is a mobile field kitchen capable of providing 550 soldiers with three hot meals per day.

**JUSTIFICATION:** FY01 funding procurement will fill critical Army shortages, replace or upgrade overaged items and, in some cases, replaces equipment that present safety hazards.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FIELD FEEDING AND REFRIGERATION (M65800)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Refrigeration Equipment (M65801)					4852	101	48	826	15	55	1391	25	56
Sanitation Center, Field Feeding (M65802)								596	20	30	4101	128	32
Kitchen, Containerized, Field (M65803)					6894	37	186	6878	35	197	5816	30	194
Engineering Support					225			172			228		
Testing					252						40		
Total Package Fielding					56			45			248		
PM Support					118			100			152		
<b>TOTAL</b>					<b>12397</b>			<b>8617</b>			<b>11976</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FIELD FEEDING AND REFRIGERATION (M65800)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Refrigeration Equipment (M65801)</b>										
FY99	Engineered Air Systems Inc. St. Louis, MO	C/FP-OPT	SBCCOM, Natick, MA	Feb-99	Aug-99	101	48	No	NA	N/A
FY00				Jan-00	Jul-00	15	55	NA	N/A	
FY01				Jan-01	Jul-01	25	56	NA	N/A	
<b>Sanitation Center, Field Feeding (M65802)</b>										
FY00	TBS	C/FP-OPT	SBCCOM, Natick, MA	Jan-00	Mar-00	20	30	Yes	NA	N/A
FY01				Jan-01	Mar-01	128	32	NA	N/A	
<b>Kitchen, Containerized Kitchen (M65803)</b>										
FY99	SFA Frederick Mfg. Frederick, MD	C/CPIF- OPT	SBCCOM, Natick, MA	Mar-99	Aug-00	37	186	Yes	NA	N/A
FY00				Mar-00	Oct-00	35	197	NA	N/A	
FY01				Jan-01	Jun-01	30	194	NA	N/A	

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: AIR DROP PROGRAM (MA7804)

Program Elements for Code B Items: Code: Other Related Program Elements: PE: 0603747A/PE: 0604713A

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	3.4	4.0	0.0	27.9	0.0	0.0	0.0	35.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	3.4	4.0	0.0	27.9	0.0	0.0	0.0	35.3
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	3.4	4.0	0.0	27.9	0.0	0.0	0.0	35.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The airdrop systems and equipment provide advanced ariel delivery capabilities of personnel and cargo over a range of altitudes with emphasis on improved safety and greater precision, balanced with reduced vulnerability of personnel, aircraft, aircrew and equipment. The Universal Static Line is a replacement for the existing 15 foot Static Line used in all Army, Navy, Air Force and Marine rotary and fixed wing aircraft to deploy airborne warfighters. Current aircraft uses a 15 foot Static Line for personnel airdrop operations. The new C-17 can not use a 15 foot Static Line due to jumper safety issues. The Universal Static Line program will provide a single Static Line useable on all aircraft for personnel operations. The Extraction Paracute Jettison System provides safe and reliable jettison of extraction parachutes during cargo airdrop emergencies which reduce losses of Army equipment and decreases risk to the aircraft and personnel.

**JUSTIFICATION:** FY01 funding procures airdrop capability enhancements necessary for the successful conduct of low level air delivery of personnel and warfighting supplies. This program will provide the capability to safely airdrop cargo from C-17 aircraft and provide improved safety and reliabilty for Army paratroopers.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: AIR DROP PROGRAM (MA7804)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
UNIVERSAL STATIC LINE								976	11693		3971	50666	
EXTRACTION PARACHUTE JETTISON DEV (EPJD)								2351	880	3			
<b>TOTAL</b>								<b>3327</b>			<b>3971</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CAMOUFLAGE: ULCANS (MA7900)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	12.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	12.9
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	12.9	0.0	0.0	0.0	0.0	0.0	0.0	12.9
Flyaway U/C												
Wpn Sys Proc U/C												

**Description:**  
 Ultra Light-Weight Camouflage Net Systems (ULCANS) is the improved camouflage for DOD. ULCANS provides increased survivability against multi spectral visual, infrared and radar threats; reduced probability of visual detection and enhanced thermal and radar signature suppression. The ULCAN system is soldier friendly due to lighter weight, snag resistant design and a one piece shape disrupter which replaces the complex batten spreaders. General Purpose, Woodland Radar Scattering is the only version available now. Desert, Urban and Snow Radar Scattering and Radar Transparent variants are being developed. The one ULCANS NSN: 1080-01-457-2956 includes the screen system, repair kit, and the support system, poles, shape disrupters, stakes and case. Not interoperable with the older camouflage, LCSS.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CAMOUFLAGE: ULCANS (MA7900)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
CAMOUFLAGE NET SYSTEM	A							12440	19346	1			
TECHNICAL SUPPORT								254					
NIGHT VISION LAB SUPPORT-TESTING								175					
<b>TOTAL</b>								<b>12869</b>					

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CAMOUFLAGE: ULCANS (MA7900)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
CAMOUFLAGE NET SYSTEM FY 00	MARCONI, LILLINGTON, NC	R/FP	CECOM	May-00	Jul-00	19346	1	YES		

**REMARKS:** The ULCANS contract was awarded by ATCOM and transitioned to CECOM. The contract is in the third ordering period with two remaining ordering periods ending in Sep 02.



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (CSS-EQ) (ML5325)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	233.9	4.3	4.2	6.4	2.5	1.9	11.0	5.6	12.0	25.0	0.0	306.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	233.9	4.3	4.2	6.4	2.5	1.9	11.0	5.6	12.0	25.0	0.0	306.8
Initial Spares												
Total Proc Cost	233.9	4.3	4.2	6.4	2.5	1.9	11.0	5.6	12.0	25.0	0.0	306.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** These programs cover support equipment which have annual procurement of less than \$5 million. All procurements made with these funds are designated to support vital high priority requirements. The types of items procured on this budget line include assault boats, survey equipment, non-breathable air compressors, hygiene and food sanitation equipment. The systems and equipment procured on this line directly support the combat readiness and quality of life of every soldier in the Army, everyday.

**JUSTIFICATION:** The FY01 funds support critical Army shortages and replace overaged, non-supportable and non-replaceable assets. The type of equipment procured on this budget line is subject to high wash-out rates due to its extensive use and low unit price. This frequently makes these assets uneconomically repairable. This equipment affects the operational capability of units in the field for designated missions and training requirements. These assets improve units combat capability.

1. Inflatable Boat, 15 Person (M238): This is a fifteen person, inflatable assault boat. It is required for infiltration/exfiltration missions, river crossings, beach landings, beach reconnaissance, general utility work, bridge and harbor construction and drug enforcement/interdiction missions. Current inventories exceed their useful life, are defective and pose a potential safety hazard.

2. Outboard Motor, 35 hp (M359): This outboard motor provides propulsion for the 7 and 15 Person Inflatable Assault Boats. The current program will help fill critical requirements.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>			Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (ENGINEER SUPPORT EQUIPMENT) (ML5325)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>			
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	
Boat, Inflatable, 15 person (M238)	A				649	58	11	1186	99	12	1207	100	12	
Outboard Motor, 35 hp (M359)	A										702	140	5	
Cutting and Welding Set	A							1154	3	385				
Deep Sea Diving Equipment	A													
Sanitation Center	A				1345	64	21							
88.cfm Air Compressor	A							203	3	68				
Lightweight Maintenance Enclosure	A				1990	81	23							
Containerized Self Svc Laundry	A				590	16	37							
Firetruck, Tactical	A				1685	4	421							
PM SPT. COSTS	A				188									
<b>TOTAL</b>					<b>6447</b>			<b>2543</b>			<b>1909</b>			

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (CSS-EQ) (MA8050)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Boat, Inflatable, 15 Person FY00 FY01	TBS TBS	F/FP Option	TACOM TACOM	Mar 00 Mar 01	Jul 00 Jul 01	99 100	12 12	Yes Yes		Mar 00
Outboard Motor, 35 HP FY01	TBS	F/FP	TACOM	Apr 01	Aug 01	140	5	No	Oct-00	Dec 00
Cutting and Welding Set FY00	TBS	C/FFP	TACOM-Rock Island	Apr 00	Sep 00	3	385	No	Mar 00	Feb 00
Air Compressor FY00	TBS	C/FFP	TACOM-Rock Island	Apr 00	Sep 00	3	68	No	Mar 00	Feb 00

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FAMILY OF TANK ASSEMBLIES, FABRIC, COLLA (M19000)

Program Elements for Code B Items:				Code:	Other Related Program Elements:							
				A								
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	31.3	0.0	0.0	9.0	11.2	2.5	0.0	0.0	0.0	0.0	0.0	54.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	31.3	0.0		9.0	11.2	2.5	0.0	0.0	0.0	0.0	0.0	54.0
Initial Spares												
Total Proc Cost	31.3	0.0	0.0	9.0	11.2	2.5	0.0	0.0	0.0	0.0	0.0	54.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** A family of collapsible fuel and water tanks ranging from 3,000 to 50,000 gallon capacity, used as storage containers when large capacity quick storage facilities are required.  
 Tanks sizes Petroleum 3,000, 10,000, 20,000, 50,000 gallon  
 Tanks sizes Water 3,000, 10,000, 20,000, 50,000 gallon

**JUSTIFICATION:** The FY01 funding will support the procurement of various sizes of collapsible fabric tanks to meet Total Army Analysis 05 (TAA05)/Army National Guard Division Redesign (ADRS) fieldings. These fieldings will involve the activation/conversion of 129 Petroleum and Water Quartermaster (QM) Units. The family of collapsible tanks (fuel and water) support the storage capability of the Army at the corps, division, brigade, and battalion levels. These tanks are used to support humanitarian, disaster relief and peace keeping missions all over the world.

**NOTE:** On 2 December 1999, the Milestone Decision Authority (MDA) approved the transistion of major items, (test kits, tanks, and pumps) to secondary items no later than FY02 (1 Oct 2001). The current back orders for the items will both increase and the mix (quanities) will change during FY00 and FY01 on at least a monthly basis. DA messages will be announcing this transistion plan to field units in January 2000. This will cause field units to assess service ability of the transistioned items. PM PAWS predicts a significant increase in back ordersas a result.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FAMILY OF TANK ASSEMBLIES, FABRIC, COLLA (M19000)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
20K Tank, Collapsible, Petroleum	A				3111	322	10	3074	279	11	300	27	11
50K Tank, Collapsible, Petroleum	A				1874	172	11	1744	89	20	700	35	20
20K Tank, Collapsible, Water	A							499	95	5	100	20	5
50K Tank, Collapsible, Water	A							2182	200	11	400	36	11
3K Tank, Collapsible, Water	A				1565	900	2	498	158	3	500	166	3
2. Government Furnished Equipment													
50,000 Gallon Bermliners					885	114	8	1649	183	9			
3,000 Gallon Water Tanks					12	2	6						
3. Engineering Change Order/Proposal													
4. Documentation								77					
5. Engineering Support													
- In-House					143			165			92		
- Contract					729			715			282		
6. Quality Assurance Support													
- In-House								82			40		
7. Program Management Support					572			516			75		
<b>TOTAL</b>								<b>8891</b>			<b>11201</b>		<b>2489</b>

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FAMILY OF TANK ASSEMBLIES, FABRIC, COLLA (M19000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>1. Hardware</b>										
20K Tank, Collapsible, Petroleum FY 99	Bell Avon, Picayunne	C/FP REQ 5(5)	TACOM	Apr-99	Apr-00	322	10	YES		
FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	Jun-01	279	11			
FY 01	TBS	C/FP REQ 5(2)	TACOM	Nov-00	Nov-01	27	11			
50K Tank, Collapsible, Petroleum FY 99	GTA Containers, South Bend,	C/FP REQ 5(2)	TACOM	Apr-99	Apr-00	172	11	YES		
FY 00	GTA Containers, South Bend,	C/FP REQ 5(3)	TACOM	Jun-00	Jun-01	89	20			
FY 01	TBS**	C/FP REQ 5(2)	TACOM	Nov-00	Nov-01	35	20			
20K Tank, Collapsible, Water FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	Jun-01	95	5	YES		
FY 01	TBS	C/FP REQ 5(2)	TACOM	Nov-00	Nov-01	20	5			
50K Tank, Collapsible, Water FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	Jun-01	200	11	YES		
FY 01	TBS	C/FP REQ 5(2)	TACOM	Nov-00	Nov-01	36	11			

**REMARKS:** \*\*Omnibus Tank Contract second year. FY01 50K Tanks will be bought under the Omnibus Tank contract; FY01 is the second year of a five-year requirements contract. FY99 and FY00 50K Tank requirements were bought under a three year requirements contract with GTA Containers.

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FAMILY OF TANK ASSEMBLIES, FABRIC, COLLA (M19000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
3K Tank, Collapsible, Water FY 99	GTA Containers, South Bend, Reliance, Camden AK	C/FP REQ 5(1)	TACOM	Aug-99	May-00	900	2	YES		
FY 00	GTA Containers, South Bend, Reliance, Camden AK	C/FP REQ 5(2)	TACOM	Jan-00	Jun-01	158	3			
FY 01	GTA Containers, South Bend, Reliance, Camden AK	C/FP REQ 5(3)	TACOM	Nov-00	Nov-01	166	3			
2. Government Furnished Equipment										
50,000 Gallon Bermliners FY 99	Defense Industrial Supply Philadelphia, PA.	MIPR	Defense Logistics Agency	Jun-99	Nov-99	114	8			
FY 00	Defense Industrial Supply Philadelphia, PA.	MIPR	Defense Logistics Agency	Feb-00	Jun-00	183	9			
3,000 Gallon Water Tanks FY 99	Defense Industrial Supply Philadelphia, PA.	MIPR	Defense Logistics Agency	Mar-99	Jun-99	2	6			

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: QUALITY SURVEILLANCE EQUIPMENT (MB6400)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	17.1	0.0	0.0	0.0	6.2	7.1	7.6	40.5	2.5	2.6	0.0	83.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	17.1	0.0	0.0	0.0	6.2	7.1	7.6	40.5	2.5	2.6	0.0	83.5
Initial Spares												
Total Proc Cost	17.1	0.0	0.0	0.0	6.2	7.1	7.6	40.5	2.5	2.6	0.0	83.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** A family of petroleum and water laboratories used to evaluate the quality of military fuels.

**Petroleum Quality Analysis System (PQAS):** The PQAS is a High Mobility Multipurpose Wheeled Vehicle (HMMWV) mounted lab that utilizes the latest available commercial technology for petroleum testing. The system is used in forward areas to conduct over 20 different quality tests on petroleum products and offers immediate feedback of petroleum quality. PQAS is intended to replace the current Air Mobile Petroleum Labs on a 1:1 basis. PQAS is a Force XXI multiplier with a two soldier crew instead of the present four soldiers required for the Air Mobile Lab.

**Ground Fuel Test Kit (GFTK):** The GFTK is designed to be a self-contained petroleum testing apparatus capable of performing fuel sampling, flash point testing and distillation testing of various ground fuels. Mission requirements will determine the type of tests that must be performed based on the types of fuel available. These test kits are used throughout the theater of operations to provide quality surveillance of fuels. The kits are designed to provide a final check on fuel quality and include only tests which indicate the most common forms of fuel contamination such as inclusion of water and sediment or commingling.

**Aviation Fuel Contamination Test Kit (AFTK):** The AFTK is used in Quartermaster units with bulk petroleum storage and supply missions and in aviation units and selected ground units in which large volumes of fuel are consumed by aircraft, vehicles and stationary equipment. The kit is required in units and at locations where the requirement for rapid results of selected tests, to insure product quality prior to use, precludes reliance on the mobile and base laboratories assigned to units operating within the bulk petroleum distribution system. These test kits are used

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature QUALITY SURVEILLANCE EQUIPMENT (MB6400)
Program Elements for Code B Items	Code A	Other Related Program Elements
<p>Water Quality Assurance System - Purification (WQAS-P): The WQAS-P set is used in divisional and nondivisional water purification elements to provide essential data for operation of reverse osmosis water purification units (ROWPUs); tactical water purification systems (TWPS); water storage and distribution systems; and in preventive medicine elements for determination of water potability. The set is used in all geographical areas. The kit is used in daylight and under blackout conditions, battlefield conditions (e.g., electronic counter measures (ECM), smoke and dust). The WQAS-P is used by Quartermaster water production personnel and by Medical Preventive Medicine units located at Division, Corps and Echelon above Corps (EAC) levels.</p> <p>JUSTIFICATION: The FY-01 funding will support the procurement of Quality Surveillance Equipment, to improve the Petroleum and Water Quartermaster (QM) warfighting capabilities required by Total Army Analysis 05 (TAA05)/Army National Guard Division Redesign Study (ARDS). TAA05 will involve the activation/conversion of 129 Petroleum and Water QM Units. The Petroleum Quality Analysis System is required to conduct quality tests on petroleum products. The Aviation Fuel Contamination Test Kit is required for petroleum quality control, quality assurance and quality surveillance. With this means of insuring quality surveillance on the battlefield, U.S. Armed Ground Forces' strategic responsiveness and its force projection globally are greatly improved.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: QUALITY SURVEILLANCE EQUIPMENT (MB6400)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware														
Petroleum Quality Analysis System		A						3640	7	520	4160	8	520	
Ground Fuel Test Kit		A						424	65	7				
Aviation Fuel Test Kit		A						536	136	4	276	69	4	
Water Quality Analysis Set		A						821	191	4				
2. Engineering Change Orders/Proposal								60			375			
3. Documentaion								70			185			
4. Testing - First Article Test (ATC)								117			180			
5. Engineering Support														
- In-House								218			400			
- Contractor								178			481			
6. Quality Assurance Support														
- In-House								53			100			
7. Program Management Support								108			496			
8. System Fielding Support (FDT, TPF, NET) ICLS)											467			
<b>TOTAL</b>								<b>6225</b>			<b>7120</b>			

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: QUALITY SURVEILLANCE EQUIPMENT (MB6400)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>1. Hardware</b>										
Petroleum Quality Analysis System FY 00	TBS	/FP RECTACOM 5(1)		Jun-00	Dec-01	7	520	YES		Nov 99
FY 01	TBS	/FP RECTACOM 5(2)		Jun-01	Dec-02	8	520			
Ground Fuel Test Kit FY 00	TBS	/FP RECTACOM		Feb-00	Sep-00	65	7	YES		Sep 99
Aviation Fuel Test Kit FY 00	TBS	/FP RECTACOM 5(1)		Feb-00	Sep-00	136	4	YES		Sep 99
FY 01	TBS	/FP RECTACOM 5(2)		Feb-01	Sep-01	69	4			
Water Quality Analysis Set Purification FY 00	TBS	/FP RECTACOM 5(1)		Feb-00	Sep-00	191	4	YES		Sep 99

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: DISTRIBUTION SYS, PET & WATER (MA6000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	133.2	0.0	0.0	5.9	12.6	13.6	12.7	45.5	25.0	23.9	0.0	272.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	133.2	0.0	0.0	5.9	12.6	13.6	12.7	45.5	25.0	23.9	0.0	272.3
Initial Spares												
Total Proc Cost	133.2	0.0	0.0	5.9	12.6	13.6	12.7	45.5	25.0	23.9	0.0	272.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Family of Petroleum and Water Distribution Systems supports the Army's mission to supply bulk fuel and water to all Department of Defense (DOD) forces in the various theatres of operations. These systems support the Army's mission of refueling aircraft, ground vehicles and other Army equipment. Distribution Systems are comprised of hoses, pumps, tanks, filter separators, fittings, couplings, and nozzles.

**Advance Aviation Forward Refueling System (AAFARS):** The AAFARS is a four point refueling system that provides filtered fuel at the rate of 55 GPM to each of four nozzles simultaneously. The AAFARS is a Force XXI multiplier with the capability to refuel four aircraft simultaneously, thus reducing refueling time and enhancing mission performance. The AAFARS consists of a pumping system, a filtration system, nozzles, hoses, couplings, and grounding rods in sufficient quantities to provide four refueling points at 100 foot separations between nozzles. The AAFARS is designed to fulfill the urgent requirement for forward "hot" refueling point operations.

**Hoseline Outfit Fuel Handling:** This rapid installation, repositioning, and recovering system is used to move fuel from a storage point to a distribution point or directly into a vehicle/aircraft. It consists of 13,000 feet of 4 inch fuel hose, along with couplings, valves, and other related equipment and it has a "through put" rate of 350 Gallons per Minute (GPM).

**Tactical Water Distribution Equipment System (TWDS):** This system consist of five or six Pumping Stations, a ten mile Hoseline Segment, two Storage Assemblies, and two Distribution Points. Equipment configuration is dependent on terrain and distance over which water must be

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature DISTRIBUTION SYS, PET & WATER (MA6000)
Program Elements for Code B Items	Code A	Other Related Program Elements
<p>Water Storage Distribution System (WSDS): This system is configured for maximum water storage and distribution capacity. Commanders will determine how many of the system components must be connected, and in what configuration, based on mission requirements. Main components include 350 and 125 GPM Pumps, 20,000 gallon collapsible tanks, four-inch interconnector kits and hoses. They are stored and transported in a combination of TRICONS and ISO containers. Additional components are available in the accessories kit to adapt the system to a varying site and operational needs.</p> <p>Forward Area Water Point Supply System (FAWPSS): This system is lightweight and used to support forward units that cannot access a major water distribution system. It supports up to 163 people per day in an arid environment.</p> <p>3,000 GPH Tactical Water Purification System (3K TWPS): This system is capable of purifying up to 2000 gallons per hour from saltwater sources and 3,000 gallons per hour from fresh water sources. It is designed to purify dirty fresh water, brackish water, sea water, and fresh water containing nuclear, biological, or chemical agents. Supports both Corps and Division Forces as well as disaster relief operations.</p> <p>JUSTIFICATION: The FY-01 funding will support the procurement of Distribution Systems to improve the Petroleum and Water Quartermaster (QM) Warfighting Capabilities required by Total Army Analysis 05 (TAA05)/Army National Guard Division Redesign Study (ADRS). TAA05 will involve the activation/conversion of 129 Petroleum and Water QM Units. These systems are the U.S. Armys' primary means of distributing and issuing bulk petroleum and water.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: DISTRIBUTION SYS, PET & WATER (MA6000)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware														
AAFARS		A			3391	18	188	1647	9	183	1995	10	200	
3000 GPH Tactical Water Purification		A						2568	6	428				
Hoseline Outfit Fuel Handling		A						1316	14	94	4429	20	221	
Tactical Water Distribution System		A						3216	4	804	2629	3	876	
Water Storage Distribution System		A						720	3	240	1179	5	236	
Gallon														
Water Storage Distribution System		A						122	1	122				
Gallon														
Forward Area Water Point Supply Sys (FAWPSS)		A									144	12	12	
2. Engineering Change Order/Proposal					357			849			391			
3. Documentation					136			333			345			
4. Testing (Air Drop Test - ATC - FY99)					431									
First Article Test - ATC								149			212			
5. Engineering Support														
- In-House					70			547			564			
- Contractor					782			258			450			
6. Quality assurance Support														
-In-House								100			100			
7. Program Management Support					532			289			380			
8. System Fielding Support(FDT, TPF, NET, ICLS)					50			469			698			
9. Tool Kits					14									
10. Refurbishment - AAFARS					116									
<b>TOTAL</b>					<b>5879</b>			<b>12583</b>			<b>13516</b>			

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: DISTRIBUTION SYS, PET & WATER (MA6000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>1. Hardware</b>										
AAFARS FY 99	Lear Astronics Corp, Ontario,	/FP RECTACOM 5(5)		Jan-99	Mar-00	18	188	YES		
FY 00	TBS	/FP RECTACOM 5(1)		Apr-00	Apr-01	9	183			Nov 99
FY 01	TBS	/FP RECTACOM 5(2)		Jan-01	Jan-02	10	200			
3000 GPH Tactical Water Purification System FY 00	TBS	/FP RECTACOM 5(1)		Jun-00	Feb-01	6	428	YES		Nov 99
Hoseline Outfit Fuel Handling FY 00	TBS	/FP RECTACOM 5(1)		Mar-00	Mar-01	14	94	YES		Sep 99
FY 01	TBS	/FP RECTACOM 5(20)		Mar-01	Mar-02	20	221			
Tactical Water Distribution System FY 00	Sierra Army Depot, Herlong,	MIPR	TACOM	Jan-00	Jun-00	4	804	N/A		
FY 01	Sierra Army Depot, Herlong,	MIPR	TACOM	Jan-01	Jun-01	3	876	N/A		
Water Storage Distribution System 80,000 GAL FY 00	Sierra Army Depot, Herlong,	MIPR	TACOM	Jan-00	Jun-00	3	240	N/A		
FY 01	Sierra Army Depot, Herlong,	MIPR	TACOM	Jan-01	Jun-01	5	236	N/A		
Water Storage Distribution System 40,000 GAL FY 00	Sierra Army Depot, Herlong,	MIPR	TACOM	Jan-00	Jun-00	1	122	N/A		
<b>REMARKS:</b>										

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment	Weapon System Type:	P-1 Line Item Nomenclature: DISTRIBUTION SYS, PET & WATER (MA6000)
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WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
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Forward Area Water Point Supply System (FAWPSS) FY 01	Sierra Army Depot, Herlong,	MIPR	TACOM	Feb-01	May-01	12	12	N/A		
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REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: PUMPS, WATER AND FUEL (M61200)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					146							146
Gross Cost	0.0	0.0	0.0	0.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.3	3.7	0.0	0.0	0.0	0.0	0.0	0.0	4.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The family of portable water and fuel pumps have operational rates ranging from 50 Gallons per Minute (GPM) to 800 GPM. Usually, these pumps are components of petroleum and water systems, e.g., pipeline pump stations or pipeline support equipment. Petroleum and Water Pumps are the primary means of transferring critical support items (fuel and water) to the soldiers and equipment. The Army utilizes various fuel pumping assemblies for the receipt and storage of bulk petroleum and for its issue to combat forces under tactical conditions. The petroleum and water pumps are used with most of the Army's petroleum and water distributing systems. The pumping assemblies are used to supply fuel or water to Supply Service Companies, Military Police Camps, Decontamination Squads, Mobile Hospitals, laundry/shower units and Field Operations Activities.

**100 GPM Pumps:** This pump is a self-priming diaphragm pump designed to pump water out of ditches and low areas.

**350 GPM Pumps, Regulated and Un-regulated:** Specifically designed to transfer gasoline, jet fuels, light liquid petroleum fuel and water. It consists of an air cooled, three cylinder diesel engine and a self-priming centrifugal pump mounted on a two wheel frame assembly. It has its own control panel, suction and discharge valves. An internal fuel tank supplies fuel to the diesel engine. The 350 GPM Pump is a self-supporting assembly, transportable by towing vehicles to the field.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: PUMPS, WATER AND FUEL (M61200)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
Depot Assembly, 100 GPM Pump					10								
Pump Assembly, Regulated, 350 GPM	A						1500	50	30				
Pump Assembly, Unregulated, 350 GF	A						1536	96	16				
2. Engineering Change Order/Proposal													
3. Documentaton													
4. Engineering Support													
In-House					73		213						
Contract					30		255						
5. Program Management Support					224		176						
<b>TOTAL</b>					<b>337</b>		<b>3680</b>						

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: PUMPS, WATER AND FUEL (M61200)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware											
Pump Assembly, Regulated, 350 GPM FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	Jun-01	50	30	YES		Oct 99	
Pump Assembly, Unregulated, 350 GPM FY 00	TBS	C/FP REQ 5(2)	TACOM	Jun-00	Jun-01	96	16	YES			
REMARKS:											

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: HOSELINE OUTFIT FUEL HANDLING (M90800)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	159					50	45	51	47	27		379
Gross Cost	20.8	0.0	0.0	0.0	0.0	5.9	5.3	5.9	5.5	3.1	0.0	46.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	20.8	0.0	0.0	0.0	0.0	5.9	5.3	5.9	5.5	3.1	0.0	46.5
Initial Spares												
Total Proc Cost	20.8	0.0	0.0	0.0	0.0	5.9	5.3	5.9	5.5	3.1	0.0	46.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This rapid installation, repositioning, and recovering system is used to move fuel from a storage point to a distribution point or directly into a vehicle/aircraft. It consists of 13,000 feet of 4 inch fuel hose, along with couplings, valves, and other related equipment. It has a "through put" rate of 350 gallons per minute.

**JUSTIFICATION:** The FY01 funding for the Hoseline Outfit procurement is required to provide incremental replacement of deteriorated assets as well as to support TAA05 new fieldings. Most of the inventory (69%) is overaged and has exceeded its useful service life. The Hoseline Outfit is required in corps support units, Quartermaster (QM) Petroleum Oil Lubricant (POL) supply companies and QM pipeline terminal operating companies to pass fuel forward from corps areas to division areas; and if tactical situations permit, from division areas forward. As such, the Hoseline Outfit is a war stopper.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: HOSELINE OUTFIT FUEL HANDLING (M90800)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware Hoseline Outfit	A										4800	40	120
2. Engineering Change Order/Proposal											200		
3. Engineering Support -In-House											90		
-Contractor											220		
4. Quality Assurance In-House											85		
5. Program Management Support											287		
6. System Fielding Support (FDT, TPF, NET - ICLS)										196			
FY00 Hoseline Outfit appears on Distribution Sys, Pet & Water P-FORMS													
<b>TOTAL</b>											<b>5878</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: HOSELINE OUTFIT FUEL HANDLING (M90800)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware Hoseline Outfit FY01	TBS	C/FP REQ 5(2)	TACOM	Jan-01	Jan-02	40	120	YES	N/A	

**REMARKS:**

First year FY00 Hoseline Outfit contract information C/FP REQ 5(1) appears on Distribution Sys, Pet & Water.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	279.9	0.0	1.0	8.2	6.8	5.6	1.7	1.4	1.2	1.2	0.0	307.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	279.9	0.0	1.0	8.2	6.8	5.6	1.7	1.4	1.2	1.2	0.0	307.1
Initial Spares												
Total Proc Cost	279.9	0.0	1.0	8.2	6.8	5.6	1.7	1.4	1.2	1.2	0.0	307.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Inland Petroleum Distribution System (IPDS) is an operational project for distribution of bulk petroleum fuels to all Department of Defense land based forces. IPDS is the storage and/or distribution of fuel in more than one area of conflict. The IPDS is a rapid-deployment, general support, bulk fuel storage and pipeline system. It consists of: Fuel Units, Pipeline Connection Assembly (PLCA), Pipeline Pump Stations, Pipeline Sets and Special Purpose Equipment. The IPDS is modular in design and can be tailored for specific locations and operations. It consists of both commercially available and military standard petroleum equipment that can be assembled by U.S. Army personnel into an integrated petroleum distribution system. The IPDS system provides the U.S. Army with the capability to support an operational force with bulk fuels. Fuel is pumped inland by means of a Pipeline system and Pump Stations to Fuel Units. IPDS integrates Palletized Loading System (PLS) technology.

**Fuel Unit:** A Tactical Petroleum Unit (TPT) is comprised of three fuel units. The Fuel Unit can be used independently or in combination with another Fuel Unit. Used independently, it is designed to load or unload fuel to/from tanker trucks via the tanker truck receipt manifold. Fuel unloaded from a tanker-truck is diverted to any of six 210,000 gallon fabric collapsible tanks. A 600 Gallon per Minute (GPM) pump is used to circulate fuel within these tanks, to draw it out of them, and to pump it to a fuel dispensing assembly. The storage capacity of a fuel unit is 1,260,000 gallons of fuel. A fuel unit can also be attached to a pipeline by means of the PLCA.

**PLCAs** are comprised of the following major components: Contaminated Fuel Module (one each), Transfer Hoseline Assembly (one each), Support Equipment, Pipeline Connection (one each), Switching Manifold (one each), Fire Suppression Equipment (one each).

**Exhibit P-40C Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No.  
OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature  
INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)

Program Elements for Code B Items

Code  
A

Other Related Program Elements

**DESCRIPTION CONTINUED:**

Fuel Units are comprised of the following major components: Tanker Truck Receipt Manifold (one each), Transfer Hoseline (one each), Fire Suppression Equipment (six each), 50000 Gallon Tank- Optional configuration (one each), Fuel Dispensing Assembly (one each) includes 350 GPM Pump and Filter Separator, Tank Farm Assembly (three each); includes Bulk Fuel Tank Assemblies (BFTA), a collapsible fuel tank (210,000 gallon capacity), used as a storage container, support equipment, Fuel Unit (one each), and Pipeline Connection Assemblies.

Pipeline Connection Assemblies (PLCA): Utilized when pipelines are used to supply fuel to, or to receive fuel from the Fuel Unit. The PLCA protects the low-pressure components of the 150 pounds per square inch (psi) Tactical Petroleum Terminals (TPT) from the high-pressure fluid (740 psi) of the pipeline. Additionally it provides storage for the contaminated fuel interface, if two different fuels are pumped through the pipeline.

Bermliners are required with tank assemblies in order to prevent environmental damage.

ISO Containers: These containers are standard international shipping containers. ISO containers are steel constructed, stackable for easy storage, ventilated, have end opening for material access and rapid material removal. They are used to store and transport most of the Inland Petroleum Distribution System equipment.

Tricon Containers: The Tricon Container is a steel container with two doors on one face. The Container is painted with CARC. It is multi-functional, serving as a storage and shipping unit. External dimensions: Length 8'; Width 6'5 1/2"; Height 8'. Three containers can be attached together using connecting link assemblies (couplers). Three coupled Tricons equals a 20' ISO container. The containers are multi-purpose.

**JUSTIFICATION:** Funding in FY01 will support procurement of Bermliners, Pipeline Connection Assemblies (PLCA), containers, Tactical Petroleum Units (TPTs), and Bulk Fuel Tank Assemblies (BFTAs) in order to focus on storage capability initially, and pipeline conduit (developmental) in later years. Without Inland Petroleum Distribution System on the battlefield force projection as we currently know it comes to a halt for U.S. Army, U.S. Air Force and Major Regional Conflict (MRC) deployed forces.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware													
Bulk Fuel Tank Assembly	A										1399	36	39
2. Government Furnished Equipment													
1 Tactical Petroleum Units (TPT)	A				946	1	946				1109	1	1109
Bermliners					1031	109	9	4103	455	9	697	77	9
Quickberms					266	167	2	1067	534	2			
TRICONS					1628	474	3	131	43	3	131	43	3
ISO Containers					997	193	5	524	100	5	524	100	5
3. Pipeline Connection Assembly (PLCA)	A										750	3	250
4. Floodlight Sets (6)	A				55	6	9						
5. Training Device (GFE)					50								
6. Engineering Change Order/Proposal					68								
7. Documentation					32			38			45		
8. Engineering Support													
- In-House					266			329			281		
- Contractor					1285			340			284		
9. Quality Assurance Support													
- In-House								82			84		
10. Program Management Support					1205			212			219		
11 System Fielding Support (FDT, TPF, NET ICLS)											95		
12. 3,000 Gallon Fuel Tank Termination for Default					403								
<b>TOTAL</b>					<b>8232</b>			<b>6826</b>			<b>5618</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware											
Bulk Fuel Tank Assembly FY 01	TBS	C/FP REQ	TACOM	Jun-01	Jun-02	36	39	YES			
2. Government Furnished Equipment											
1 Tactical Petroleum Units (TPT)											
FY 99	Sierra Army Depot, Herlong CA.	MIPR	TACOM	Sep-99	Aug-00	1	946	YES			
FY 01	TBS	C/FP REQ	TACOM	Jan-01	Feb-02	1	1109	YES		Jun 00	
Bermliners											
FY 99	Defense Industrial Supply Center Philadelphia, PA.	MIPR	Defense Logistics Agency	Jun-99	Nov-99	109	9	YES			
FY 00	Defense Industrial Supply Center Philadelphia, PA.	MIPR	Defense Logistics Agency	Feb-00	Jun-00	455	9	YES			
FY 01	Defense Industrial Supply Center Philadelphia, PA.	MIPR	Defense Logistics Agency	Jan-01	Jul-01	77	9	YES			
Quickberms											
FY 99	Defense Industrial Supply Center Philadelphia, PA.	MIPR	Defense Logistics Agency	Jun-99	Aug-99	167	2	YES			
FY 00	Defense Industrial Supply Center	MIPR	Defense Logistics Agency	Feb-00	Jun-00	534	2	YES			
TRICONS											
FY 99	Joint Traffic Management Office	MIPR	TACOM	Sep-99	Jan-00	474	3	YES			
FY 00	TBS	C/FP REQ	TACOM	Jun-00	Sep-00	43	3	YES		Jan 00	

REMARKS:

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: INLAND PETROLEUM DISTRIBUTION SYSTEM (MA5120)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
TRICONS FY 01	TBS	C/FP REQ 3(2)	Joint Traffic Management	Jan-01	Apr-01	43	3	YES		
ISO Containers FY 99	ETG, Grand Rapid, MI.	REQN	TACOM	Sep-99	Feb-00	193	5	YES		
FY 00	TBS	C/FP REQ 3(1)	TACOM	Jun-00	Dec-00	100	5	YES		Feb 00
FY 01	TBS	C/FP REQ 3(2)	TACOM	Jan-01	Jun-01	100	5	Yes		
3. Pipeline Connection Assembly (PLCA) FY 01	TBS	C/FP REQ 5(1)	TACOM	Mar-01	Aug-01	3	250	YES		Oct 00
4. Floodlight Sets (6) FY 99	Powers MFG., Covington, TN	C/FP REQ 5(5)	TACOM	Oct-99	Mar-00	6	9	YES		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (POL) (ML5330)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	225.2	0.0	6.7	4.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	240.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	225.2	0.0	6.7	4.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	240.3
Initial Spares												
Total Proc Cost	225.2	0.0	6.7	4.6	3.9	0.0	0.0	0.0	0.0	0.0	0.0	240.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Fuel System Supply Point (FSSP) 60,000 Gallon: This system is a bulk fuel receiving, issuing and storing facility consisting of 350 gallon-per-minute (GPM) Pumps, 350 GPM Filter Separators and Collapsible Petroleum Tanks.

Pipeline System Cutting and Beveling Tool Kit: This tool kit is a portable split frame cutting and grooving machine. It can handle four, six, and eight inch pipe. The tool kit, pipe cutting is a separate component of Inland Petroleum Distribution System (IPDS). Without it the units installing IPDS would be unable to cut, groove, or bevel sections of pipe to the proper size, which would slow or possibly stop the installation of IPDS.

Hoseline Outfit 350 GPM Pumps: The Hoseline Outfit 350 GPM pumps are a component of the Hoseline Outfit Fuel Handling system. This rapid installation, repositioning, and recovery system is used to move fuel from a storage point to a distribution point or directly into a vehicle/aircraft. It consists of 13,000 feet of 4 inch fuel hose, along with couplings, valves, and other related equipment.

Advance Aviation Forward Refueling System (AAFARS): The AAFARS is a four point refueling system that provides filtered fuel at the rate of 55 GPM to each of four nozzles simultaneously. The AAFARS is a Force XXI multiplier with the capability to refuel four aircraft simultaneously, thus reducing refueling time and enhancing mission performance. The AAFARS consists of a pumping system, a filtration system, nozzles, hoses, couplings, and grounding rods in sufficient quantities to provide four refueling points at 100 foot separations between nozzles. The AAFARS is designed to fulfill the urgent requirement for forward "hot" refueling point operations.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (POL) (ML5330)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware													
Fuel System Supply Point 60K Gal. (FSSP)	A				1987	72	28						
Pipeline System Cutting and Beveling Tool Kit	A				750	11	68						
Hoseline Outfit Pumps	A				693	28	25						
Advanced Aviation Forward Refueling System (AAFARS) **	A							549	3	183			
2. Engineering Change Order/Proposal Fuel System Supply Point ECP's					696			2464					
3. Documentation								50					
4. Engineering Support													
In-House					52			40					
Contractor					63			200					
5. Program Management Support					354			503					
6. System Fielding Support (FDT,TPF Contractor								60					
<b>TOTAL</b>					<b>4595</b>			<b>3866</b>					

\*\*AAFARS - payback - Kosovo

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (POL) (ML5330)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>1. Hardware</b>										
Fuel System Supply Point 60K Gal. (FSSP) FY 99	Lebarge, St. Louis, MO.	C/FP REQ 5(4)	TACOM	Mar-99	Jun-00	72	28	YES	N/A	
Pipeline System Cutting and Beveling FY 99	Unicor, Three River, TX	C/FP REQ 5(1)	TACOM	Sep-99	Mar-00	11	68	YES	N/A	
Hoseline Outfit Pumps FY 99	Easi, St. Louis, MO.	C/FP REQ 5(4)	TACOM	May-99	May-00	28	25	YES	N/A	
Advanced Aviation Forward Refueling FY 00	TBS	C/FP REQ	TACOM	Apr-00	Apr-01	3	183	YES	N/A	

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: WATER PURIFICATION SYS (R05100)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	82.5	0.0	0.0	0.0	10.4	40.7	40.3	45.3	21.9	22.1	0.0	263.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	82.5	0.0	0.0	0.0	10.4	40.7	40.3	45.3	21.9	22.1	0.0	263.2
Initial Spares												
Total Proc Cost	82.5	0.0	0.0	0.0	10.4	40.7	40.3	45.3	21.9	22.1	0.0	263.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Family of Water Purification Systems consists of the 1500 gallons per hour (GPH) Tactical Water Purification System (TWPS), 3,000 GPH Tactical Water Purification System (3K TWPS), and the Lightweight Water Purifier (LWP). The water purification rates for these systems range from 125 GPH to 3,000 GPH. Future systems will use the latest available commercial off the shelf technology (COTS), in addition to or in lieu of reverse osmosis technology. Some of these systems will be tested for Palletized Loading System (PLS) technology integration. Systems include:

**1,500 GPH Tactical Water Purification System (1500 TWPS):** This system enhances purification water production capabilities at the division and brigade unit level. It is designed to fit within the approximate weight and cube limitations of the 600 GPH Reverse Osmosis Water Purification Unit (ROWPU) and is capable of double the pure water output of the 600 GPH system. The 1500 TWPS will replace the 600 ROWPU on a one-for-two basis. The 1500 TWPS is a force multiplier. This system will enable a crew of three soldiers to purify the same amount of water as six soldiers can purify now using 600 GPH ROWPU.

**3,000 GPH Tactical Water Purification System (3K TWPS):** This system is capable of purifying up to 2000 gallons per hour from saltwater sources and 3,000 gallons per hour from fresh water sources. It is designed to purify dirty fresh water, brackish water, sea water, and fresh water containing nuclear, biological, or chemical agents. Supports both Corps and Division Forces as well as disaster relief operations.

**Lightweight Water Purifier (LWP):** A portable water purifier developed for use during rapid tactical movement, and during independent

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature WATER PURIFICATION SYS (R05100)
Program Elements for Code B Items	Code A	Other Related Program Elements
<p>DESCRIPTION CONTINUED: It is capable of purifying 75 GPH from saltwater sources and 125 GPH from fresh water sources. This High Mobility Multipurpose Wheeled Vehicle (HMMWV) mounted system has up to 6 modules, and can be operated by one soldier.</p> <p>JUSTIFICATION: The FY-01 funding will support the Total Army Analysis 05 (TAA05)/Army National Guard Division Redesign Study (ADRS) fieldings. These fieldings will involve the activation/conversion of 129 Petroleum and Water Quartermaster (QM) Units. The QM water units being fielded are Water Supply Companies, Water Purification Detachments, Water Purification Teams, Tactical Water Distribution Teams, and Arid Environment Water Teams. These water purification systems support the Army's mission of providing life and mission sustaining water to the front line and remote units in tactical environments. Without these systems, the force projected ground forces can not be sustained beyond initial deployment.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: WATER PURIFICATION SYS (R05100)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
1500 GPH Tactical Water Purification Sys	A										8390	11	763
3000 GPH Tactical Water Purification Sys	A						8132	19	428		22684	53	428
Lightweight Water Purifier (LWP)	A										3444	40	86
3. Engineering Change Order/Proposal										334			560
4. Documentation										236			330
5. Testing - First Article Test (TECOM)										250			980
6. Engineering Support													
- In-House										455			950
- Contractor										317			700
7. Quality Assurance Support													
- In-House													140
8. Program Management Support										400			676
9. System Fielding Support (Training										228			1873
-FDT, TPF, NET, ICLS)													
<b>TOTAL</b>											<b>10352</b>		<b>40727</b>

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: WATER PURIFICATION SYS (R05100)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware											
1500 GPH Tactical Water Purification System											
FY 01	TBS	C/FP Req 5(1)	TACOM	Mar-01	Mar-02	11	763	YES		Oct 00	
3000 GPH Tactical Water Purification Sys.											
FY 00	TBS	C/FP Req5(1)	TACOM	Jun-00	Jun-01	19	428	YES		Nov 99	
FY 01	TBS	C/FP Req5(2)	TACOM	Feb-01	Nov-01	53	428				
Lightweight Water Purifier (LWP)											
FY01	TBS	C/FP Req 5(1)	TACOM	Apr-01	Dec-01	40	86	YES		Jan 01	
REMARKS:											





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (WATER EQ) (ML5335)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	65.1	0.0	2.5	1.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	71.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	65.1	0.0	2.5	1.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	71.3
Initial Spares												
Total Proc Cost	65.1	0.0	2.5	1.9	1.7	0.0	0.0	0.0	0.0	0.0	0.0	71.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Forward Area Water Point Supply System (FAWPSS): This system is lightweight and used to support forward units that cannot access a major water distribution system. It supports up to 163 people per day in an arid environment.

Tactical Water Distribution Equipment System (TWDS): This system consists of five to six Pumping Stations, a ten mile Hoseline Segment, two Storage Assemblies, and two Distribution Points. TWDS can deliver large quantities of potable water, up to 720,000 gallons per day, to theater distribution storage and distribution systems located up to 100 miles away from a potable water source. The water is pumped through hoses to the distribution unit. This frees up other transportation assets to deliver materiel which cannot be distributed by pipeline. This is the most efficient and economical way to transport water. A Petroleum Engineer Company can deploy about 20 miles of hose per day and be operational within 48 hours.

The Water Storage and Distribution Systems are packaged into three sizes, 800,000, 300,000, and 40,000. Each is designed and packaged for easy delivery and set-up in every area of operation. These systems are crucial to providing safe potable water that meets all Tri-Service water standards to military personnel, both U.S. and Foreign, civilians, and refugees.

Pump Assembly Tactical Water Distribution 600 GPM: This trailer mounted pump consists of a four stroke, six cylinder, air cooled diesel engine and a direct coupled self priming centrifugal pump. A forty two gallon fuel tank is an integral part of the trailer. This system is the main pump of the Tactical Water Distribution System (TWDS) pumping stations.

OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (WATER EQ) (ML5335)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
Forward Area Water Point Supply Sys								105	10	11			
Tactical Water Distribution System (TWA)					1083	7	155						
Pump Assembly Tactical Water					590	62	10						
2. Engineering Change Order/Proposal								68					
3. Documentation								62					
4. Testing								24					
5. Engineering Support													
- In-House								480					
- Contractor					136			460					
6. Program Management Support					89			476					
7. System Gilding Support (FDT, TPF, ICLS)								54					
<b>TOTAL</b>					<b>1898</b>			<b>1729</b>					

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (WATER EQ) (ML5335)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>1. Hardware</b>										
Forward Area Water Point Supply System FY00	Sierra Army Depot, Herlong,	MIPR	TACOM	Feb-00	Apr-00	10	11	YES		
Tactical Water Distribution System (TWDS) - Assembly FY99	Sierra Army Depot, Herlong,	MIPR	TACOM	May-99	Sep-99	7	155	YES		
Pump Assembly, Tactical Water Distributor FY99	Sierra Army Depot, Herlong	MIPR	TACOM	Sep-99	Mar-00	62	10	YES		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: COMBAT SUPPORT MEDICAL (MN1000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	395.3	15.8	11.1	25.5	34.9	31.6	21.2	23.0	22.1	22.1	0.0	602.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	395.3	15.8	11.1	25.5	34.9	31.6	21.2	23.0	22.1	22.1	0.0	602.6
Initial Spares												
Total Proc Cost	395.3	15.8	11.1	25.5	34.9	31.6	21.2	23.0	22.1	22.1	0.0	602.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Combat Support Medical (MN1000) line modernizes and sustains the Army Medical Department (AMEDD) Table of Organizational Equipment (TOE) force structure with Deployable Medical Systems (DEPMEDS). Program resources fund medical assemblage components, the acquisition of major clinical capital equipment required to provide combat casualty care, and the physical hospital platforms necessary to provide the mobile modular design of field medicine. The program supports the medical force structure throughout the continuum of Contingency Operations, Stability and Support Operations, Peace Keeping Operations and Humanitarian Assistance Programs.

**JUSTIFICATION:** FY 01 continues to fund the modernization of the Army Core Force (Force Package 1 and 2) Combat Service Support Mission Area requirements. Force requirements for Force Packages 1 and 2 equate to 25 total hospitals that include both direct patient care medical equipment and non-medical associated items of equipment. Resources partially support fifteen staffed hospitals, prepositioned assets within the Army War Reserve and AFLOAT program (nine hospital sets), and the Army Medical Department Center and School hospital training set. Acquisition of technological and clinically advanced medical equipment ensures medical force protection and maintains a standard of care for combat casualty care comparable to civilian medical practices. In addition, resources will ensure system efficacy and deployability through the modernization of the physical platforms (tents, shelters, environmental control, etc.). Proposed acquisition plans partially satisfy equipment deficiencies (anesthesia, ventilation, water distribution and waste water collection, and chemical protection).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: COMBAT SUPPORT MEDICAL (MN1000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS)					15952			8260			5286		
FIELD MEDICAL EQUIPMENT					9513			26680			26281		
<b>TOTAL</b>					<b>25465</b>			<b>34940</b>			<b>31567</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS) (MX0003)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	239.8	7.1	6.0	16.0	8.2	5.3	5.1	5.7	5.0	5.0	0.0	303.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	239.8	7.1	6.0	16.0	8.2	5.3	5.1	5.7	5.0	5.0	0.0	303.2
Initial Spares												
Total Proc Cost	239.8	7.1	6.0	16.0	8.2	5.3	5.1	5.7	5.0	5.0	0.0	303.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Deployable Medical Systems Platform provides the funding for the non-medical components necessary to support the AMEDD field hospital attributes requiring a functional, mobile and sustainable modular design of Army combat casualty care. This physical design establishes a system capability to support maintainability, modernization and sustainability. Resources support the configuration of Army equipment (tents, environmental control, water distribution systems, etc.) in support of clinically functional modules for the hospital platforms.

**JUSTIFICATION:** FY01 funds the continued acquisition of deficiencies for water distribution and waste water collection and continues the acquisition and fielding of chemical protection (hardened air conditioners and heaters) for DEPMEDS hospitals. The tent systems have exceeded life expectancy and must be replaced to ensure system deployability. Funds complete FP 1 and partial FP 2 modernization requirements for the tentage system that supports the mobile, modular physical hospital platform. FY 01 continues the modernization of the Water Distribution and Waste Water Collection System for FP 2.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS) (MX0003)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
M339 Air Conditioner 54000 BTU Field Deployable Environmental Control Unit					8267	684	12	1909	150	13	1747	138	13
Tent, Expandable Modular Personnel (TEMPER) 64' x 20' Medical					2775	96	29	1872	62	30	986	33	30
Tent, Expandable Modular Personnel (TEMPER) 64' x 20' Surgical					1068	31	34	837	23	36			
M196 Heater 120000 BTU Army Space Heater, Multi Fuel-Chemical Hardened					1997	128	16	1986	127	16	1349	87	16
Tent, Expandable Modular Personnel (TEMPER) 16' x 20'					445	40	11	216	19	11			
Tent, Expandable Modular Personnel (TEMPER) 16' x 20' Central Materiel					178	16	11	300	26	12	56	4	14
Water Distribution and Waste Water Collection System					1222	5	244	836	3	279	848	3	283
Systems Fielding								304			300		
<b>TOTAL</b>					<b>15952</b>			<b>8260</b>			<b>5286</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS) (MX0003)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
M339 Air Conditioner 54000 BTU Field Deployable Environmental Control Unit	Keco Industries, Inc.	OPT/FFP	Kelly AFB, TX	Apr-99	Aug-99	684	12	Y		
FY 99					Dec-99	150	13			
FY 00					Dec-00	138	13			
FY 01					Apr-01					
Tent, Expandable Modular Personnel (TEMPER) 64' x 20' Medical	CG Manufacturing, AZ	FFP	DSCP, Philadelphia, PA	Feb-99	Dec-99	96	29	Y		
FY 99					Dec-99	62	30			
FY 00					Dec-00	33	30			
FY 01					Dec-01					
Tent, Expandable Modular Personnel (TEMPER) 64' x 20' Surgical	CG Manufacturing, AZ	FFP	DSCP, Philadelphia, PA	Feb-99	Dec-99	31	34	Y		
FY 99					Dec-99	23	36			
FY 00					Dec-00					
M196 Heater 120000 BTU Army Space Heater, Multi Fuel-Chemical Hardened	Engineered Air Systems, St Louis, MO	FFP	Soldier Sys Spt, Nadick, MA	Sep-99	Mar-00	128	16	Y		
FY 99					Dec-99	127	16			
FY 00					Dec-00	87	16			
FY 01					Jun-01					
Tent, Expandable Modular Personnel (TEMPER) 16' x 20'	CG Manufacturing, AZ	FFP	DSCP, Philadelphia, PA	Feb-99	Dec-99	40	11	Y		
FY 99					Dec-99	19	11			
FY 00					Dec-00					

**REMARKS:** TEMPERs: Since components (i.e., structure, cloth, doors, zippered windows, etc.) are purchased from various suppliers and assembled at the depot site, the main supplier is listed.

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: DEPLOYABLE MEDICAL SYSTEMS (DEPMEDS) (MX0003)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Tent, Expandable Modular Personnel (TEMPER) 16' x 20' Central Materiel FY 99 FY 00 FY 01	CG Manufacturing, AZ	FFP	DSCP, Philadelphia, PA	Feb-99 Dec-99 Dec-00	Dec-99 Dec-00 Dec-01	16 26 4	11 12 14	Y		
Water Distribution and Waste Water Collection System FY 99 FY 00 FY 01	Rock Island Army Depot, IL	FFP	Sierra Army Depot, CA	Feb-99 Dec-99 Dec-00	Mar-00 Oct-00 Oct-01	5 3 3	244 279 283	Y		

**REMARKS:** Water Distribution and Waste Water Collection System. Components for this system are numerous, however, a major supplier is Rock Island Army Depot for the metal components. Sierra Army Depot assembles the systems.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FIELD MEDICAL EQUIPMENT (MB1100)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	155.5	8.7	5.1	9.5	26.7	26.3	16.1	17.3	17.1	17.1	0.0	299.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	155.5	8.7	5.1	9.5	26.7	26.3	16.1	17.3	17.1	17.1	0.0	299.4
Initial Spares												
Total Proc Cost	155.5	8.7	5.1	9.5	26.7	26.3	16.1	17.3	17.1	17.1	0.0	299.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Field Medical Equipment (MB1100) provides funding for the modernization and sustainment of the medical equipment component for clinical, diagnostic, treatment and preventive medicine mission requirements for combat casualty care within DEPMEDS combat hospital units and non-hospital units (Battalion Aid Stations, Medical Clearing Stations, Area Medical Laboratories). The equipment supports the operational readiness of the Army Medical Department's field units in support of wartime and peacetime medical missions.

**JUSTIFICATION:** FY01 funds complete the acquisition of direct patient care deficiencies for anesthesia in FP1 and FP2 hospitals. Funds will cumulatively modernize requirements for 73% of ventilators required in FP1 and FP2 hospitals and 100% of FP1 and 2 defibrillators. FY 01 continues the digitized radiology for FP1 and 2. FY 01 initiates the conversion of hospitals to the Medical Reengineering Initiative (MRI) configuration which includes defibrillators, centrifugal analyzers, clinical chemistry analyzers and coagulation timers for the corps slice. FY 01 also continues the modernization and sustainment of operational project hospital sets which includes anesthesia apparatus, defibrillators, sterilizers and operating tables.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FIELD MEDICAL EQUIPMENT (MB1100)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
ECG Monitor, Vital Signs w/pulse oximeter					594	72	8				1005	100	10
Anesthesia Apparatus					548	19	29	1434	48	30	1606	54	30
Ventilators (Volume)					2039	239	9	886	95	9	1555	164	9
Defibrillators								797	81	10	1729	173	10
Digitized Radiology					6112	5	1222	12113	10	1211	14269	10	1427
Central Compressors								586	13	45	549	12	46
ECG Monitor, Vital Signs w/ Capnography					220	18	12	203	17	12	1102	91	12
Dental Hand-held X-Ray								15	1	15	510	34	15
Operating Room Tables								242	18	13	1396	102	14
X-Ray (Portable)								362	7	52	263	5	53
Dental Chair Unit								11	5	2	107	46	2
Sterilizers											1527	29	53
Electrosurgical Apparatus								73	12	6	296	48	6
Coagulation Timer								17	4	4	73	17	4
Analyzer Centrifugal								43	6	7	124	17	7
Analyzer Clinical Chemist								59	6	10	170	18	9
Life Support for Trauma & Transport (LSAT) 1/								3000					
Advanced Surgical Suite for Trauma (ASSTC) 1/								6839					
<b>TOTAL</b>					<b>9513</b>			<b>26680</b>			<b>26281</b>		
1/ Funds were appropriated in the wrong appropriation. Work is ongoing to move these dollars (to include Congressional plus up tax) to RDTE to complete Engr Manufacturing Dev which belongs to RDTE.													

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FIELD MEDICAL EQUIPMENT (MB1100)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
ECG Monitor, Vital Signs w/pulse oximeter FY 01	Protocol Systems, Inc.	FFP	DSCP, Philadelphia, PA	Dec-00	Feb-01	100	10	Y		
Anesthesia Apparatus FY 00 FY 01	Dragger Corp	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Mar-00 Mar-01	48 54	30 30	Y		
Ventilators (Volume) FY 00 FY 01	TBS TBS	FFP FFP	DSCP, Philadelphia, PA	Feb-00 Dec-00	Apr-00 Mar-01	95 164	9 9	Y		
Defibrillators FY 00 FY 01	Physio Control Co	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Mar-00 Mar-01	81 173	10 10	Y		
Digitized Radiology FY 99 FY 00 FY 01	General Electric Medical Sys, Milwaukee, WI	FFP FFP FFP	DSCP, Philadelphia, PA	Oct-99 Dec-99 Dec-00	Oct-99 Apr-00 Apr-01	5 10 10	1222 1211 1427	Y		
Central Compressors FY 00 FY 01	Mortley Air Power	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Mar-00 Mar-01	13 12	45 46	Y		
ECG Monitor, Vital Signs w/ Capnography FY 00 FY 01	Protocol Systems, Inc.	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Feb-00 Feb-01	17 91	12 12	Y		

**REMARKS:** Digitized radiology has several components and are purchased from various suppliers, then are assembled at the depot site. Main supplier is listed.

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FIELD MEDICAL EQUIPMENT (MB1100)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Dental Hand-held X-Ray FY 00 FY 01	TBS TBS	FFP FFP	DSCP, Philadelphia, PA	Feb-00 Dec-00	Apr-00 Mar-01	1 34	15 15	Y		
Operating Room Tables FY 00 FY 01	Steris Corp	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Mar-00 Mar-01	18 102	13 14	Y		
X-Ray (Portable) FY 00 FY 01	TBS TBS	FFP FFP	DSCP, Philadelphia, PA	Feb-00 Dec-00	Apr-00 Mar-01	7 5	52 53	Y		
Dental Chair Unit FY 00 FY 01	TBS TBS	FFP FFP	DSCP, Philadelphia, PA	Feb-00 Dec-00	Apr-00 Mar-01	5 46	2 2	Y		
Sterilizers FY 01	TBS	FFP	DSCP, Philadelphia, PA	Dec-00	Mar-01	29	53	Y		
Electrosurgical Apparatus FY 00 FY 01	Diverstech Co	FFP FFP	DSCP, Philadelphia, PA	Dec-99 Dec-00	Mar-00 Mar-01	12 48	6 6	Y		
Coagulation Timer FY 00	TBS	FFP	DSCP, Philadelphia, PA	Feb-00	Apr-00	4	4	Y		

**REMARKS:**

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: FIELD MEDICAL EQUIPMENT (MB1100)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
FY 01	TBS	FFP		Dec-00	Mar-01	17	4			
Analyzer Centrifugal										
FY 00	TBS	FFP	DSCP, Philadelphia, PA	Feb-00	Apr-00	6	7	Y		
FY 01	TBS	FFP		Dec-00	Mar-01	17	7			
Analyzer Clinical Chemist										
FY 00	TBS	FFP	DSCP, Philadelphia, PA	Feb-00	Apr-00	6	10	Y		
FY 01	TBS	FFP		Dec-00	Mar-01	18	9			

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP (M61500))

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	4145	31	26	140	135	169	160	160	160	160		5286
Gross Cost	125.7	1.7	1.6	7.8	7.8	9.7	9.9	10.2	10.5	10.8	0.0	195.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	125.7	1.7	1.6	7.8	7.8	9.7	9.9	10.2	10.5	10.8	0.0	195.6
Initial Spares												
Total Proc Cost	125.7	1.7	1.6	7.8	7.8	9.7	9.9	10.2	10.5	10.8	0.0	195.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Shop Equipment, Contact Maintenance Vehicle (CMV), Truck Mounted, High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) Heavy Variant (HHV) (1097) is for general use and will provide improved cross-country mobile maintenance support to maneuver elements. The current CMVs, the gasoline-engine M887 Dodge Truck and Commercial Utility Cargo Vehicle (CUCV) CMV, are unable to traverse the terrain or maintain sufficient cross-country speed to keep up with support equipment while carrying tool and repair parts. The CMV will deploy to the site of disabled equipment to make repairs of all weapons systems and military equipment. The CMV will operate throughout the battlefield to include the Division Support Area (DSA), the Brigade Support Area (BSA), and the Unit Maintenance Collection Point (UMCP). The CMV will operate as far forward as behind the first terrain feature to the rear of the Forward Line of Own Troops (FLOT). Contact Maintenance teams using the CMV will perform repairs to equipment on-site in hours of daylight and darkness.

**JUSTIFICATION:** The FY01 CMV funds will permit the Army to continue to support the highest priority Force Package 1 units in their tactical maintenance mission. This version also adds to the overall ability of the system to transverse over all types of terrain. The Shop Equipment, Contact Maintenance is employed at the intermediate levels of maintenance to provide the capability of performing on-site repairs to disabled equipment. The CMV will replace uneconomically repairable, overaged shops (1500) mounted on the M880 series truck chassis for which spare and repair parts are no longer available. In addition, the 1986 CUCV version CMV is no longer supportable. This is in line with the "Purefleeting" concept for Light Maintenance Vehicle. Future procurement of the CMV will be mounted on the HMMWV chassis. This will assist in purifying the vehicular fleet and reduce shortage requirements of spare/repair parts and fuel. These funds also support a Contact Maintenance Truck Heavy (CMTH) variant for the EOD components. At present, there is insufficient quantity to enable FP1 units to effectively complete ordance disposal missions. Current field strength required is approximately 300. There are none of these versions in the field. Current AAO for ORD/ENG is approximately 2,760. AAO for EOD is 301 (delivery should be complete by 2004).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP (M61500))			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware CMTH	A				5580	90	62	5481	87	63	6656	104	64
2. Engineering Support (In-House)					75			72			72		
3. Quality Support (RIA)					54			50			50		
4. Engineering Change Proposal (ECP)					6			5			5		
5. Fielding					29			185			260		
1. Hardware EOD					1850	50	37	1710	45	38	2340	60	39
2. Engineering Support (In-House)					57			55			53		
3. Quality Support (RIA)					39			35			40		
4. Engineering Change Proposal (ECP)					39			5			4		
5. Fielding					36			180			170		
6. Publications					27								
<b>TOTAL</b>					<b>7792</b>			<b>7778</b>			<b>9650</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: SHOP EQ CONTACT MAINTENANCE TRK MTD (MYP (M61500))					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware CMTH										
FY99	Rock Island Arsenal Rock Island, IL	SS/FFP	TACOM - Rock Island	Mar-99	Nov-99	90	62	Yes		
FY00	Rock Island Arsenal Rock Island, IL	Option	TACOM - Rock Island	Feb-00	Sep-00	87	63	Yes		
FY01	Rock Island Arsenal Rock Island, IL	Option	TACOM - Rock Island	Nov-00	Feb-01	104	64	Yes		
2. Hardware EOD										
FY99	Rock Island Arsenal Rock Island, IL	SS/FFP	TACOM - Rock Island	Jul-99	Nov-99	50	37	Yes		
FY00	Rock Island Arsenal Rock Island, IL	Option	TACOM - Rock Island	Feb-00	Sep-00	45	38	Yes		
FY01	Rock Island Arsenal Rock Island, IL	Option	TACOM - Rock Island	Nov-00	Jul-01	60	39	Yes		

REMARKS: FY00-FY01 procurements are Indefinite Delivery Indefinite Quantity (IDIQ) work orders.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: WELDING SHOP, TRAILER MTD (M62700)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1374			64	95	144	95	92	94	94		2052
Gross Cost	37.5	0.0	0.0	3.0	6.0	6.0	6.0	5.8	5.9	5.9		76.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	37.5	0.0	0.0	3.0	6.0	6.0	6.0	5.8	5.9	5.9		76.3
Initial Spares												
Total Proc Cost	37.5	0.0	0.0	3.0	6.0	6.0	6.0	5.8	5.9	5.9		76.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The welding shop is a trailer-mounted, self-contained unit with provisions for safely accomplishing oxy-propylene braze welding, straight stick electric arc, metal inert gas, air carbon arc-cutting and flux-cored wire welding of ferrous and nonferrous metals. The welding shop provides all purpose welding in support of the Army in the field. Mobility is accomplished by using a High Mobility Multi-Purpose Wheeled Vehicle (HMMWV) or a vehicle with a higher pulling payload capacity.

**JUSTIFICATION:** FY01 funds support Welding Shops to fill unit requirements throughout the Army in fielding Force Package 1 units. Approximately 300 systems in the field were produced in the late 60's, with a life expectancy of 13 years. These units, as well as approximately 185 fielded in the early 80's, are uneconomically repairable. The new system mission will require that the system operate throughout the battlefield to include the Division Support Area (DSA), the Brigade Support Area (BSA), and the Unit Maintenance Collection Point (UMCP).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: WELDING SHOP, TRAILER MTD (M62700)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware	A				2368	64	37	5148	156	33	5250	150	35
2. First Article Test					298								
3. Engineering Support (In-House)					174			190			140		
4. Publications					58								
5. Quality Support (TACOM - Rock Island)					69			92			75		
6. ECP					37			18			20		
7. Fielding								598			557		
<b>TOTAL</b>					3004			6046			6042		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: WELDING SHOP, TRAILER MTD (M62700)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY99	Power Mfg Inc. Covington, TN	C/FFP	TACOM - Rock Island	Aug-99	Sep-00	64	37	Yes		
FY00	Power Mfg Inc. Covington, TN	Option	TACOM - Rock Island	Apr-00	Apr-01	156	33	Yes		
FY01	Power Mfg Inc. Covington, TN	Option	TACOM - Rock Island	Jan-01	Apr-02	150	35	Yes		

**REMARKS:** FY00 award forecast late due to First Article Test (FAT) forecast for March FY00. FAT will test 3 assets which will be refurbished and shipped to the Ordnance School. Delivery to the field is forecasted to begin in September. FY00-FY01 procurements are Indefinite Delivery Indefinite Quantity (IDIQ) contracts.







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	98.7	1.3	2.3	4.3	3.1	5.1	2.6	2.4	1.1	1.1	0.0	121.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	98.7	1.3	2.3	4.3	3.1	5.1	2.6	2.4	1.1	1.1	0.0	121.9
Initial Spares												
Total Proc Cost	98.7	1.3	2.3	4.3	3.1	5.1	2.6	2.4	1.1	1.1	0.0	121.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides for procurement of major shop equipment, shop sets, and weapon support items. Major shop equipment shop sets have multi-applications for Army maintenance organizations tasked with maintaining and repairing combat and tactical weapon systems. This equipment is for initial issue shortages or to replace overaged and uneconomically repairable assets.

**JUSTIFICATION:** The FY01 funds are required to procure tool sets and shop equipment to support current and increasing requirements of maintenance and weapons support units. These requirements include interchange, readiness fixing, and replacement of uneconomically repairable/unsupportable assets.

Demolition Equip Set, Expl Elec & Non Elec is used by Engineering, EOD & Special Forces for rendering safe unexploded devices as well as various other mission requiring explosive detonation.

Torch Outfit, Cutting & Welding Org Maint, Set 5, is required for performance of cutting and welding operations at the organizational level for track and wheel vehicles. This item is needed to satisfy readiness requirements.

Shop Set, Spare Part Storage, Field Maintenance (FM), Set 1, is required to provide the necessary equipment for the storage and security of authorized repair parts. This item is needed to satisfy readiness requirements.

Shop Equip, Machine Shop, Field Maint, Heavy Suppl provides the necessary components and the basic accessories for common field maintenance machine operations.

**Exhibit P-40C Budget Item Justification Sheet**

Date

February 2000

Appropriation / Budget Activity/Serial No.

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature

ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)

Program Elements for Code B Items

Code

Other Related Program Elements

Shop Equipment, Radiator Test and Repair, FM, Composite, Shop Set B, is required to provide the special tools and equipment for the testing and repair of radiators at the organizational level. This item is needed to satisfy Readiness requirements.

Shop Equip, Machine Shop, Field maint, Basic, Less Power provides the necessary components to perform duties associated with Machine Shop Field Maintenance.

Tool Set, Light Engineer, Squad provides necessary components for performing basic engineering functions at forward deployed, remote, wilderness areas.

Shop Equip, Machine Shop Field Maint, Heavy provides necessary components for highly mobile machine shop operation.

Measuring Tool Set, Machinist's Set 6, is required to provide the necessary components to perform machinist's measuring and resizing of equipment to rebuild engines at the organization, depot level. Item is needed to satisfy Readiness requirements.

Power Plant Shelter Set contains tools and equipment to construct, repair and maintain electrical power in forward or remote areas.

Machine, Welding is a mig/tig welding machine used by units requiring welding capabilities but not authorized a mobile welding shop.

Steam Cleaner is essential to prepare equipment for maintenance in both shop and field applications. Utilization reduces downtime.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Demolition Equip Set, Expl Elec & Non Elec 1375-00-047-3750	F001	A			576	365	2	169	97	2	385	193	2
2. Torch Outfit, Cutting & Welding Org Maint Set 5 4940-00-357-7778	F065	A			90	48	2	15	7	2	34	16	2
3. Shop Set, Spare Part Storage Field Maint, Set 1 4940-00-322-6016	F079	A						936	150	6	1649	265	6
4. Shop Equip, Machine Shop Field Maint, Heavy Suppl 1 3470-00-754-0739	G321	A						104	2	52	106	2	53
5. Shop Equip, Radiator Test & Repair, FM 4910-00-071-0747	G715	A			91	6	15	215	13	17	168	10	17
6. Shop Equip, Machine Shop Field Maint, Basic, Less Power 3470-00-754-0708	G322	A						106	2	53	108	2	54
7. Tool Set, Light Engineer Squad 5180-00-900-8559	G395	A			232	60	4	29	15	2	30	15	2
8. Shop Equip, Machine Shop Field Maint, Heavy 3470-00-754-0738	G320	A						376	5	75	383	5	77
9. Advanced Radiographic Sys (ARS) (EOD)	A010	A			1913	143	13						
10. Measuring Tool Set Machinist Set 6 5280-00-278-9919	F056	A			17	10	2	11	7	2			
11. Shop Set, Spare Part Storage Field Maint, Set 2 4940-00-322-6017	F080	A						403	80	5	525	106	5

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
12. Power Plant Shelter Set 4940-00-089-5280	G651	A			94	2	47	221	1	221	221	1	221
13. Small Equip Repair Shelter Set 4940-00-209-6232	G338				73	1	73	14	1	14			
14. Citadel Units	PEND				131	105	1						
15. Engineering Support					75			81			83		
16. Machine, Milling 3417-00-624-4254	S067	A			229	10	23						
17. Machine, Welding 3431-00-235-4728	M632	A			220	52	4	188	50	4	188	50	4
18. Lathe, Engine 3416-01-030-8195		A			199	10	20	204	9	23			
19. Dearmer (EOD)		A			5	14							
20. Pioneer Tool Outfit					120	3	40						
21. Steam Cleaner											1198	26	46
22. Regogram to AMC 21 Jun 99					250								
NOTE: #12 FY99 unit cost is tool sets only. FY00/FY01 includes procurement of shelter.													
#13 FY99 includes procurement of shelter. FY00 is tool sets only.													
<b>TOTAL</b>					<b>4315</b>			<b>3072</b>			<b>5078</b>		

**Exhibit P-5a, Budget Procurement History and Planning**

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Demolition Equip Set, Expl Elec & Non Elec Hardware and Assembly										
FY99	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Sep-99	Oct-99	365	2	Y		
FY00	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Mar-00	Apr-00	97	2	Y		
FY01	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Oct-00	Nov-00	193	2	Y		
2. Torch Outfit, Cutting & Welding Org Maint Set 5 Hardware and Assembly										
FY99	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Sep-99	Oct-99	48	2	Y		
FY00	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Mar-00	Apr00	7	2	Y		
FY01	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Oct-00	Nov-00	16	2	Y		
3. Shop Set, Spare Part Storage Field Maint, Set 1 Hardware and Assembly										
FY00	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Mar-00	Apr-00	150	6	Y		
FY01	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Oct-00	Nov-00	265	6	Y		
4. Shop Equip, Machine Shop, Field Maint, Heavy Hardware and Assembly										
FY00	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Mar-00	Apr-00	2	52	Y		
FY01	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Oct-00	Nov-00	2	53	Y		
5. Shop Equip, Radiator Test G715 Hardware and Assembly										
FY99	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Aug-99	Sep-00	6	15	Y		
FY00	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Mar-00	Apr-00	13	17	Y		
FY01	Rock Island Arsenal, Illinois	REQN/FP	TACOM- Rock Island	Oct-00	Nov-00	10	17	Y		

REMARKS:

**Exhibit P-5a, Budget Procurement History and Planning**

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
6. Shop Equip, Machine Shop Hardware and Assembly FY00 FY01	G322 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island	Mar-00 Oct-00	Apr-00 Nov-00	2 2	53 54	Y Y			
7. Tool Set, Light Engineer Squad Hardware and Assembly FY99 FY00 FY01	G395 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island TACOM- Rock Island	Sep-99 Mar-00 Oct-00	Oct-99 Apr-00 Nov-00	60 15 15	4 2 2	Y Y Y			
8. Shop Equip, Machine Hardware and Assembly FY00 FY01	G320 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island	Mar-00 Oct-00	Apr-00 Nov-00	5 5	75 77	Y Y			
9. Advanced Radiographic Sys Hardware FY99	A010 Science Applications International Corp.San Diego, CA	C/FFP	TACOM- Rock Island	Mar-99	Apr-99	143	13	Y			
10. Measuring Tool Set Hardware and Assembly FY99 FY00	F056 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island	Sep-99 Mar-00	Oct-99 Apr-00	10 7	2 2	Y Y			

REMARKS:

**Exhibit P-5a, Budget Procurement History and Planning**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
11. Shop Set, Spare Part Hardware and Assembly FY00 FY01	F080 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island	Mar-00 Oct-00	Apr-00 Nov-00	80 106	5 5	Y Y			
12. Power Plant Shelter Set Hardware and Assembly FY99 FY00 FY01	G651 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island TACOM- Rock Island	Aug-99 Mar-00 Oct-00	Sep-99 Apr-00 Nov-00	2 1 1	47 221 221	Y Y Y			
13. Small Equip Repair Shelter Set Hardware and Assembly FY99 FY00	G338 Rock Island Arsenal, Illinois Rock Island Arsenal, Illinois	REQN/FP REQN/FP	TACOM- Rock Island TACOM- Rock Island	Jun-99 Mar-00	Jul-99 Apr-00	1 1	73 14	Y Y			
14. Citadel Units Hardware FY99	PEND Classified	SS/FFP	TACOM- Rock Island	Apr-99	Dec-99	105	1	Y			
16. Machine, Milling Hardware FY99	S067 Bridgeport Machine Inc. Bridgeport, CT	C/FFP	TACOM- Rock Island	Jul-99	Sep-99	10	23	Y			

REMARKS:

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MAINT EQ) (ML5345)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
17. Machine, Welding Hardware FY99	M632 Valley National Gases Inc. Dayton,OH	MIPR/ CPAF	TACOM- Rock Island	Mar-99	Jun-99	50	4	Y	N		
FY00	TBS	MIPR/ CPAF	TACOM- Rock Island	Mar-00	Apr-00	50	4	Y			
FY01	TBS	MIPR/ CPAF	TACOM- Rock Island	Oct-00	Nov-00	50	4	Y			
18.Lathe, Engine Hardware FY99	S053 Machinery Group Inc. Huntington Beach, CA	C/FFP	TACOM- Rock Island	May-99	Oct-99	10	20	Y			
FY00	TBS	C/FFP	TACOM- Rock Island	Mar-00	Apr-00	9	23	Y			
19. Dearmer (EOD) Hardware FY99	F044 Sandik Mfg Passaic, NJ	REQN/ FFP	TACOM- Rock Island	Feb-99	Dec-99	14		Y			
20.Pioneer Tool Outfit Hardware and Assembly FY99	Rock Island Arsenal, Illinois	SS/FFP	TACOM- Rock Island	Jun-99	Jan-00	3	40	Y			
21. Steam Cleaner Hardware FY01	TBS	SS/FFP	TACOM- Rock Island	Oct-00	Oct-01	26	46	Y			

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

STEAM CLEANER, TRAILER MOUNTED (S60200)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					47							47
Gross Cost	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	1.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The cleaner will be a general purpose, wheel-mounted, electrical motor driven, diesel fuel-fired self-contained unit with steam and high pressure hot and cold water cleaning capability. The cleaner will be capable of operating from any standard 220/240 V, AC, 50/60 Hz, single-phase commercial power source. When operating in the field, electrical power will be supplied by a self-contained, diesel, engine-driven generator.

**NOTE:** FY01 and FY02 funding has been moved to SSN ML5345 Items <\$5M (Maintenance Equipment)

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: MISSION MODULES - ENGINEERING (R02000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	6.2	3.3	0.0	4.3	5.5	1.5	6.1	8.5	3.7	3.6	0.0	42.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	6.2	3.3	0.0	4.3	5.5	1.5	6.1	8.5	3.7	3.6	0.0	42.6
Initial Spares												
Total Proc Cost	6.2	3.3	0.0	4.3	5.5	1.5	6.1	8.5	3.7	3.6	0.0	42.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Engineer Mission Modules (EMM) support the Combat Engineers and include Bituminous Distributor, Concrete Mobile Mixer, and 12 Cubic Yard Dump modules. These modules are transported by M1075 PLS Trucks and M1076 PLS Trailers, providing significantly improved mobility and flexibility to combat engineer units. The EMM modules are Non-Developmental Items (NDI) and replace single-purpose trucks that are overage, unreliable and not economically repairable.

**JUSTIFICATION:** FY01 continues procurement of EMMs to fill critical shortages in Combat Engineer units. AAOs are as follows: Bituminous Distributor 144ea, Concrete Mobile Mixer - 167ea, and 12 Cubic Yard Dump - 622ea.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: MISSION MODULES - ENGINEERING (R02000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware													
Bituminous Distributor Modules	A				1009	12	84	986	12	82	247	3	82
Concrete Mobile Mixer Modules	A				1378	12	115	2020	18	112	450	4	113
Dump Modules	A				1701	50	34	2085	62	34	440	13	34
<b>SUBTOTAL</b>					<b>4088</b>			<b>5091</b>			<b>1137</b>		
2. ECPs					89			153			90		
3. Quality Assurance Support In-House					21			21			22		
4. System Fielding Support					41			88			117		
5. PM Support					80			120			123		
<b>TOTAL</b>					<b>4319</b>			<b>5473</b>			<b>1489</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ENGINEERING MISSION MODULES (R02100)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>Bituminous Distributor Modules</b>										
FY 99	Oshkosh Truck Corp.	SS/REQ5(2)	TACOM	Feb-99	Jul-99	12	84	Yes		
FY 00	Oshkosh, WI	SS/REQ5(3)		Jan-00	Jul-00	12	82	Yes		
FY 01		SS/REQ5(4)		Dec-00	Jul-01	3	82	Yes		
<b>Concrete Mobile Mixer Modules</b>										
FY 99	Oshkosh Truck Corp.	SS/REQ5(2)	TACOM	Feb-99	Jul-99	12	115	Yes		
FY 00	Oshkosh, WI	SS/REQ5(3)		Jan-00	Jul-00	18	112	Yes		
FY 01		SS/REQ5(4)		Dec-00	Jul-01	4	113	Yes		
<b>Dump Modules</b>										
FY 99	Oshkosh Truck Corp.	SS/REQ5(2)	TACOM	Feb-99	Apr-99	50	34	Yes		
FY 00	Oshkosh, WI	SS/REQ5(3)		Jan-00	Jun-00	62	34	Yes		
FY 01		SS/REQ5(4)		Dec-00	Jul-01	13	34	Yes		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ROLLER, VIBRATORY, SELF-PROPELLED (CCE) (R03300)

Program Elements for Code B Items: 0604804 DH01 Code: B Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	406		88			70		41				605
Gross Cost	16.5	0.0	6.0	0.0	10.2	4.7	0.1	3.2	0.0	0.0	0.0	40.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	16.5	0.0	6.0	0.0	10.2	4.7	0.1	3.1	0.0	0.0	0.0	40.6
Initial Spares												
Total Proc Cost	16.5	0.0	6.0	0.0	10.2	4.7	0.1	3.1	0.0	0.0	0.0	40.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Vibratory Self Propelled Roller is a commercial Nondevelopmental Item (NDI) with minor military unique modifications. It has the capability of exchanging smooth drum vibratory compaction to tamping foot compaction function within a single base self-propelled unit. There will be three types procured. A heavy roller (Type II) with a bolt on padfoot kit replaces the standard size currently in the inventory. A small "light" (Type I) version with a bolt on padfoot kit replaces selected towed compaction equipment in light engineer units. The "light" (Type III) version with interchangeable smooth and padfoot drums will be procured for the 18th Airborne Corps. Rollers will be capable of all modes of transportation, to include low velocity airdrop (Type III only) and external helicopter transport for airborne/airmobile units (Type I & III). Missions of the vibratory roller include constructing/repairing roads, air fields, and base preparation of storage areas and hardstands. The vibratory roller is intended to compact various types of cohesive and non-cohesive soils, and consolidate sand, gravel, and crushed rock for base and subbase horizontal construction requiring high load bearing capacity. Performance Specification date PD3895-2190 Sep 97; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic 1Q95; TC Standard scheduled for 2Q00.

**JUSTIFICATION:** FY 01 funding procures 64 vibratory rollers. The Army inventory now contains 12 makes and models of compaction equipment to meet this mission. This inventory is 13 to 34 years old and over 90% of the vehicles exceed the economic useful life of 15 years. The Operating and Support (O&S) costs associated with numerous makes and models, the nonavailability of repair parts, the age of the existing fleet and filling shortages directs the acquisition of new equipment. The Army Cost Analysis Agency Study of 1993 documented a \$12 O&S cost savings for every \$1 new acquisition cost for this old equipment. Two models will replace the existing fleet of 12 models self-propelled and towed rollers, promoting standardization. The Army's Authorization Objective is 660.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ROLLER, VIBRATORY, SELF-PROPELLED (CCE) (R03300)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware Type I I	B						9450	150	63	4096	64	64	
2. Engineering Change Order							198			109			
3. Documentation							45						
4. Engineering In-House							50			40			
5. Program Management Support							300			250			
6. System Fielding Support							154			176			
<b>Total</b>							10197			4671			

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ROLLER, VIBRATORY, SELF-PROPELLED (CCE) (R03300)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 98	Caterpillar	C/FP REQ 5(1)	TACOM	Apr-98	Feb-00	88	59	YES		
FY 00	Caterpillar	C/FP REQ 5(2)	TACOM	Jan-00	Jun-00	150	63	YES		
FY 01	Caterpillar	C/FP REQ 5(3)	TACOM	Jan-01	Jun-01	64	64	YES		

**REMARKS:** Jan 00 award planned. Based on release of OSD withhold (Congressional Plus Up).





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: COMPACTOR, HIGH SPEED (R06600)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty					87							87
Gross Cost	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	12.3	0.0	0.0	0.0	0.0	0.0	0.0	12.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The High Speed Compactor is a commercial self-propelled, diesel powered, tamping machine for high speed embankment compaction. Features include articulated steering, hydraulically controlled strike off dozer blade and tamping feet with adjustable cleaners on all wheels. It is the current Caterpillar commercial production model introduced in 1996. It will be used for compaction during construction of roads, airfields, and dams.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: COMPACTOR, HIGH SPEED (R06600)			Weapon System Type:			Date: February 2000		
Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A							11360	80	142			
2. Engineering Change Order								245					
3. Engineering In-House								30					
4. Program Management Support								294					
5. System Fielding Support								345					
Total								12274					

## Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: COMPACTOR, HIGH SPEED (R06600)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 00	Caterpillar, Peoria, Ill	C/FP Req 5(5)		Dec-99	May-00	80	142	YES		

REMARKS:



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment / 53504134  
 P-1 Item Nomenclature: LOADERS (R04500)

Program Elements for Code B Items: 0604804 AH01  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	5660				27	5	38	83	74	74		5961
Gross Cost	209.6	0.0	0.0	0.0	7.7	1.4	10.1	25.3	19.4	19.5	0.0	293.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	209.6	0.0	0.0	0.0	7.7	1.4	10.1	25.3	19.4	19.5	0.0	293.0
Initial Spares												
Total Proc Cost	209.6	0.0	0.0	0.0	7.7	1.4	10.1	25.3	19.4	19.5	0.0	293.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Loader, Scoop Type, 4-5 CU YD - The 4.5 and 5.0 cubic yard loader is a commercial item with minor military unique requirements. It is required for completing construction tasks which include excavating consolidated earth and loading blast rocks, loose rock, sand, aggregate and loose soil from stock piles into dump trucks, concrete mobile mixers, hoopers and aggregate bins. Two types are being procured: Type I with a 4.5 cubic yard rock bucket and Type II with a 5.0 cubic yard general purpose bucket. Performance specification date: 3Q00; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic scheduled for 3Q00; TC Standard scheduled for 4Q02.

Loader, Scoop Type, DD 4 WHL, 2 1/2 CU YD - The scoop loader is a versatile item of equipment for performing horizontal and vertical construction tasks. The loader is a diesel-engine driven, four-wheel-drive machine with rear axle oscillation and articulated frame steering. The hydraulically-operated scoop bucket is attached to the front of the loader by means of a push frame and lift arms. Loaders are usually equipped with one piece general purpose bucket, a rock bucket or a multipurpose (hinged jaw) bucket. New 2 1/2 cubic yard scoop loaders for Airborne/Airmobile units feature a quick-coupler mechanism to attach/detach the multipurpose bucket. The loaders in Airborne/Airmobile units can be delivered by airdrop and low altitude parachute extraction, and a small number are capable of sectionalization for helicopter lift operations.

**JUSTIFICATION:** FY 01 funds will replace existing Loader, Scoop Type, 4-5 CU YD, last procured in 1978. These 20 year old loaders had a planned useful life of 15 years. Due to their age and extensive heavy use, maintenance costs and parts availability have become a burden to the Army. The 1993 Cost Analysis Agency Study identified that \$12 of O & S costs could be saved for every \$1 of new procurement funds for this type of construction equipment. Additionally, technology improvements in ride quality, fuel consumption, on-board diagnostics, and environmental compliance for engines will make the new equipment safer, Manpower Personnel Integration (MANPRINT) friendly, and environmentally compliant. Funds through FY 01 will procure 30 vehicles towards the Total Force Package 1 requirement of 73. Total Army's Authorization Objective 258.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment / 53504134			P-1 Line Item Nomenclature: LOADERS			Weapon System Type:			Date: February 2000		
Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Loader, Scoop Type, 4-5 CU. YD R03900								7704			1444		
TOTAL								7704			1444		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: LOADER, SCOOP TYPE, 4-5 CU YD (CCE) (R03900)

Program Elements for Code B Items: 0604804A DH01  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	419				27	5	38	43	14	14		560
Gross Cost	30.6	0.0	0.0	0.0	7.7	1.4	10.1	11.6	4.0	4.1	0.0	69.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	30.6	0.0	0.0	0.0	7.7	1.4	10.1	11.6	4.0	4.1	0.0	69.5
Initial Spares												
Total Proc Cost	30.6	0.0	0.0	0.0	7.7	1.4	10.1	11.6	4.0	4.1	0.0	69.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The 4.5 and 5.0 cubic yard loader is a commercial item with minor military unique requirements. It is required for completing construction tasks which include excavating consolidated earth and loading blast rocks, loose rock, sand, aggregate and loose soil from stock piles into dump trucks, concrete mobile mixers, hoppers and aggregate bins. Two types are being procured; Type I with a 4.5 cubic yard rock bucket and Type II with a 5.0 cubic yard general purpose bucket. Performance Specification date 3Q00; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic 3Q00; TC Standard scheduled for 3Q00

**JUSTIFICATION:** FY 01 funds will replace existing loaders, last procured in 1978. These 20 year old loaders had a planned useful life of 15 years. Due to their age and extensive heavy use, maintenance costs and parts availability have become a burden to the Army. The 1993 Cost Analysis Agency Study identified that \$12 of O&S costs could be saved for every \$1 of new procurement funds for this type of construction equipment. Additionally, technology improvements in ride quality, fuel consumption, on-board diagnostics, and environmental compliance for engines will make the new equipment safer, MANPRINT friendly, and environmentally compliant. Fund through FY 01 will procure 30 vehicles towards the Total Force Package 1 requirement of 73. Total Army's Authorization Objective 258.



### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: LOADER, SCOOP TYPE, 4-5 CU YD (CCE) (R03900)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	Dec-00	27	243	Yes		Nov 99
FY 01	TBS	C/FP REQ 5(2)	TACOM	Feb-01	Jan-02	3	247	Yes		

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: HYDRAULIC EXCAVATOR (X01500)

Program Elements for Code B Items: 0604804 DH01  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty		17	10	32	34	35	41	35	10	10		224
Gross Cost	0.0	4.4	1.7	7.8	8.3	8.3	8.6	8.9	2.2	2.3	0.0	52.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	4.4	1.7	7.8	8.3	8.3	8.6	8.9	2.2	2.3	0.0	52.5
Initial Spares												
Total Proc Cost	0.0	4.4	1.7	7.8	8.3	8.3	8.6	8.9	2.2	2.3	0.0	52.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Hydraulic Excavator (HYEX) is a commercial item of construction equipment with minor military unique modifications. It is a diesel engine driven, self-propelled, track mounted, hydraulically controlled system, equipped with a hydraulic quick disconnect coupler for use with a wide variety of attachments. The HYEX will be transported by highway, rail, marine, and air in C-17 and C-5 aircraft. Type I is equipped with attachments used for general excavation, digging, trenching and lifting. Type II is equipped with a rock drill and a heavy duty bucket for quarry operations. Type III is equipped with an impact breaker, rock bucket, and heavy duty bucket also for use in quarry operations. Performance Specification date Oct 97; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic May 98; TC Standard Full Material Release scheduled for 2Q00.

**JUSTIFICATION:** FY 01 funds the HYEX which will satisfy the Army's requirement to provide Engineer Units a machine with state-of-the-art, multipurpose excavation capabilities to perform construction and quarry missions. It is the single most versatile piece of equipment used in commercial industry. Previously these missions were accomplished with four obsolete systems, all procured in the late 50's and early 60's, and one current system, D8K (T-11 Size) Tractor, procured in 1976. The four overaged, unsupported systems, type classified obsolete in FY 93, were (1) 12.5 ton crawler crane, cable controlled with attachments, (2) ditching machine, (3) pneumatic rock drill, and (4) the 750 cfm air compressor. The HYEX will replace all five systems with one multipurpose excavation system that will result in significant O&S cost reduction and increased productivity and effectiveness in accomplishing engineer construction missions. The Army's Authorization Objective is 262.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: HYDRAULIC EXCAVATOR (X01500)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	Type I	B			3799	23	165	4671	27	173	2685	15	179	
	Type II				2025	5	405	1676	4	419	3025	7	432	
	Type III				948	4	237	988	4	247	1778	7	254	
2. Refurbishment								240						
3. Engineering Change Order					292			208			209			
4. Documentation - ALPHA Publications					173			56			60			
5. Testing (Production Qualification Test- Government ATC)					100									
6. Engineering In-House					115			80			40			
7. Program Management Support					345			346			290			
											195			
<b>Total</b>					7797			8265			8282			

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			Weapon System Type:			P-1 Line Item Nomenclature: HYDRAULIC EXCAVATOR (X01500)					
WBS Cost Elements: Fiscal Years	Contractor and Location		Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware											
FY 99	John Deere,	Moline, ILL	C/FP REQ 5(1)	TACOM	Jan-99	Aug-00	32	212	YES		
FY 00	John Deere,	Moline, ILL	C/FP REQ 5(2)	TACOM	Feb-00	Dec-00	35	210	YES		
FY 01	John Deere,	Moline, ILL	C/FP REQ 5(2)	TACOM	Nov-00	Apr-01	29	258	YES		

**REMARKS:** Variation in unit cost is due to three sizes of HYEXs being procured from a 5 year requirements contract. Unit costs listed above reflect average unit costs for the three different sizes of HYEXs. Actual price breakout for the types of HYEXs is annotated on P-5.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment	P-1 Item Nomenclature: DEPLOYABLE UNIVERSAL COMBAT EARTH MOVERS (M10600)
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Program Elements for Code B Items:				Code: A	Other Related Program Elements:							
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	15	21	23	24	43	34						160
Gross Cost	9.4	7.7	8.3	9.2	16.6	14.1	0.0	0.0	0.0	0.0	0.0	65.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	9.4	7.7	8.3	9.2	16.6	14.1	0.0	0.0	0.0	0.0	0.0	65.4
Initial Spares												
Total Proc Cost	9.4	7.7	8.3	9.2	16.6	14.1	0.0	0.0	0.0	0.0	0.0	65.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Deployable Universal Combat Earth Mover (DEUCE) is a military unique system. It is a high-speed self deployable earthmoving tractor capable of conducting clearing, leveling, and excavating operations. The DEUCE will travel at speeds of 30 mph between job sites, travel across paved airfield and highways without damaging the surfaces, and be capable of low velocity air drop and roll-on/roll-off from C-130 and C-17 aircraft. The unique rubber track gives the DEUCE capabilities significantly greater than the steel tracked, low speed bulldozer it will replace. Light divisions and airborne units will use the DEUCE in support of mobility, countermobility, survivability, and sustainment of engineer missions.

**JUSTIFICATION:** The FY 01 funding supports the Engineer School's top priority acquisition of construction equipment. DEUCE provides a needed capability in terms of increased mobility and self deployability to light engineer units supporting light divisions replacing commercial low speed T-5 tractors. These current tractors require a prime mover and trailer, thus limiting its battlefield movement. Engineers, as part of the combined arms team, need this lightweight earthmoving capability that is tactically self-deployable and is strategically deployable by air. The Army's Authorization Objective is 188.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: DEPLOYABLE UNIVERSAL COMBAT EARTH MOVERS (M10600)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A				8688	24	362	15708	42	374	13233	33	401
2. Armored Kits					164	6	27						
3. Engineering Change Order					105			220			373		
4. Engineering In-House					61			83			60		
5. Program Management Support					227			311			300		
6. System Fielding Support								257			180		
<b>TOTAL</b>					<b>9245</b>			<b>16579</b>			<b>14146</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: DEPLOYABLE UNIVERSAL COMBAT EARTH MOVERS (M10600)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 99	CATERPILLAR MINNEAPOLIS, MN	C/FFP OPTION	TACOM	Feb-99	Jun-99	24	362	YES		
FY 00	CATERPILLAR MINNEAPOLIS, MN	C/FFP OPTION	TACOM	Jan-00	May-00	42	374	YES		
FY 01	CATERPILLAR MINNEAPOLIS, MN	SS/FFP	TACOM	Jan-01	May-01	33	401	YES		

**REMARKS:**

FY 01 will be a negotiated extension of current contract & unit price is currently estimated.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CRANES (M06700)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	182.9	0.0	13.3	19.3	21.8	6.1	15.2	15.6	6.2	0.7	0.0	281.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	182.9	0.0	13.3	19.3	21.8	6.1	15.2	15.6	6.2	0.7	0.0	281.0
Initial Spares												
Total Proc Cost	182.9	0.0	13.3	19.3	21.8	6.1	15.2	15.6	6.2	0.7	0.0	281.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Crane, Shovel Crawler MTD, 20-40 Ton W/ATTACH - This is a commercial crawler crane, with full revolving superstructure, hydraulically operated, a diesel engine driven, with a minimum 50 foot boom. It will be operable with clamshell, drag line, pile driving equipment, wrecking ball, and concrete bucket attachments. It will be used to support Port Construction Companies and Construction Support Companies for: construction, rehabilitation and maintenance of mooring systems, jetties, and breakwaters; construction of piers, wharves, ramps and related structures required for cargo loading/off loading; preparation and construction of facilities for roll on, roll off, break bulk containerized cargo handling; maintain tanker discharge facilities; dredging and removal of underwater obstructions; installing off shore petroleum discharge systems in support of Army LOTS (Logistics Over The Shore); provide support for rock crushing, bituminous mixing, and major horizontal construction projects, (i.e. airfields, highways and storage facilities. It will be capable of lifting and assisting with the assembly of all causeway modules, including the powered causeway module which weights almost 50,000 lbs.

Crane, Wheel MTD, 25T, 3/4 CU. YD. RT - This is a commercial All Terrain Crane (ATEC) with minor military unique modifications. It is pneumatic tired, diesel engine driven, and has a full revolving superstructure and cab, and a hydraulically powered telescoping boom. Used in engineer construction excavating missions, it is capable of operating with a hydraulic clamshell and grapple, pile driver and concrete bucket. It is capable of lifting, lowering, loading, and handling general supplies, construction materials and bridging to support maintenance, resupply points and logistic support facilities.

Crane, Whl Mtd, Hyd Light, 7 1/2 Ton - The 7.5 ton crane is a diesel-engine driven, 2- and 4- wheel drive vehicle. It is hydraulically operated and equipped with a full revolving telescoping boom. The family consists of two types of the same basic crane. A Type I crane (non-sectionalized is for units other than Airborne/Airmobile (ABN/AMBL). The Type II crane is also externally transportable by medium lift helicopter. These new cranes replace the 3-,5-, and 7- ton cranes previously in the Army inventory on a 1:1 basis.

**Exhibit P-40C Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No.  
OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature  
CRANES (M06700)

Program Elements for Code B Items

Code

Other Related Program Elements

JUSTIFICATION: FY 01 procures additional Crane Shovel Crawler MTD, 20-40 Ton W/ATTACH. The Heavy Engineer Crane replaces the 40 ton crawler cranes procured in the early 1960's and various supporting items with modern crane and pile driving systems. The current systems are inefficient and not capable of providing the proper operational output to meet the mission of the units. Systems to be replaced are: the 40 ton crawler crane with its front shovel (LIN T40771) and backhoe attachment (LIN B12585), the skid-mounted pile driving rig (LIN N91371), the 750 CFM Air Compressor (LIN C72872), 5 3/4 ton winch (LIN Y51851) and pile hammer (LIN K04834), leads (LIN L48815 & L49089). The current 40 ton cranes do not meet all required OSHA and Manpower Personnel Integration (MANPRINT) requirements. The configuration of the current crane is difficult and time consuming to transport. It is not capable of removing its own counterweights and requires assistance from other Materiel Handling Equipment (MHE) to prepare for transport. The Army's Authorization Objective is 29.

FY 01 procurement for the All Terrain Crane (ATEC) replaces 3 existing overage cranes: 20 ton truck mounted crane, 25 ton truck mounted crane, and 20 ton rough terrain crane that includes eight different makes and models. These cranes are 19-30 years old, have low operational readiness rates and units incur significant operation and sustainment (O & S) costs to maintain them. Also, the currently fielded cranes do not meet all current Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI), and Environmental Protection Agency (EPA) health, safety, and environmental requirements. Procurement of the ATEC will provide improved readiness, state-of-art commercial technology, and will blend the mobility characteristics of the three cranes it is replacing into one crane capable of on and off road travel. The Army's Authorization Objective is 460.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CRANES (M06700)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Crane Shovel Crawler MTD 20-40Ton	B				19332			3849			3127		
2. Crane Wheel MTD 25T 3/4 CU YD RT	A						17907				2962		
					19332			21756			6089		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CRANE SHOVEL CRAWLER MTD, 20-40 TON W/ATTACH (M06600)

Program Elements for Code B Items: Code: B Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	45				5	4	5	5	3	1	2	71
Gross Cost	6.7	0.0	0.0	0.0	3.9	3.1	3.2	3.3	2.3	0.7	1.4	24.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	6.7	0.0	0.0	0.0	3.9	3.1	3.2	3.2	2.3	0.7	1.4	24.8
Initial Spares												
Total Proc Cost	6.7	0.0	0.0	0.0	3.9	3.1	3.2	3.3	2.3	0.7	1.4	24.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This is a commercial crawler crane, with full revolving superstructure, hydraulically operated, a diesel engine driven, with a minimum 50 foot boom. It will be operable with clamshell, drag line, pile driving equipment, wrecking ball, and concrete bucket attachments. It will be used to support Port Construction Companies and Construction Support Companies for: Construction, rehabilitation and maintenance of mooring systems, jetties, and breakwaters; construction of piers, wharves, ramps and related structures required for cargo loading/off loading; preparation and construction of facilities for roll on, roll off, break bulk and containerized cargo handling; maintain tanker discharge facilities; dredging and removal of underwater obstructions; installing off shore petroleum discharge systems in support of Army LOTS (Logistics Over The Shore); provide support for rock crushing, bituminous mixing, and major horizontal construction projects, i.e. airfields, highways and storage facilities. It will be capable of lifting and assisting with the assembly of all causeway modules, including the powered causeway module which weights almost 50,000 lbs. Performance Specification date: Apr 99; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic 3Q00; TC Standard 1Q02.

**JUSTIFICATION:** FY 01 funding procures the Heavy Engineer Crane which replaces the 40 ton crawler cranes procured in the early 1960's and various supporting items with modern crane and pile driving systems. The current systems are inefficient and not capable of providing the proper operational output to meet the standards or mission of the units. Systems to be replaced are: the 40 ton crane with its front shovel (LIN T40771) and backhoe attachment (LIN B12585), the skid-mounted pile driving rig (LIN N91371), the 850 CVM Air compressor (LIN C72872), 5 3/4 ton winch (LIN Y51851) and pile hammer (LIN K04834), Leads(LINs L48815 & L49089). The current 40 ton cranes do not meet all required OSHA and Manpower Personnel Integration (MANPRINT) requirements. The configuration of the current crane is difficult to transport. It is not capable of removing its own counterweights and requires assistance from other Materiel Handling Equipment (MHE) to prepare for transport. The Army's Authorization Objective is 29.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CRANE SHOVEL CRAWLER MTD, 20-40 TON W/ATTACH (M06600)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	B							2625	5	525	2160	4	540
2. Engineering Change Order								155			126		
3. Documentation								370					
4. Testing (Production Qualification test- Government (ATC))								220					
5. Engineering In-House								80			85		
6. Program Management Support								346			368		
7. System Fielding Support								53			388		
<b>TOTAL</b>								<b>3849</b>			<b>3127</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CRANE SHOVEL CRAWLER MTD, 20-40 TON W/ATTACH (M06600)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 00	TBS	C/FFP REQ 6(1)	TACOM	Oct-00	Feb-01	5	525	Apr 00		Jun 00
FY 01	TBS	C/FFP REQ 6(2)	TACOM	Jan-01	Dec-01	4	540			

REMARKS:



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CRANE, WHEEL MTD, 25T, 3/4 CU YD, RT (X00800)

Program Elements for Code B Items: 0604804A DH01  
 Code: A  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	2758	29	56	77	69	11	48	49				3097
Gross Cost	170.1	6.1	13.3	19.3	17.9	3.0	12.0	12.4	0.0	0.0	0.0	254.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	170.1	6.1	13.3	19.3	17.9	3.0	12.0	12.4	0.0	0.0	0.0	254.1
Initial Spares												
Total Proc Cost	170.1	6.1	13.3	19.3	17.9	3.0	12.0	12.4	0.0	0.0	0.0	254.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The All Terrain Crane (ATEC) is a commercial all terrain crane with minor military unique modifications. It is pneumatic tired, diesel engine driven, and has a full revolving superstructure and cab, and a hydraulically powered telescoping boom. Used in engineer construction excavating missions, it is capable of operating with a hydraulic clamshell and grapple, pile driver and concrete bucket. It is capable of lifting, lowering, loading, and handling general supplies, construction materials and bridging to support maintenance, resupply points and logistic support facilities.

**JUSTIFICATION:** FY 01 procurement for the All Terrain Crane (ATEC) replaces 3 existing overage cranes: 20 ton truck mounted crane, 25 ton truck mounted crane, and 20 ton rough terrain crane that includes eight different makes and models. These cranes are 19-30 years old, have low operational readiness rates and units incur significant operation and sustainment (O&S) costs to maintain them. Also, the currently fielded cranes do not meet all current Occupational Safety and Health Administration (OSHA), American National Standards Institute (ANSI), and Environmental Protection Agency (EPA) health, safety, and environmental requirements. Procurement of the ATEC will provide improved readiness, state-of-art commercial technology, and will blend the mobility characteristics of the three cranes it is replacing into one crane capable of on and off road travel. The Army's Authorization Objective is 460.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CRANE, WHEEL MTD, 25T, 3/4 CU YD, RT (X00800)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A				16401	77	213	15180	69	220	2260	10	226
2. Attachments					1971	73	27	1809	67	27	140	5	28
3. Refurbishment					100								
4. Engineering Change Order					223			260			100		
5. Documentation					205								
6. Testing (Production Qualification test Government ATC)					80								
7. Engineering In-House					115			50			50		
8. Program Management Support					237			249			204		
9. System Fielding Support								359			208		
<b>Total</b>					19332			17907			2962		

## Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CRANE, WHEEL MTD, 25T, 3/4 CU YD, RT (X00800)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 99	Grove Worldwide Shadygrove, PA.	C/FP Req 5(2)	TACOM	Dec-98	Jun-99	39	213	YES		
FY 99	Grove Worldwide Shadygrove, PA.	C/FP Req 5(2)	TACOM	Mar-99	Oct-99	32	213	YES		
FY 99	Grove Worldwide Shadygrove, PA.	C/FP Req 5(2)	TACOM	May-99	Mar-00	6	213	YES		
FY 00	Grove Worldwide Shadygrove, PA.	C/FP Req 5(3)	TACOM	Nov-99	Apr-00	69	220	YES		
FY 01	Grove Worldwide Shadygrove, PA.	C/FP Req 5(4)	TACOM	Oct-00	Apr-01	10	226	YES		

**REMARKS:** FY 99 - December award reflects initial release of funds and quantity 39. March award reflects Congressional \$8 Mil release and quantity of 32. May award reflects additional release of withheld funds and quantity 6.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: TRUCK, DUMP, 20T (CCE) (R03000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	915	211		67								1193
Gross Cost	41.5	43.3	0.0	13.1	0.0	0.0	0.0	0.0	0.0	0.0		97.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	41.5	43.3	0.0	13.1	0.0	0.0	0.0	0.0	0.0	0.0		97.9
Initial Spares												
Total Proc Cost	41.5	43.3	0.0	13.1	0.0	0.0	0.0	0.0	0.0	0.0		97.9
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: Dump Truck model (18.5Ton, Commercial Construction Equipment), Model M917A1, is a Non-Developmental Item used to load, transport, and dump payloads of sand and gravel aggregates, crushed rock, hot paving mixes, earth, clay, rubble, and large boulders at engineering and construction sites under worldwide climatic conditions in a military environment. This truck has a heavy duty steel, 18.5Ton, 12 cubic yard truck and 14 cubic yard heaped capacity dump, in a cab controlled double action hydraulic hoist system capable of a 50 degree tilt angle, 8 inch high removable sideboards, easy wind tarpaulin system, and an air actuated tailgate lock. This 18.5Ton Dump Truck is transportable by highway, rail, marine, and air modes worldwide. This Dump Truck with the Material Control System (MCS) has an air actuated four door tailgate controlled by the operator, capable of dumping loads through any one or all four gates. The Army's Acquisition Objective is 1,076. The M917A1 Dump Truck replaces the 24-year old F5070 and the 18-year old M917 Dump Trucks on a one-for-one basis in existing engineering units.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: TRUCK, DUMP, 20T (CCE) (R03000)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
			\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Vehicle		A												
Truck, Dump, 18.5T, M917A1														
-W/O Material Control System					7824	48	163							
-W Material Control System					3325	19	175							
2. Federal Retail Excise Tax														
- W/O Material Control System					949									
- W Material Control System					405									
3. Engineering Change Proposals					149									
4. Documentation														
5. Testing/Production Verification Test					100									
6. Engineering Support														
- In-House					150									
7. Program Management Support					226									
<b>TOTAL</b>					<b>13128</b>									

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: TRUCK, DUMP, 20T (CCE) (R03000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Vehicle FY99 M917A1 W/O MCS M917A1 W MCS M917A1 W MCS	Freightliner, Portland, Oregon Freightliner, Portland, Oregon Freightliner, Portland, Oregon	Option Option Option	TACOM TACOM TACOM	Dec-98 Dec-98 Mar-99	Aug-99 Aug-99 Aug-99	48 15 4	163 175 175	Yes Yes Yes		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CRUSHING/SCREENING PLANT, 150 TPH (M07000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	2			4	4		4	4	2			20
Gross Cost	4.5	0.0	0.0	8.1	7.3	0.1	7.6	7.6	4.0	0.0	0.0	39.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.5	0.0	0.0	8.1	7.3	0.1	7.6	7.6	4.0	0.0	0.0	39.2
Initial Spares												
Total Proc Cost	4.5	0.0	0.0	8.1	7.3	0.1	7.6	7.6	4.0	0.0	0.0	39.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Crushing, Screening, and Washing Plant (CSWP) is portable, diesel/electric driven system, consisting of a primary jaw crusher, a secondary cone crusher, tertiary cone crusher, wash and screening unit, product conveyors, generators and other components required to provide a complete and operational rock crushing plant. The plant produces a minimum of 150 tons per hour of product suitable for base stone and concrete aggregate materials to be used in construction and maintenance of roads and airfields. Unlike commercial plants which are for fixed quarry operation, the Army's CSWP are mobile and completely transportable over the highway.

**JUSTIFICATION:** FY 01 funding provides support for fielding equipment. The CSWP is a major piece of construction equipment for which there is a continuing need. Use of this equipment is essential for construction of main supply routes, logistical facilities, roads, helipads, airfields, landing strips, and parking areas. These facilities are required for combat support or combat service support operations throughout the theater of operations. The CSWP produces the gravel and crushed rock for base and subbase horizontal construction. Studies and lessons learned from our Latin American experiences have all indicated that the engineers cannot expect host nation support for aggregate materials to sustain horizontal construction in any but the most developed countries of the world. Force structure changes have resulted in the consolidation of various sizes of crushing units, 75 tons per hour (TPH) and 225 TPH into the 150 TPH requirement. The existing fleet of the 75 and 225 TPH units were all procured in the 1960's, and repair parts are unavailable. The Army's Authorization Objective stands at 25.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>			Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CRUSHING/SCREENING PLANT, 150 TPH (M07000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>			
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	
1. Hardware	A				7356	4	1839	5682	3	1894				
2. Engineering Change Order					393			366						
3. Engineering In-House					58			86						
4. Program Management Support					320			370						
5. System Fielding Support								824			89			
<b>TOTAL</b>							8127			7328			89	

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: CRUSHING/SCREENING PLANT, 150 TPH (M07000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware FY 99	Cedarapids, Inc Cedar Rapids, Iowa	CFP REQ 5(4)	TACOM	Jan-99	Apr-99	4	1839	Yes			
FY 00	Cedarapids, Inc Cedar Rapids, Iowa	CFP REQ 5(5)	TACOM	Jan-00	Apr-00	3	1894	Yes			

REMARKS: FY 00 unit price increase based on inflation and yearly production cost increases.



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CONST EQUIP SLEP (M05500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	2.0	5.0	6.3	9.9	9.9	0.0	33.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	2.0	5.0	6.3	9.9	9.9	0.0	33.1
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	2.0	5.0	6.3	9.9	9.9	0.0	33.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Grader Heavy - Vehicle is diesel engine driven, with articulated frame steering and enclosed cab with Roll Over Protection System (ROPS). Blade controls, steering, wheel lean and articulation are hydraulically assisted. Vehicle is used for grading roads, airfields, and runways prior to applying surface materials

Scraper, Heavy, 14 - 18 CY - Vehicle is diesel engine driven, single lever shift control transmission, with a rated load of 48,000 lbs, a capacity of 14-18 cubic yards, and hydraulically controlled. Vehicle is used by conventional support units for earthmoving operations (hauling and spreading of earthen materials) in the construction of roads and airfields. Also used by Engineering Battalion Combat Heavy Companies for earthmoving operations such as rapid airfield and road repair and rapid excavation of anti-tank ditches.

Tractor, T-9 Dozer (D7F & D7G) - The dozer is a full tracked, low speed, medium draw bar pull with bulldozer, and ripper or winch. Vehicle is used for construction and maintenance emplacements, roads, and airfields. The dozer is used by combat construction, supply, and service units, Table of Distribution and Allowances(TDA's), depots, and ports.

Tractor, T-5 Dozer (D5B) - This dozer is a full size bulldozer that comes in sectionalized and non-sectionalized versions. It is airmobile, airdroppable, and/or helicopter transportable depending on configuration. Vehicle is used for construction and maintenance emplacements, roads, and airfields.

Loader, Scoop Type, DD 4 WHL, 2 1/2 CU YD - The scoop loader is a versatile item of equipment for performing horizontal and vertical construction tasks. The loader is a diesel-engine driven, four-wheel-drive machine with rear axle oscillation and articulated frame steering. The hydraulically-operated scoop bucket is attached to the front of the loader by means of a push frame and lift arms. Loaders are usually equipped with one piece general purpose bucket, a rock bucket or a multipurpose (hinged jaw) bucket. 2 1/2 cubic yard scoop loaders for

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature CONST EQUIP SLEP (M05500)
Program Elements for Code B Items	Code	Other Related Program Elements
<p>JUSTIFICATION: FY 01 funds initiate the construction equipment service life extension program. The service life of each of these vehicle systems have been, or will be exceeded in the FY 86-04 time frame (grader-FY 03, scraper-FY 04, D7 dozer FY 86-04, D5 dozer-FY 97). The service life of these vehicles will be extended another 10 years by rebuilding the entire vehicle to include major components such as the engine, transmission, hydraulics, etc. During rebuild, technology insertions will be added to the vehicle. The cost to extend the service life of each of these systems is approximately 25-33% the cost of a new vehicle; the rebuilt product will have approximately the same amount of service life as a new vehicle, thus enabling the Army to save money.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CONST EQUIP SLEP (M05500)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware											1680	14	120
2. Engineering Support											58		
3. Program Management Support											248		
<b>TOTAL</b>											<b>1986</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: CONST EQUIP SLEP (M05500)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware FY 01	CATERPILLAR PEORIA,	SS/FP REQ 5 (1)	TACOM	Jan-01	Apr-01	14	120	YES		Jan 00	

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (CONST EQUIP) (ML5350)

Program Elements for Code B Items: 604804A  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	87.4	2.0	1.5	2.0	6.2	2.6	18.8	15.6	11.4	11.4	0.0	159.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	87.4	2.0	1.5	2.0	6.2	2.6	18.7	15.6	11.4	11.4	0.0	158.9
Initial Spares												
Total Proc Cost	87.4	2.0	1.5	2.0	6.2	2.6	18.7	15.6	11.4	11.4	0.0	158.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This program covers various types of Construction Equipment (CE) where the total acquisition cost for each line item is below \$5,000,000 (total expended program per year).  
 Water Distributor - Provides for water distribution on construction sites in airborne units.  
 Code B data; D604804A, DH01 RDTE; Performance Specification Date May 98; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopmental; TC Generic (TC standard scheduled for Jul 99; replaces model 5R549; no test results available as acquisition supported by market survey, no testing to date).

Ultimate Building Machine Equipment - Self contained trailer mounted unit. Panel forming and curving machinery powered by diesel engine. Capble of producing metal buildings on site as small as 12 feet wide by 6 feet height to as large as 80 feet wide by 40 feet height. All Commercial Off The Shelf (COTS) and Non-development Item (NDI) equipment.

**JUSTIFICATION:** FY 01 procures equipment required for combat engineering units to build and maintain roads and facilities to support the tactical mission. Construction equipment supports tactical wheeled vehicles and combat equipment in the forward deployment zone by constructing maintenance and storage facilities and roads. This equipment is critical towards insuring combat readiness and fleet mobilization of U.S. Armed Forces.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (CONST EQUIP) (ML5350)			Weapon System Type:			Date: February 2000			
<b>Cost Elements</b>		ID CD	<b>FY 98</b>			<b>FY99</b>			<b>FY 00</b>			<b>FY 01</b>		
			TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. All Terrain Crane	USMC	A			1932	23	84							
2. Water Distributor	M031	B						910	7	130	520	4	130	
a. ECO								72			100			
b. Documentation								129			81			
c. Testing - ATC First Article Test								131						
d. Engineering In-House								80			50			
3. Program Management Support								270			270			
4. System Fielding Support					88			2631			1614			
5. Ultimate Building Machine Equipment								2000	8	250				
<b>TOTAL</b>					<b>2020</b>			<b>6223</b>			<b>2635</b>			

NOTE: System Fielding Funds are for all construction equipment.

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (CONST EQUIP) (ML5350)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware Water Distributor M031 FY 00	TBS	C/FP REQ 5(1)	TACOM	Jun-00	May-01	7	130	YES		Mar 00
FY 01	TBS	C/FP REQ 5(2)	TACOM	Dec-00	Aug-01	4	130	YES		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: TUG, SMALL (M44500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	1	3	2	3								9
Gross Cost	3.8	7.6	6.2	8.5	8.9	0.0	0.0	0.0	0.0	0.0	0.0	35.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	3.8	7.6	6.2	8.5	8.9	0.0	0.0	0.0	0.0	0.0	0.0	35.0
Initial Spares												
Total Proc Cost	3.8	7.6	6.2	8.5	8.9	0.0	0.0	0.0	0.0	0.0	0.0	35.0
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Small Tug, 900 class is a steel hull craft approximately 60 feet in length with a maximum draft of 8 feet when fully loaded and is capable of operating in Sea State 3. It has a capability of reaching a minimum of 8 knots sustained speed when fully loaded, no tow, in Sea State 2. It has twin propulsors with twin diesel inboard drive, pilothouse control, five berths, dinette with seating for four and two diesel engine driven (DED) generators. The mission of the tug is to provide towing of general cargo barges in harbors, inland waterways, and along coastlines. It will also assist larger tugs in the performance of heavier utility work such as: docking and undocking ships of all sizes, movement of floating cranes, floating machine shops, and line handling duties. Current program is for nine tugs with a total Army requirement of fifteen (15) tugs.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: TUG, SMALL (M44500)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A				7236	3	2412	7455	3	2485			
2. Auxiliary Equipment					472			169					
3. Engineering Change Order/Proposal					215			15					
4. Technical Manuals					8			25					
5. Testing (Acceptance/Engineering Chg)(ATC)					81								
6. Engineering Support - In-House					25			25					
7. Program Management Support					354			219					
8. System Fielding Support								901					
9. Claim					85			100					
TOTAL					8476			8909					

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			Weapon System Type:			P-1 Line Item Nomenclature: TUG, SMALL (M44500)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 99	Orange Shipbuilding, Orange, TX	Option	TACOM	Feb-99	Apr-00	1	2404	YES		
FY 99	Orange Shipbuilding, Orange, TX	Option	TACOM	Apr-99	Aug-00	2	2412			
FY 00	Orange Shipbuilding, Orange, TX	Option	TACOM	Apr-00	Jul-01	3	2485			

**REMARKS:** These are options to original fixed price contract awarded Apr 96. Split award in FY99 reflects late receipt of Congressional Plus-up funds for 2nd and 3rd tug.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FLOATING CRANE, 100-250 TON (M32400)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty		1	1	1								3
Gross Cost	0.0	13.9	13.5	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	13.9	13.6	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7
Initial Spares												
Total Proc Cost	0.0	13.9	13.6	15.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	42.7
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Floating Crane is capable of off-loading existing and projected shipping through the year 2020. The crane is transportable on Float On/Float Off(FLO/FLO) ships, has living accommodations (berthing, cooking, and sanitation) for 15 persons; and has heating, ventilation, and air conditioning. The crane operates on diesel and/or Jet Propellant - 8 (JP-8) fuel for 30 days without refueling. It is operational during night operations and while soldiers are dressed in Mission Oriented Protective Posture IV (MOPP IV) clothing.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FLOATING CRANE, 100-250 TON (M32400)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A				13916	1	13916						
2. Engineering Change Order/Proposal					657								
3. Documentation					153								
4. Builder's Trial Test & Fielding					129								
5. Engineering Support - In House					200								
6. Program Management Support					161								
<b>TOTAL</b>					<b>15216</b>								

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 Weapon System Type:  
 P-1 Line Item Nomenclature: FLOATING CRANE, 100-250 TON (M32400)

WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 99	Bollinger Shipyard, Lockport, LA	Option	TACOM	Mar-99	Jan-01	1	13916	Yes		

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

LOGISTIC SUPPORT VESSEL (LSV) (M11200)

Program Elements for Code B Items:

Code:

A

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	4						1	1				6
Gross Cost	75.6	0.0	0.0	0.0	18.8	0.0	21.2	29.0	0.0	0.0	0.0	144.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	75.6	0.0	0.0	0.0	18.8	0.0	21.2	29.0	0.0	0.0	0.0	144.6
Initial Spares												
Total Proc Cost	75.6	0.0	0.0	0.0	18.8	0.0	21.2	29.0	0.0	0.0	0.0	144.6
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: The Logistic Support Vessel (LSV) provides worldwide overseas transport of combat vehicles and sustainment cargo. It is ideally suited for intratheatre line haul of large quantities of cargo and equipment, and as a result of its shallow draft configuration can perform supply missions to remote underdeveloped coastlines and inland waterways. It is also highly effective for the discharge of Navy/Contract Roll-on/Roll-off Vessels and all Logistics-Over-The-Shore (LOTS) missions. This includes offload to degraded ports and unimproved beaches. The LSV can handle all wheeled and tracked vehicles including up to 24 M1 Main Battle Tanks and has a container carrying capacity of up to 50 double-stacked 20' International Standards Organization (ISO) containers. Features include extended bow offload ramp, full bow thruster for beaching & extraction, and world-wide self-deployability.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: LOGISTIC SUPPORT VESSEL (LSV) (M11200)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A							16500	1	16500			
2. Engineering Change Order / Proposal								723					
3. Documentation								731					
4. Testing (Operational & Accept.) (ATC)								209					
5. Engineering Support - Navy								485					
6. Program Management Support								196					
<b>TOTAL</b>								<b>18844</b>					

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: LOGISTIC SUPPORT VESSEL (LSV) (M11200)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware - FY00	TBS	C/FP	TACOM	Aug-00	Feb-02	1	16500	Yes		Feb 00

**REMARKS:**





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: LOGISTICS SUPPORT VESSEL (ESP) (M11201)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty						1	1	2				4
Gross Cost	0.0	0.0	0.0	0.0	0.0	6.6	5.9	13.0	0.0	0.0	0.0	25.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	6.6	5.9	13.0	0.0	0.0	0.0	25.5
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	6.6	5.9	13.0	0.0	0.0	0.0	25.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Logistics Support Vessel (LSV) provides worldwide overseas transport of combat vehicles and sustainment cargo. It is ideally suited for intratheatre line haul of large quantities of cargo and equipment, and as a result of its shallow draft configuration can perform supply missions to remote underdeveloped coastlines and inland waterways. It is also highly effective for the discharge of Navy/Contract Roll-On/Roll-off Vessels and all Logistics-Over-The-Shore (LOTS) missions. This includes offload to degraded ports and unimproved beaches. The LSV can handle all wheeled and tracked vehicles including up to 24 M1 Main Battle Tanks and has a container carrying capacity of up to 50 double-stacked 20' International Standards Organization (ISO) containers. Features include extended bow offload ramp, full bow thruster for beaching & extraction, and world-wide self-deployability.

**JUSTIFICATION:** FY 01 funds one LSV ESP. The existing Army Fleet consists of 6 vessels. These vessels have now reached half of their expected Economic Useful Life (EUL). The LSVs must undergo an Extended Service Program (ESP) to enable them to achieve the full EUL. Planned modifications include power train, piping & plumbing, electrical, command and safety system upgrades. An effort will be made to achieve sub-system commonality with new LSVs now being procured. The current program covers four of the six vessel fleet.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: LOGISTICS SUPPORT VESSEL (ESP) (M11201)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware & Installation	A										5061	1	5061
2. Documentation											197		
3. Testing Support (Contractor / ATC)											295		
4. Engineering Support (Navy)											296		
5. Program Management Support											287		
6. System Fielding Support											502		
<b>TOTAL</b>											<b>6638</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: LOGISTICS SUPPORT VESSEL (ESP) (M11201)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 01	TBS	C/FP	TACOM	Mar-01	May-02	1	5061	Yes		Aug 00

REMARKS:



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CONTAINERIZED MAINTENANCE FACILITY (M11300)

Program Elements for Code B Items: 0604804A  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				3								3
Gross Cost	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Containerized Maintenance Facility (CMF) will be repair facilities housed in rigid wall, expandable International Standards Organization (ISO) shelters and containers. The rapidly deployable, lightweight containerized system will supplant the existing Floating Machine Shop (FMS). The system consists of four shops in one-side-expandable shelters; a machine/welding shop; an air conditioning/hydraulic shop; an engine/component rebuild shop; and a communications/electronic repair shop. A single two-side-expandable shelter will be the administrative/communication office. Three ISO containers will be used to hold support equipment and spare parts.

**Code B Data:** The Containerized Maintenance Facility is intended to replace the Floating Machine Shop and supporting Barge, Cargo, Deck Enclosure on a one for one basis. Delivery of first unit is scheduled for June 2000, with Operational Test and Evaluation (OTE) scheduled for Aug 2000. The CMF was also supported with Research & Development funds from Program Element (PE) 0604804A, Project D461 in addition to Procurement Funding support. The system is currently undergoing technical review by the engineering and user communities to determine suitability from requirements, safety, and reliability perspectives.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CONTAINERIZED MAINTENANCE FACILITY (M11300)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware	B				3003	3	1001						
2. Engineering Change Order/Proposal					532								
3. Documentation					110								
4. Testing Support (Operational test) (ATC)					511								
5. Engineering Support - In-House					210								
6. Program Management Support					379								
7. System Fielding Support					485								
<b>TOTAL</b>					<b>5230</b>								

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: CONTAINERIZED MAINTENANCE FACILITY (M11300)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
1. Hardware FY 99	IOC, Rock Island, IL	MIPR	TACOM	Jun-99	Jun-00	3	1001	Yes			

**REMARKS:** System maturity levels allow us to shorten the planned R&D phase. All units will be production units, with no (or little) required retrofit of 1st unit.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment	P-1 Item Nomenclature: CAUSEWAY SYSTEMS (R97500)
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Program Elements for Code B Items:				Code: A	Other Related Program Elements:							
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	77.4	0.0	0.0	16.9	16.7	17.2	12.6	12.8	14.0	13.9	0.0	181.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	77.4	0.0	0.0	16.9	16.7	17.2	12.6	12.8	14.0	13.9	0.0	181.5
Initial Spares												
Total Proc Cost	77.4	0.0	0.0	16.9	16.7	17.2	12.6	12.8	14.0	13.9	0.0	181.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Causeway Systems include the Floating Causeway (FC), the Causeway Ferry (CF), and the Roll On/Roll Off Discharge Facility (RRDF). The components provide a means to move cargo across unimproved beaches in areas of the world where fixed port facilities are unavailable, denied, or otherwise unacceptable. They are composed of sections that are normally 80 feet by 24 feet by 4.5 feet. The sections are composed of modular, International Standards Organization (ISO) compatible modules. Each section is capable of transporting up to 100 short tons with 12 inches of freeboard and is fitted with the Navy designed flexor and shear connector system. The three systems are stand alone; however, they are constructed from the same basic building blocks. They are interoperable, but not interdependent.

**JUSTIFICATION:** In FY01, the funding procures one Floating Causeway and one Causeway Ferry. This causeway system provides a dry bridge for the discharge of cargo from Army Lighters (Floating Causeways/LCUs/LSVs/LCM-8) directly to the beach logistics operations. The Floating Causeway is capable of handling the discharge from multiple Lighters simultaneously, dramatically increasing theatre logistics throughput. This system is pivotal to meeting Army Strategic Mobility Program (ASMP) throughput objectives. The Ferry is utilized to transport limited cargo from the ship to the shore.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CAUSEWAY SYSTEMS (R97500)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A												
RRDF								11181	1	11181			
Causeway Ferry								2624	1	2624	2642	1	2642
Floating Causeway											13029	1	13029
Causeway Subsystem Set					7174	2	3587						
2. Engineering Change Order/Proposal					147			217			121		
3. Documentation					274			379			120		
4. Testing Support(Operational					2545			660			225		
5. System Technical Support (STS)					125			60			80		
6. Engineering Support													
- In-House					175			175			185		
- Contractor					100			100					
7. Program Management Support					335			448			553		
8. System Fielding Support				208			384			272			
9. Royalties							441						
10. Refurbishment of existing units				4021									
11. Manuals				500									
12. Other Hardware / BII				932									
13. Army Technical Support				320									
<b>TOTAL</b>							<b>16856</b>			<b>16669</b>			<b>17227</b>

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			Weapon System Type:			P-1 Line Item Nomenclature: CAUSEWAY SYSTEMS (R97500)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY99 Subsystem Set - Floating Causeway	DOT Volpe, Cambridge, MA	C/FP	TACOM	May-99	Nov-99	2	3587	YES		
FY 00 RRDF Causeway Ferry	TBS TBS	FFP FFP	TACOM TACOM	Jun-00 Jun-00	Jun-01 Aug-01	1 1	11181 2624	YES YES		Feb 00
FY 01 Floating Causeway Causeway Ferry	TBS TBS	Option Option	TACOM TACOM	Jan-01 Jan-01	Mar-02 Oct-01	1 1	13029 2642	YES YES		

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: RAILWAY CAR, FLAT, 89 FOOT (M37000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	835	320		120	45							1320
Gross Cost	63.9	13.7	0.0	13.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	96.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	63.9	13.7	0.0	13.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	96.1
Initial Spares												
Total Proc Cost	63.9	13.7	0.0	13.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	96.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** These are new 89 foot Multi-purpose rail flat cars of a design already approved by the Association of American Railroads (AAR). The cars have a steel deck and can carry up to 100 Tons. They are primarily used for transporting heavy equipment such as self-propelled howitzers, Bradleys, Multiple Launch Rocket Systems, and International Standards Organization (ISO) containers. These cars are not available on the used rail car market. The Army has tried on two occasions, FY95 and FY97, to buy used 100 Ton Multi-purpose cars and both times have been unsuccessful.

Exhibit P-5, Weapon OPA Cost Analysis			Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: RAILWAY CAR, FLAT, 89 FOOT (M37000)			Weapon System Type:		Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware	A												
Railway Car, 89 Foot Multi-purpose					11311	125	90	2366	26	91			
Railway Car, 89 Foot Multi-purpose								2185	23	95			
Railway Car, 68 Foot Multi-purpose					1130	10	113						
2. DOT (VOLPE Procurement Support)					821			298					
3. Program Management Support					317			80					
<b>TOTAL</b>					<b>13579</b>			<b>4929</b>					

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: RAILWAY CAR, FLAT, 89 FOOT (M37000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY99										
Railway Car, 89 Foot, 100 Ton	Silver Enterprises, Cape Coral, FL	C/FP	DOT - Volpe Contract	Oct-99	Apr-00	125	90	Yes		
Railway Car, 68 Foot, 100 Ton	Mid-America Equip., Mesa, AZ	C/FP	DOT - Volpe Contract	Jul-99	Apr-00	10	113	Yes		
FY00										
Railway Car, 89 Foot, 100 Ton	Silver Enterprises, Cape Coral, FL	Option	DOT - Volpe Contract	Feb-00	Aug-00	26	91	Yes		
Railway Car, 89 Foot, 100 Ton	TBS	C/FP	DOT - Volpe Contract	Jul-00	Jul-01	23	95	Yes		Mar 00
<b>REMARK</b> New contract required in FY 00 because the option quantity will be met with the 26 cars.										





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (FLOAT/RAIL) (ML5355)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	50.7	3.7	8.0	2.2	6.8	6.7	3.2	3.6	4.6	4.7		94.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	50.7	3.7	8.0	2.2	6.8	6.7	3.2	3.6	4.6	4.7		94.2
Initial Spares												
Total Proc Cost	50.7	3.7	8.0	2.2	6.8	6.7	3.2	3.6	4.6	4.7		94.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Railroad equipment consists of locomotives, rolling stock, track maintenance equipment, etc., used to support Army ammunition plants, Army Materiel Command (AMC) depots, and Forces Command (FORSCOM) and Training and Doctrine (TRADOC) installations in peacetime and mobilization missions. Funding for Float items is for the acquisition of six Roll-on/Roll-off Discharge Facility (RRDF) to support C3 Readiness Objective. The Modular Causeway Components provide a floating platform interface between Roll-on Roll-off (RO/RO) ship and lighters for the discharge of rolling cargo during Logistics Over The Shore (LOTS) operations.

**JUSTIFICATION:** In FY01, funding provides for the replacement of overage, logistically unsupportable assets. Current items are in some cases, already unserviceable, and in other cases, are either unsafe or not cleared for use under Federal Railroad Administration (FRA)/Maritime Standards.

- Boxcar, 100 Ton, 85 Foot, Reconditioned: The Boxcar will provide a safe, secure means for the holding, transportation, and handling of hazardous materials used in the ammunition manufacturing process, and in the movement of completed ammunition to distribution points. This railroad equipment meets Federal Railroad Administration (FRA) standards and increases Army munition plant readiness capabilities.
- Railcars, Side, Dump, 100 Ton: Provide for cost-effective movement, staging and dynamic unloading of consumable aggregates (coal, gravel, sand, etc) at Army depots and in Army industrial operations. Replace overage railcars.

Exhibit P-40C Budget Item Justification Sheet		Date
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment		P-1 Item Nomenclature ITEMS LESS THAN \$5.0M (FLOAT/RAIL) (ML5355)
Program Elements for Code B Items	Code	Other Related Program Elements
<p>3. <u>Railcars, Hopper, 100 Ton</u>: Provide for cost-effective movement and staging of bulk commodities, including ballast, in Army industrial facilities and base operations.</p> <p>4. <u>Gondolas, 60 Foot, 100 Ton</u>: Gondolas provide Army physical plants with the ability to move large quantities of scrap material and aggregates (stone and similar materials) in an efficient and expeditious manner. The refurbished and reconditioned gondolas will be fully compliant with all FRA safety standards.</p> <p>5. <u>Car Spotters</u>: These rail vehicles perform railcar switching tasks and can substitute as a cost-effective alternative for locomotives in many situations. Requirements exist at McAlester, Aberdeen, Radford and Redstone.</p> <p>6. <u>Causeway System Components</u>: Includes survey of causeway components on "loan" to units and purchase of items discovered to be in deteriorated condition (includes flexors, mooring bits, ancillary equipment, etc). This will enable equipment to be officially released to units, thereafter becoming their responsibility for repair.</p> <p>7. <u>Miscellaneous Watercraft Equipment</u>: Includes movable Fire Extinguishing Systems, Landing Craft, Utility Reduction Gears, and Telelogistics modules for ocean-going craft.</p> <p>8. <u>Locomotive Fleet MWO</u>: Procure and apply FRA/AAR/EPA required modifications including Event Recorders/Speedometers, Ditch Lights, Drip Pans, and Kim Hot Start Kits.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (FLOAT/RAIL) (ML5355)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
BOXCAR, 100 TON, 85 FOOT	A							260	4	65	272	4	68
FLATCAR, 100 TON, 89 FOOT	A				1999	20	100	760	8	95			
RAILCARS, SIDE, DUMP	A							156	2	78	162	2	81
RAILCARS, HOPPERS	A							144	2	72	150	2	75
GONDOLAS, 100 TON, 60 FOOT	A				150	2	75	150	2	75	156	2	78
CAR SPOTTERS, LIGHT DUTY	A							375	1	375	780	2	390
CAR SPOTTERS, HEAVY DUTY	A							1300	2	650	670	1	670
RAIL (DOT VOLPE PROCUREMENT)	A							270			250		
LOCOMOTIVE, FLEET MWO	A										900		
RAIL PROGRAM MANAGEMENT	A				98			221			243		
MISC WATERCRAFT EQUIPMENT	A							1203			1809		
CAUSEWAY ANCHOR SYSTEM	A							94			78		
CAUSEWAY SYSTEM COMPONENTS	A							1875			1252		
<b>TOTAL</b>					<b>2247</b>			<b>6808</b>			<b>6722</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (WATERCRAFT/RAIL) (ML5355)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Boxcar, 100 Ton, 85 Foot, (Reconditioned) FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	May 00 May 01	Mar 01 Mar 02	4 4	65 68	Yes		Dec 99
Railcars, Side Dump FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	May 00 Feb 01	Mar 01 Oct 01	2 2	78 81	Yes		Dec 99
Railcars, Hopper FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	May 00 Mar 01	Feb 01 Jan 02	2 2	72 75	No		Feb 00
Gondolas, 100 Ton, 60 Foot FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	Apr 00 Feb 01	Nov 00 Nov 01	4 2	75 78	Yes Yes		Jan 00
Car Spotters, Light Duty FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	Jun 00 Feb 01	Jun 01 Jan 02	1 2	375 390	No	Feb 00	Mar 00
Car Spotters, Heavy Duty FY00 FY01	TBS TBS	C/FP Option	DOT, Volpe, MA DOT, Volpe, MA	Jun 00 Feb 01	Apr 01 Jan 02	2 1	650 670	No	Feb 00	Mar 00

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: GENERATORS AND ASSOCIATED EQUIP (MA9800)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	1331.3	30.9	9.1	65.6	79.6	85.9	58.9	70.7	67.1	58.7		1857.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1331.3	30.9	9.1	65.6	79.6	85.9	58.9	70.7	67.1	58.7		1857.6
Initial Spares												
Total Proc Cost	1331.3	30.9	9.1	65.6	79.6	85.9	58.9	70.7	67.1	58.7		1857.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Tactical Quiet Generators (TQG) and 2kW Military Tactical Generator (MTG) diesel programs are a result of Army and DoD direction to replace the current generator fleet. The current fleet is overaged and does not meet current user requirements. These requirements are designed to introduce into the DoD inventory a new family of generators (sizes 2kW through 920kW) that will satisfy the user requirements for:

1. Reduction in detection by threat forces of 80% (low operating noise and infrared suppression).
2. Improved ground mobility for power units/power plants (PU/PP) (trailer mounted generator sets).
3. Improved reliability and lower operating and support costs (reduction in scheduled maintenance, reduction in fuel consumption).
4. Improved battlefield survivability (high altitude electromagnetic pulse protection).
5. Single fuel on the battlefield (diesel/JP8).
6. Reduced generator requirements by utilizing the Distribution Illumination System, Electric (DISE)

**JUSTIFICATION:** FY01 funds will provide for the replacement of the current fleet of overaged, gasoline fueled generators with modernized diesel assets that will enhance the user's safety and survivability. These modernized mobile generators provide electrical power to virtually every weapon, communication, medical and combat support system in the Army inventory. FY01 continues the production and fielding of 2kW, 3kW and 5-60kW TQG skid mounted generator sets, power units and power plants in support of Force Package I and II.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: GENERATORS AND ASSOCIATED EQUIP (MA9800)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
Small Generator Sets (2kW-3kW)	A				5614			26139			31741		
Medium Generator Sets (5kW-60kW)	A				37695			36217			41825		
Large Generator Sets (100kW-920kW)	B							474					
Power Units/Power Plants	A				16855			12070			12320		
Readiness Incentives					5388			4689					
<b>TOTAL</b>					<b>65552</b>			<b>79589</b>			<b>85886</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

SMALL SETS (2-3 KW)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	5.3	1.3	5.6	26.1	31.7	17.7	22.4	10.7	10.7		131.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	5.3	1.3	5.6	26.1	31.7	17.7	22.4	10.7	10.7		131.5
Initial Spares												
Total Proc Cost	0.0	5.3	1.3	5.6	26.1	31.7	17.7	22.4	10.7	10.7		131.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** 2kW Military Tactical Generator, Manportable/Skid mounted, Diesel/JP8 fueled, AC (60Hz) and DC (28Vdc) and 3kW Tactical Quiet Generator, Skid Mounted, Diesel Fuel (60Hz and 400Hz).

**JUSTIFICATION:** FY01 continues the production and fielding of the small generator sets in support of Force Package I and II. This program will replace existing overaged gasoline engine driven sets with modernized new assets with improved reliability, reduced noise signatures, and diesel/JP8 fueled engines. These modernized sets will reduce operating and support costs thus providing a lower system total ownership cost. The small generator program supports the Multiple Launch Rocket systems, missile air defense systems, mobile kitchen units, other combat support systems and numerous communication systems.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: SMALL SETS (2-3 KW)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Item Hardware(M59400)													
2kW/60Hz	A				4402	862	5	5799	1102	5	8302	1538	5
2kW/ DC	A							364	80	5			
3kW/60Hz	B							17958	2210	8	19125	2298	8
3kW/60Hz(FA)	B										240	6	40
3kW/400Hz	B							47	5	9			
3kW/400Hz(FA)	B										240	6	40
2. Engineering Support					411			682			682		
3. Engineering Change Orders					601			500			500		
4. Testing											400		
5. System Fielding Support											700		
6. System Assessment											150		
7. Logistic Support											403		
8. Data								56			399		
9. PM Management Support					200			733			600		
<b>TOTAL</b>					<b>5614</b>			<b>26139</b>			<b>31741</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: SMALL SETS (2-3 KW)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
2kW/60Hz										
FY99	Dewey Electronics, Oakland, NJ	C/FP-R5(3)	CECOM	Jan-99	Sep-99	862	5	Yes		
FY00	Dewey Electronics, Oakland, NJ	C/FP-R5(4)	CECOM	Jan-00	Sep-00	1102	5	Yes		
FY01	Dewey Electronics, Oakland, NJ	C/FP-R5(5)	CECOM	Jan-01	Sep-01	1538	5	Yes		
2kW/DC										
FY00	Dewey Electronics, Oakland, NJ	C/FP-R5(4)	CECOM	Jan-00	Sep-00	80	5	Yes		
3kW/60Hz										
FY00	Fermont, Bridgeport, CT	C/FP-R5(4)	CECOM	Jan-00	Aug-00	2210	8	Yes		
FY01	Fermont, Bridgeport, CT	C/FP-R5(5)	CECOM	Jan-01	Aug-01	2298	8	Yes		
FY01 (New Contract/First Article)	TBS	C/FP-R8(1)	CECOM	Feb-01	Jul-02	6	40	Yes		
3kW/400Hz										
FY00	Fermont, Bridgeport, CT	C/FP-R5(4)	CECOM	Jan-00	Aug-00	5	9	Yes		
FY01 (New Contract/First Article)	TBS	C/FP-R8(1)	CECOM	Feb-01	Jul-02	6	40	Yes		

REMARKS:







**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

MED SETS (5-60 KW)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	168.0	5.3	5.1	37.7	36.2	41.8	19.5	21.3	26.1	21.7		382.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	168.0	5.3	5.1	37.7	36.2	41.8	19.5	21.3	26.1	21.7		382.7
Initial Spares												
Total Proc Cost	168.0	5.3	5.1	37.7	36.2	41.8	19.5	21.3	26.1	21.7		382.7
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Medium Generator program includes the 5kW, 10kW, 15kW, 30kW, and 60kW Generator Sets, Skid Mounted, Diesel Fueled Tactical Quiet Generator, 60Hz and 400Hz.

**JUSTIFICATION:** The FY01 program continues the production and fielding of the medium generator sets in support of Force Package I/II. These generators will replace existing overaged gasoline/diesel sets with modernized assets that increase safety and survivability by improving reliability, reducing noise signatures, reducing weight, providing high altitude electromagnetic pulse protection, and increasing infrared signature suppression. These new modernized sets which will reduce total ownership costs support Missile/Air Defense Systems (THAADs, Tow Missile System, Patriot Missile System, Avenger and Multiple Launch Rocket System), Tactical Operations Centers, numerous communication and combat support systems.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: MED SETS (5-60 KW)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Item Hardware (M53500)													
5kW/60Hz	A				12768	1248	10	5859	553	11	6596	600	11
5kW/400Hz	A												
10kW/60Hz	A				12195	1048	12	12458	1033	12	10400	831	13
10kW/400Hz	A							459	30	15			
15kW/60Hz	A				1852	150	12	3918	312	13	3555	275	13
15kW/400Hz	A				383	26	15				537	35	15
30kW/60Hz	A				1935	90	22	4917	223	22	6111	263	23
30kW/60Hz (FA)	B										360	6	60
30kW/400Hz	A				476	20	24				436	17	26
30kW400Hz (FA)	B										360	6	60
60kW/60Hz	A				2449	100	24	1905	76	25	4862	184	26
60kW/60Hz (FA)	B										360	6	60
60kW/400Hz	A				222	8	28				1344	45	30
60kW/400Hz (FA)	B										360	6	60
2. Engineering Support					1577			1966			1800		
3. Engineering Change Orders					430			600			600		
4. Testing					2308			1000			768		
5. System Fielding Support											1009		
6. System Assessment											200		
7. Logistics Support											1017		
8. Data					150			150			150		
9. PM Management Support					950			975			1000		
10. Contractor Claim								2010					
<b>TOTAL</b>					<b>37695</b>			<b>36217</b>			<b>41825</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: MED SETS (5-60 KW)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>5kW/60Hz</b>										
FY99	Fermont, Bridgeport, CT	C/FP-R10(2)	CECOM	Jan-99	Jan-00	1248	10	Yes		
FY00	Fermont, Bridgeport, CT	C/FP-R10(3)	CECOM	Jan-00	Jan-01	553	10	Yes		
FY01	Fermont, Bridgeport, CT	C/FP-R10(4)	CECOM	Jan-01	Jan-02	600	10	Yes		
<b>10kW/60Hz</b>										
FY99	Fermont, Bridgeport, CT	C/FP-R10(2)	CECOM	Jan-99	Jan 00	1048	12	Yes		
FY00	Fermont, Bridgeport, CT	C/FP-R10(3)	CECOM	Jan-00	Jan-01	1033	12	Yes		
FY01	Fermont, Bridgeport, CT	C/FP-R10(4)	CECOM	Jan-01	Jan-02	831	13	Yes		
<b>15kW60Hz</b>										
FY99	Fermont, Bridgeport, CT	C/FP-R10(2)	CECOM	Jan-99	Jan-00	150	12	Yes		
FY00	Fermont, Bridgeport, CT	C/FP-R10(3)	CECOM	Jan-00	Jan-01	312	13	Yes		
FY01	Fermont, Bridgeport, CT	C/FP-R10(4)	CECOM	Jan-01	Jan-02	275	13	Yes		
<b>15kW/400Hz</b>										
FY99	Fermont, Bridgeport, CT	C/FP-R10(2)	CECOM	Jan-99	Jan-00	26	15	Yes		
FY01	Fermont, Bridgeport, CT	C/FP-R10(4)	CECOM	Jan-01	Jan-02	35	15	Yes		

**REMARKS:** Rebuy contract for 5,10, 15kW sets was awarded to Fermont, Bridgeport, CT, Jun 97. Contract is a 10 year requirements contract. PCO change from ATCOM to CECOM is due to BRAC 95 realignment. Unit cost is firm fixed price regardless of quantity.

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: MED SETS (5-60 KW)				
WBS Cost Elements:	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
30kW/60Hz											
FY99	MCII, Dallas, TX	C/FP-R5(3)	CECOM	Jul-99	Jul-00	90	22	Yes			
FY00	MCII, Dallas, TX	C/FP-R5(4)	CECOM	Feb-00	Feb-01	223	22	Yes			
FY01	MCII, Dallas, TX	C/FP-R5(5)	CECOM	Jan-01	Jan-02	263	23	Yes			
FY01 (New Contract/First Article)	TBS	C/FP-8(1)	CECOM	Mar-01	Sep-02	6	60	Yes			
30kW/400Hz											
FY99	MCII, Dallas, TX	C/FP-R5(3)	CECOM	Jul-99	Jul-00	20	24	Yes			
FY01	MCII, Dallas, TX	C/FP-R5(5)	CECOM	Jan-01	Jan-02	17	26	Yes			
FY01 (New Contract/First Article)	TBS	C/FP-R8(1)	CECOM	Mar-01	Sep-02	6	60	Yes			
60kW/60Hz											
FY99	MCII, Dallas, TX	C/FP-R5(3)	CECOM	Jul-99	Jul-00	100	24	Yes			
FY00	MCII, Dallas, TX	C/FP-R5(4)	CECOM	Feb-00	Feb-01	76	25	Yes			
FY01	MCII, Dallas, TX	C/FP-R5(5)	CECOM	Jan-01	Jan-02	184	26	Yes			
FY01 (New Contract/First Article)	TBS	C/FP-R8(1)	CECOM	Mar-01	Sep-02	6	60	Yes			
60kW/400Hz											
FY99	MCII, Dallas, TX	C/FP-R5(3)	CECOM	Jul-99	Jul-00	8	28	Yes			
FY01	MCII, Dallas, TX	C/FP-R5(5)	CECOM	Jan-01	Jan-02	45	30	Yes			
FY01 (New Contract (First Article)	TBS	C/FP-R8(1)	CECOM	Mar-01	Sep-02	6	60	Yes			

**REMARKS:** The FY96 contract for 30 and 60kW sets awarded to MCII, Dallas, TX, was for design and testing on sets with new certified engines and follow-on production.































**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

POWER UNITS/POWER PLANTS

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	74.8	8.3	2.6	16.9	12.1	12.3	7.9	12.6	12.3	11.1		170.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	74.8	8.3	2.6	16.9	12.1	12.3	7.9	12.6	12.3	11.1		170.9
Initial Spares												
Total Proc Cost	74.8	8.3	2.6	16.9	12.1	12.3	7.9	12.6	12.3	11.1		170.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Depot/Field Manufacturing Program: The integration of Tactical Quiet Generator's on trailers with the electronic components are defined as power units or power plants. Power units consist of one TQG mounted on trailer . Power plants consist of two TQG's mounted on one or two trailer interfaces with a switchbox installed. The trailers are procured from TACOM and the electronic components/raw materials are procured through the depot or by other government activities and competitive contracts.

**JUSTIFICATION:** FY01 continues the acquisition and manufacture of power unit/power plant integration with TQG assets designed to provide greater reliability, quieter operation, extended mean-time-between-failure, and replace overaged diesel and gasoline fueled assets. The FY01 program will continue assembly and fielding of TQG's to Force Package I and II units. Total package fielding of Missile/Air Defense Systems, Communications Systems and Combat Support Systems are dependent upon these power unit power plant configurations.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: Power Units/Power Plants			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Item Hardware (R62700)													
AN/MJQ35	A				170	15	11	311	28	11	588	51	12
AN/MJQ36	A							138	12	11	46	4	12
AN/MJQ37	A				2597	230	11	1394	123	11	1175	102	12
AN/MJQ38	A							12	1	11			
AN/MJQ39	A				560	40	14	520	38	14	195	14	14
AN/MJQ40	A				2100	150	14	1382	101	14	877	63	14
AN/MJQ41	A				1232	88	14	369	27	14	724	52	14
AN/MJQ42	A										270	21	13
AN/MJQ43	A										180	14	13
PU797	A				1860	310	6	1826	306	6	1772	291	6
PU798	A				3000	500	6	1772	297	6	732	120	6
PU799	A							180	30	6	6	1	6
PU800	A				288	40	7	126	19	7	147	22	7
PU801	A				240	40	6	60	10	6	24	4	6
PU802	A				1633	230	7	1055	161	7	1453	218	7
PU803	A				770	110	7	637	97	7	867	130	7
PU804	A							33	5	7	73	11	7
PU805	A				431	60	7	385	59	7	593	89	7
PU806	A							80	12	7			
2. Engineering Support					1174			1102			1100		
3. Engineering Change Orders					100			100					
4. Testing					100			100			100		
5. System Fielding Support											438		
6. System Assessment													
7. Logistics Support											460		
8. Data					200								
9. PM Management Support					400			400			500		
10. Other								88					
Total					16855			12070			12320		

**Exhibit P-5a, Budget Procurement History and Planning**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Power Units/Power Plants					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Power Units/Power Plants										
FY98	Tobyhanna Army Depot, PA	WR	CECOM/TOAD	Jan-98	Jun-98	125		Yes		
FY99	Tobyhanna Army Depot, PA	WR	CECOM/TOAD	Jan-99	Jun-99	1700		Yes		
FY00	Tobyhanna Army Depot, PA	WR	CECOM/TOAD	Jan-00	Jun-00	1326		Yes		
FY01	Tobyhanna Army Depot, PA	WR	CECOM/TOAD	Jan-99	Jun-99	1207		Yes		

REMARKS: Unit cost for production includes: Depot procurement of electrical components and raw materials, manufacturing the power unit/power plants, integration packages, and integration of components and ancillary equipment into a completed power unit/power plant.







Exhibit P-40, Budget Item Justification Sheet

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT /Other Support Equipment / 53600426

P-1 Item Nomenclature:

GENERATOR READINESS INCENTIVES PROGRAM

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	91.1	2.4	0.7	5.4	4.7	0.0	0.0	0.0	0.0	0.0		104.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	91.1	2.4	0.7	5.4	4.7	0.0	0.0	0.0	0.0	0.0		104.3
Initial Spares												
Total Proc Cost	91.1	2.4	0.7	5.4	4.7	0.0	0.0	0.0	0.0	0.0		104.3
Flyaway U/C												
Wpn Sys Proc U/C												

DESCRIPTION: This program supports the system fielding (new equipment training and total package fielding) costs associated with the generator program and contractor support. It also supports readiness improvement programs: Generator System Assessments, production engineering and various testing on generator systems that are not separately authorized.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: Rough Terrain Container Handler, 53,000 LBS (M41200)

Program Elements for Code B Items: 0604804A DH14  
 Code: B  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	332			18		77	81	84	29	26		647
Gross Cost	94.3	0.0	0.0	20.4	0.0	40.0	43.1	45.2	16.0	15.7	0.0	274.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	94.3	0.0	0.0	20.4	0.0	40.0	43.1	45.2	16.0	15.7	0.0	274.7
Initial Spares												
Total Proc Cost	94.3	0.0	0.0	20.4	0.0	40.0	43.1	45.2	16.0	15.7	0.0	274.7
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Rough Terrain Container Handler (RTCH) is equipped with a 20' to 40' expandable top handler capable of handling the new International Standardization Organization (ISO) family of 8' wide, 20' and 40' long containers weighting up to 53,000 pounds. The RTCH will operate worldwide on prepared surfaces in port or depot operations, sand terrain during Joint Logistics Over The Shore operations, and cross country rough terrain during Ordnance ammunition handling operations. The RTCH is four wheel drive and capable of fording 5' of water. Performance Specification Date Jan 98; DTE/IOTE/OTE/TDP are all N/A as item is nondevelopment; TC Generic scheduled for April 00; TC Standard scheduled for June 01.

**JUSTIFICATION:** FY 01 will procure 75 RTCHs. The Army needs an improved rough terrain container handler with an increased lift capacity of 53,000 pounds. The previous RTCH only has a lift capacity of 50,000 pounds, which no longer meets the weight requirement of new 20' commercial containers. Currently, the RTCH supports world wide deployments at theatre level. The Army's Battlefield Distribution System plan call for expanded container handling missions forward into the Corps, Division and Brigade Support areas. Lessons learned from Somalia and Haiti indicate a significant shortfall in container handling capability in terms of numbers of RTCH's and in vehicle capability. This shortfall is to be remedied in part through creation of the Improved Cargo Handling Operations (ICHO) units and increases in the Army Authorization Objective (AAO) from 346 to 651. The new ICHO units began activating in FY 99 and continues through June 2001. The current RTCH fleet (282) was procured in 1978 and is now approaching 20 years old. Their reliability and cost effectiveness will sharply decrease as their planned life expectancy was 15 years. The increased requirement for container handling requires a RTCH that is more robust and includes technologies and capabilities compatible with current commercial standards. The new machine will be more transportable than the current machine to support worldwide deployability and battlefield mobility, will have increased lift capacity and will comply with new environmental engine emission standards.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ROUGH TERRAIN CONTAINER HANDLER, 53,000 LBS (M41200)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Hardware					18770	32	586				36900	75	492
2. Refurbishment											206		
3. Engineering Change Order					190						1102		
4. Documentation					414						150		
5. Testing (Production Qualification test- Government (ATC))					438								
6. Engineering In-House					115						207		
7. Program Management Support					376						473		
9. System Fielding Support					113						993		
<b>TOTAL</b>					20416						40031		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: TRUCK, FORK LIFT, DE, PT, RT, 50000 LB (M41200)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 99	TBS	C/FP REQ 5(1)	TACOM	Apr-00	Sep-00	32	586	Yes		
FY 01	TBS	C/FP REQ 5(2)	TACOM	Jan-01	Jul-01	75	492	Yes		

REMARKS: First year price includes non-recurring start up costs.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ALL TERRAIN LIFTING ARMY SYSTEM (M41800)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	130	168	31	171	196	196	233	226	211	200		1762
Gross Cost	13.6	16.5	3.3	18.8	23.5	24.4	29.9	29.8	30.1	28.5	0.0	218.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	13.6	16.5	3.3	18.8	23.5	24.4	29.9	29.8	30.1	28.5	0.0	218.4
Initial Spares												
Total Proc Cost	13.6	16.5	3.3	18.8	23.5	24.4	29.9	29.8	30.1	28.5	0.0	218.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The All Terrain Lifting, Army System (ATLAS) is a rough terrain variable reach forklift having cross country mobility and a speed of 23 MPH. The variable reach capability is used to load and unload palletized cargo into and out of 20-foot International Standardization Organization (ISO) containers. Maximum lift capacity is 10,000 pounds at a 48-inch load center. Two carriages, 6000 lb and 10000 lb are furnished with the forklift and are quickly interchangeable, providing flexibility in accomplishing the overall mission. It can unload palletized loads from ISO containers with the 6000 LB carriage and can handle breakbulk palletized cargo and the Air Force 463L pallet with the 10000 LB carriage. The ATLAS can drive on and off C-130 aircraft and is transportable by truck, rail and sea.

**JUSTIFICATION:** FY 01 continues procurement of the ATLAS. The currently fielded military designed 6,000 lb and 10,000 lb rough terrain forklifts fielded 1968-1976 and the 10,000 lb rough terrain forklifts fielded again in 1983-1985 no longer meet new mission requirements supporting the Army's Strategic Mobility Plan. Specifically, the plan calls for deployment by containerized cargo. The ATLAS's variable reach enables ISO container loading and unloading of palletized cargo, which can not be done with the current fleet. Additionally, parts are no longer available, and sustainment is through cannibalization. These vehicles are obsolete, but have not been removed from the inventory for lack of replacement forklifts, a critical element in the logistics sustainment of deployed units. The current 10,000 lb forklifts are not easily transportable by C-130 and C-17 aircraft, requiring disassembly and multiple aircraft sorties. Deploying units need a mobile forklift that can unload cargo immediately upon arrival in a conflict area. The ATLAS Army Authorized Objective is 3235 and the ATLAS is being fielded to Transportation, Quartermaster, Ordnance, Missile Munition, Engineering, Aviation, and Medical Units in the Army.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ALL TERRAIN LIFTING ARMY SYSTEM (M41800)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware	A				17613	171	103	22800	190	120	23312	188	124
2. Government Furnished Equipment					300								
3. Engineering Change Order					509			150			200		
4. Documentation					70								
5. Testing-Comparison											124		
6. Engineering In-House					56			59			61		
7. Program Management Support					257			250			259		
8. System Fielding Support								210			451		
<b>TOTAL</b>					18805			23469			24407		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ALL TERRAIN LIFTING ARMY SYSTEM (M41800)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware										
FY 99	TRAK INTERNATIONAL PORT WASHINGTON, WI	CFP REQ 4(4)	TACOM	Jan-99	Jul-99	171	103	YES		
FY 00	TRAK INTERNATIONAL PORT WASHINGTON, WI	CFP OPTION	TACOM	Jan-00	Jul-00	190	120	YES		
FY 01	TRAK INTERNATIONAL PORT WASHINGTON, WI	SSFP REQ 2(1) SSFP	TACOM	Dec-00	Jun-01	188	124	YES		

**REMARKS:**

Increase in price in FY 00 and FY 01 due to negotiation of the contract unit price for fifth year unpriced option on current contract.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ROUGH TERRAIN CONTAINER CRANE (X00900)

Program Elements for Code B Items: 060804 DH14  
 Code: A  
 Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty	254			2	22	4						282
Gross Cost	51.7	0.0	0.0	1.1	10.9	2.1	0.0	0.0	0.0	0.0	0.0	65.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	51.7	0.0	0.0	1.1	10.9	2.1	0.0	0.0	0.0	0.0	0.0	65.8
Initial Spares												
Total Proc Cost	51.7	0.0	0.0	1.1	10.9	2.1	0.0	0.0	0.0	0.0	0.0	65.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Rough Terrain Container Crane (RTCC) has a diesel engine, 4 wheel drive steering, and a hydraulically operated telescopic boom with 360 degree rotation capability. The RTCC is capable of handling the 20 foot and 40 foot long American National Standards Institute/International Standardization Organization (ANSI/ISO) family of containers. It lifts max loaded 20' ISO containers (52,910 lbs.) at 27' reach and max loaded 40 feet containers (67,200 lbs.) at 22' reach. The RTCC will also store and stack containers up to three high. It will operate worldwide on improved and unimproved surfaces, cross country rough terrain, and beach areas. It has a 5' saltwater fording capability needed for Joint Logistics Over the Shore operations. Transportation Cargo Transfer Companies, Transportation Terminal Service Companies, and General Support Ammunition Companies use the RTCC to lift and transfer containers from the ground to waiting transportation or from one mode of transportation to another. The RTCC is also used to lift and transfer palletized projectiles, PLS flatracks, and bulk supplies.

**JUSTIFICATION:** FY 01 continues procurement of the RTCC. The RTCC requirement is supported by the Defense Planning Guidance and Army's Battlefield Distribution System Plan, which call for expanding the container crane handling mission forward into the Corps, Division, and Brigade Support areas. Funding is/will be used to fill shortages in Transportation Cargo Transfer Companies when the units convert under the new Improved Cargo Handling Operation (ICHO) concept during FY 99-FY 01. Under TAA03, the Army's Authorization Objective (AAO) has increased from 255 to 354. Currently, of the 120 RTCCs required for ICHO activation's, only 42 are on hand. RTCC productivity and reliability will be of critical importance by minimizing bottlenecks and backlogs. The massive increase in the use of containers by all Army units also intensifies the impact current RTCC shortages will have on future deployments. Initial force projections and faster velocity management of initial and sustainment shipments will create an estimated workload of 500 containers per day per company.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ROUGH TERRAIN CONTAINER CRANE (X00900)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY 98			FY 99			FY 00			FY 01		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
1. Hardware	A				806	2	403	8360	22	380	1613	4	403
2. Refurbishment								153					
3. Engineering Change Order								390			47		
4. Documentation					35			240					
5. Testing													
a. Contract Test-First Article Test								60					
b. Production Verification Test					28			363					
6. Engineering In-House					55			118			55		
7. Program Management Support					200			351			238		
8. System Fielding Support								848			103		
TOTAL					1124			10883			2056		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ROUGH TERRAIN CONTAINER CRANE (X00900)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Hardware FY 99	Grove, U.S. L.L.C. Shady Grove, PA.	SS FP	TACOM	Mar-00	Oct-00	2	403	YES		
FY 00	Grove, U.S. L.L.C. Shady Grove, PA.	SS *FP/Option	TACOM	Jun-00	Jan-01	22	380			
FY 01	Grove, U.S. L.L.C. Shady Grove, PA.	SS *FP/Option	TACOM	Jan-01	Jul-01	4	403			

REMARKS: \*Matrix - Pricing by range of quantity, 1-5, 6-10, 11-20, 20+.  
Based on the small buy quantity and fleet standardization desired by CASCOM, a sole source rebuy of the same make and model is recommended.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ITEMS LESS THAN \$5.0M (MHE) (ML5365)

Program Elements for Code B Items:				Code:	Other Related Program Elements:							
				A								
	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	65.3	2.0	1.6	1.7	1.8	1.2	1.5	1.5	1.4	1.4	0.0	79.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	65.3	2.0	1.6	1.7	1.8	1.2	1.5	1.5	1.4	1.4	0.0	79.4
Initial Spares												
Total Proc Cost	65.3	2.0	1.6	1.7	1.8	1.2	1.5	1.5	1.4	1.4	0.0	79.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This program covers various types of Materials Handling Equipment (MHE) where the total acquisition cost for each line item is below \$5,000,000 (total expended program per year).  
 Tractor Warehouse - Self propelled commercial diesel towing tractor capable of towing loads up to 4,000 lbs. Used primarily to pull trailer loads or break bulk commodities in warehouses at depots and terminal operations.  
 20 Foot Spreader Bars - This is a commercial design spreader bar for use with crane hook attachments. It is an ASIOE for the Rough Terrain Container Crane (RTCC) X009 to handle 20-foot ANSI/ISO containers.

**JUSTIFICATION :** FY 01 funds equipment required for transportation, quartermaster, and materiel handling units in order to replace or retrofit existing systems to ensure that equipment is safe to operate, provides the soldier with reliable systems to support materiel handling requirements, and does not require excessive Operating and Support (O & S) costs to maintain. This equipment is critical in support of fleet mobilization and sustainment roles. FY 01 procures 20 Foot Spreader Bars - A Safety Of Use Message (SOUM) was released 21 Aug 98. Currently, commercial 20' containers could weigh up to 67,200 lbs. The current Army fleet of 20 foot spreader bars is rated at 44,800 lbs. This procurement is to support a fleet replacement of 20 foot spreader bars which are ASIOE for the Rough Terrain Container Crane (RTCC).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MHE) (ML5365)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
1. Tractor Warehouse M487					851	37	23						
2. Spreader Bars R134					520	52	10	1460	146	10	540	54	10
3. Program Management Support					361			296			325		
4. System Fielding Support											366		
<b>TOTAL</b>					<b>1732</b>			<b>1756</b>			<b>1231</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ITEMS LESS THAN \$5.0M (MHE) (ML5365)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
1. Tractor Warehouse FY 99	Harlan Corp. Kansas City, KS	FFP	TACOM	Mar-99	Apr-99	37	23	YES		
2. Spreader Bars FY 99	TBS	C/FP REQ 5(1)	TACOM	Jul-00	Jan-01	52	10	YES		Nov 99
FY 00	TBS	C/FP REQ 5(1)	TACOM	Jul-00	Mar-01	146	10	YES		
FY 01	TBS	C/FP REQ 5(2)	TACOM	Jan-01	Sep-01	54	10	YES		

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: COMBAT TRAINING CENTERS SUPPORT (MA6600)

Program Elements for Code B Items: 654715  
 Code: A/B  
 Other Related Program Elements: OMA-115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	271.3	26.5	28.1	47.9	17.4	81.8	0.2	8.4	27.7	31.7	0.0	541.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	271.3	26.5	28.1	47.9	17.4	81.8	0.2	8.4	27.7	31.7	0.0	541.0
Initial Spares												
Total Proc Cost	271.3	26.5	28.1	47.9	17.4	81.8	0.2	8.4	27.7	31.7	0.0	541.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The Army continues with the implementation of the strategy in the Combat Training Center (CTC) Master Plan. CTC incorporates the following programs. The National Training Center (NTC), the Combat Maneuver Training Center (CMTC), and the Joint Readiness Training Center (JRTC). Instrumentation systems are being procured and upgraded under this program for the three maneuver training centers to provide the capability to capture and process the actual training data and provide instructive After Action Reviews (AARs). This provides valuable feedback to the unit Commander and soldiers training at the centers which can be carried back to the unit and used for follow-on sustainment training. The CTC's are the Army's premiere training area. Overall, the CTC experience provides realistic combat training with long-term training benefits, thereby, increasing the unit's combat readiness.

**JUSTIFICATION:**  
 The FY01 funds supports the: (1) JRTC Military Operations in Urban Terrain (MOUT) by continuing procurement of the Phase II objective, (2) Opposing Forces Surrogate Vehicle (OSV), (3) National Training Center Range Data Management System (NTC RDMS) and (4) the Maneuver Combat Training Center Army Battle Command System (MCTC ABCS) Integration program. The CTC strategy for FY01 provides the Army with a comprehensive mechanism to conduct training from the individual level to the Corps Commander and Battle Staff, in scenarios that will realistically replicate combat from low to high intensity. It is essential that our investment in the CTC's be maintained by assuring that the training provided represents current doctrine and weapon capability.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: COMBAT TRAINING CENTERS SUPPORT (MA6600)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
JRTC MOUT II	B				7321			5427			2336		
Opposing Forces Surrogate Vehicle (OSV)	A				40163						71485		
NTC RDMS	A										4800		
NTC TOW	A				400								
Army Battle Command System/Combat Maneuver Training Center (ABCS/CMTC)	A										3224		
DFIRST	A							6912					
Camp Shelby								5035					
<b>TOTAL</b>					<b>47884</b>			<b>17374</b>			<b>81845</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment  
 P-1 Item Nomenclature: JRTC MOUT II Phase II (MA6601)

Program Elements for Code B Items: 654715  
 Code: B  
 Other Related Program Elements: OMA-115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	15.3	9.4	7.3	17.4	2.3	0.0	0.0	0.0	0.0	0.0	51.7
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	15.3	9.4	7.3	5.4	2.3	0.0	0.0	0.0	0.0	0.0	39.8
Initial Spares												
Total Proc Cost	0.0	15.3	9.4	7.3	5.4	2.3	0.0	0.0	0.0	0.0	0.0	39.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 Joint Readiness Training Center (JRTC) Military Operations in Urban Terrain (MOUT) provides an instrumentation system (IS) to satisfy a unique requirement for crucial training readiness in an urban terrain environment. The JRTC MOUT complex consists of a series of villages and tactical objective sites, with the centerpiece being a 29-building enclave replicating a third world town. System capabilities include: conduct of live fire and force-on-force exercises; assessment of team through company level operations; monitoring of individual player movements through the complex; real-time data capture for analysis and After Action Reviews (AARs); reaction time/hit/miss reporting from remote location control targets; and centralized visual observation and control of facilities.

**JUSTIFICATION:**  
 FY01 funding will continue the JRTC MOUT Phase II objective by procuring 90 Advanced Target Systems for the MOUT sites. Funding will also support automated data collection and feedback, command and control of the MOUT portion of exercises and interactive target systems supporting MOUT scenario play. Procurement funds also buy/install Non-Developmental Items (NDI).

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment			P-1 Line Item Nomenclature: JRTC MOUT II Phase II (MA6601)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
A. TYPE II BLDG	B				225	1	225						
B. TYPE III BLDG	B				778	2	389						
C. TYPE IV BLDG								1358	2	679			
D. TYPE V BLDG	B				1303	1	1303	1366	1	1366			
E. Low Light Cameras	B							1090	5	218			
F. Advanced Target System	B							500	50	10	900	90	10
G. Audio/Visual Instrumentation Support					3045			104			675		
H. Interim Contractor Logistics Support					855						280		
I. Engineering Changes					298			200			50		
J. Contractor Engineering Support					228								
K. Other Gov't Agency Support					100								
L. In-House Government Support					465			809			431		
M. Technical Documentation					24								
<b>TOTAL</b>					<b>7321</b>			<b>5427</b>			<b>2336</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: JRTC MOU II Phase II (MA6601)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
C. TYPE IV BLDG FY 00	SIGCOM, Greensboro, NC	Option	NAWC, Orlando, FL	Feb-00	Jan-01	2	679	Yes		
D. TYPE V BLDG FY 00	SIGCOM, Greensboro, NC	Option	NAWC, Orlando, FL	Feb-00	Jan-01	1	1366	Yes		
E. Low Light Cameras FY 00	SIGCOM, Greensboro, NC	Option	NAWC, Orlando, FL	Jan-00	Nov-00	5	218	Yes		
F. Advanced Target System FY 00 FY 01	Northern NEF Inc, Colorado TBS	FFP	AMCOM, Huntsville, AL	Jun-00 Jan-01	Nov-00 Apr-01	50 90	10 10	Yes Yes		

**REMARKS:** NAWC - Naval Air Warfare, Contract Type - Firm Fixed Price (FFP)  
 All FY99-00 contracts will be options to original FY97 contract with the exception of Advanced Target Systems.  
 Buildings in groups are identical; however, there are differences in number of rooms, floors, required cameras, and required instrumentation, etc.  
 Therefore, there are notable changes in unit costs.  
 Delivery site - Fort Polk, LA  
 Ready for Training Date - 1QFY01. jrtc HAS BEEN UTILIZIANG THE FACILITY ON A "PROGRESSIVE" BASIS. as SOON AS A BUILDING

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment  
 P-1 Item Nomenclature: Opposing Forces Surrogate Vehicle (OSV) (MA6601)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	4.5	4.9	18.7	40.2	0.0	72.0	0.0	0.0	0.0	0.0	0.0	140.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.5	4.9	18.7	40.2	0.0	71.5	0.0	0.0	0.0	0.0	0.0	139.8
Initial Spares												
Total Proc Cost	4.5	4.9	18.7	40.2	0.0	71.5	0.0	0.0	0.0	0.0	0.0	139.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The Opposing Forces Surrogate Vehicle (OSV) is in production for use by the Opposing Force (OPFOR) component of the U.S. Army maneuver Combat Training Centers (CTCs) to provide the representation of the Former Soviet Union designed Boyevaya Mashina Pyekhoty-2 (BMP-2) Infantry Fighting Vehicle in simulated combat maneuver exercises. The performance objectives of the Operational Requirements Document are accomplished by modifying excess M901 Improved TOW Vehicles (ITVs) to M113A3 conditions. The modifications include the A3 upgrade and the addition of a fully functional stabilized turret (based on M2A2 Bradley fire control components), thermal sights, and related visual modifications (VISMOS) that provide the key recognition signatures of the BMP-2. The OSV has both visual and Multiple Integrated Laser Engagement System (MILES) representation of the salient characteristics of the BMP-2 on-board weapons systems. The OSV is a unique training vehicle that has no go-to-war capability. The operational use of the OSV is limited to the unique training environment of the CTCs. While representing the BMP-2 functionally and visually the OSV also provides the crewman 11M (Bradley Crewman) Military Occupation Speciality (MOS) positive training sustainment.

**JUSTIFICATION:**  
 Through FY01, 196 vehicles will be procured to support the total NTC and JRTC requirement. The OSV provides realistic simulation of the BMP-2 Infantry Soviet Armored Fighting Vehicle in the CTC training environment and meets the requirements for soldier safety and functional skills sustainment for the OPFOR (U.S. Soldier) role player. Vehicles procured with FY01 funds will be fielded to NTC and JRTC locations. They have very different and distinct environments in which to operate.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment			P-1 Line Item Nomenclature: Opposing Forces Surrogate Vehicle (OSV) (MA6601)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
A. NTC Vehicle	A				32393	72	450				29055	41	709
B. JRTC Vehicle	A										25511	36	709
C. SAWE/MILES II kits					1835	86	21				2747	77	36
D. Other Government Agency Support					630						384		
E. In-House Government Support					715						736		
F. Engineering Change Proposals					1820						4743		
G. Contractor Engineering Support					2770						4362		
H. Interim Contractor Logistics Support											947		
I. Major Item Management*											3000		
* Costs associated with the technical activities and logistic activities required to transition item management responsibilities for the OSV to TACOM.													
<b>TOTAL</b>					<b>40163</b>						<b>71485</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Opposing Forces Surrogate Vehicle (OSV) (MA6601)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. NTC Vehicle FY 99	Anniston Army Depot, AL	Option	NAWC, Orlando, FL	Dec-98	Mar-00	72	450	Yes		
FY 01		Option	NAWC, Orlando, FL	Dec-00	Mar-02	41	709	Yes		
B. JRTC Vehicle FY 01	Anniston Army Depot, AL	Option	NAWC, Orlando, FL	Dec-00	Aug-02	36	709	Yes		
C. SAWE/MILES II Kits FY 99	Lockheed/Martin, Pomona, CA	Option	NAWC, Orlando, FL	Dec-98	Oct-99	86	21	Yes		
FY 01		Option	NAWC, Orlando, FL	Dec-00	Oct-01	77	36	Yes		

**REMARKS:**

Naval Air Warfare Center (NAWC)  
 Delivery Site - NTC-Ft Irwin/JRTC-Ft Polk  
 Ready for Training Date - 4QFY98  
 Contract Type - C/FFP  
 Increase in FY01 SAWE/MILES II kits unit cost due to buying new kits versus retrofit kits.  
 Increase in FY01 vehicle unit cost due to requirement to procure Reliability Improvement Selection Equipment (RISE) kits previously provided at no cost.







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: NTC Range Data Management System (NTC RDMS) (MA6601)

Program Elements for Code B Items: Code: Other Related Program Elements: OMA-115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	4.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	4.8
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	4.8	0.0	0.0	0.0	0.0	0.0	4.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The National Training Center Range Data Management System (NTC RDMS) is a bidirectional communication system that relays event data generated by instrumented players on the battlefield back to the NTC Core Instrumentation Sub-System. The major componetns of the RDMS are the Data Communication Interface (DCI), the communication relay networks, and the Central Node.

**JUSTIFICATION:**  
 The FY01 funds will procure the instrumentation interface system necessary to fix the serious data loss occuring between the instrument players and the Core Instrumentation Sub-System. This will provide accurate event data for essential training exercise analysis.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: NTC RDMS (MA6601)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. Instrumentation Interface System	A										4010	1	4010
B. Contractor Engineering Support											315		
C. Other Government Agency Support											50		
D. In-House Government Support											400		
E. Technical Documentation											25		
<b>TOTAL</b>											<b>4800</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: NTC RDMS (MA6601)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. Instrumentation Interface System FY 01	TBS	TBS	NAWC, Orlando, FL	Dec-00	Jan-01	1	4010	No	Sep 00	

**REMARKS:** NAWC - Naval Air Warfare Center  
Delivery Site - NTC, Ft Irwin

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: MCTC ABCS Integration (MA6601)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	3.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	3.2
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	3.2	0.0	0.0	0.0	0.0	0.0	3.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**  
 The Maneuver Combat Training Center Army Battle Command System (MCTC ABCS) Integration program provides essential non-intrusive connectivity between ABCS (C4I), the legacy Army Tactical Command and Control System (ATCCS) and instrumentation capabilities at each of the three CTCs, National Training Center (NTC), Joint Readiness Training Center (JRTC), and Combat Maneuver Training Center (CMTC).

**JUSTIFICATION:**  
 The FY01 funding will provide for "Just In Time" (to preclude obsolescence) procurement of the MCTC ABCS Integration hardware and interim contractor logistics support necessary to install the three required systems at the CTC's.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: MCTC ABCS Integration (MA6601)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. System Hardware	A										2296	3	765
B. Contractor Engineering Support											328		
C. Other Government Agency Support											150		
D. In-House Government Support											350		
E. Technical Documentation											100		
<b>TOTAL</b>											<b>3224</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: MCTC ABCS Integration (MA6601)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. System Hardware FY 01	TBS	TBS	NAWC, Orlando, FL	May-01	Apr-02	3	765	No		Apr 01

**REMARKS:** NAWC - Naval Air Warfare Center  
 Delivery Sites: NTC- Ft. Irwin, JRTC - Ft Polk, CMTC - Hohenfel, Germany

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: TRAINING DEVICES, NONSYSTEM (NA0100)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	1674.1	73.5	52.8	56.5	72.5	91.9	84.3	90.9	80.4	84.4	0.0	2361.5
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1674.1	73.5	52.8	56.5	72.5	91.9	84.3	90.9	80.4	84.4	0.0	2361.5
Initial Spares												
Total Proc Cost	1674.1	73.5	52.8	56.5	72.5	91.9	84.3	90.9	80.4	84.4	0.0	2361.5
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

The Army continues to build on a major initiative with the Non-System Training Devices (NSTD) program, to introduce realistic and effective simulative training devices into the individual and unit training setting. These devices bring into play many aspects of the combat environment (smoke, noise, confusion, stress, etc.), which provide our soldier the valuable experience of battlefield conditions in a training environment. This effort includes the acquisition of training systems for maneuver situation target engagement simulators and gaming simulations. Devices and simulations are being fielded to minimize resource consumption which will effect a direct cost reduction through conservation of energy and ammunition. The reduction of available real estate (ranges and maneuver areas) for training being experienced by both active and reserve component units necessitates the increased use of devices and simulations. The devices and simulations acquired under the NSTD program are essential for the Army to achieve the goal of increasing training effectiveness and sustaining combat readiness in a constrained training environment.

**JUSTIFICATION:**

The FY01 NSTD program will procure Multiple Integrated Laser Engagement System 2000 (Miles 2000), the Tank Weapons Gunnery Simulation System/Precision Gunnery System (TWGSS/PGS), and Range Modernization. Simulators procured under this line are either the result of a development effort or are the purchase of a non-developmental item.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: TRAINING DEVICES, NONSYSTEM (NA0100)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
NA0100 - NSTD Maneuver/Close Combat MILES 2000	A				7826			29018			49727		
Miles Cope Thunder	A				3897								
Engagement Skills Trainer (EST)	B				4147			3054					
TWGSS/PGS	A				17628			15619			35253		
BEAMHIT								995					
FY 99 ORRTF					1447								
Weaponeer											1800		
NA0103 - NSTD Command and Control Corps Battle Simulation (CBS)	A				639								
Warfighters Simulation 2000 (WARSIM)	B												
Tactical Simulation	A												
NA0105 - NSTD Ranges and Targets Range Modernization	A				11795			19379			5157		
Area Weapon Scoring System (AWSS)	A				1974								
Improved Target Simulator								2487					
NA0106 - NSTD Fire Support/Air Defense Firefighter	A				2986								
Simulated Area Weapons Effects (SAWE)	A				255								
GUARDFIST II								1980					
In-House Support					3935								
FY99 includes \$1.447 for the two year appropriated funds for the Operational Rapid Response Transfer Fund.													
<b>TOTAL</b>					<b>56529</b>			<b>72532</b>			<b>91937</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment  
 P-1 Item Nomenclature: Multiple Integrated Laser Engagement System (MILES 2000) (NA0101)

Program Elements for Code B Items: Code: A Other Related Program Elements: OMA - 115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.8	7.1	36.5	7.8	29.0	51.5	46.4	46.8	53.0	53.3	0.0	332.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.8	7.1	36.5	7.8	29.0	51.5	46.4	46.8	53.0	53.3	0.0	332.2
Initial Spares												
Total Proc Cost	0.8	7.1	36.5	7.8	29.0	51.5	46.4	46.8	53.0	53.3	0.0	332.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

The MILES 2000 system provides real-time casualty effects necessary for tactical engagement training in a force-on-force training scenario. MILES 2000 is a replacement of all direct-fire MILES devices currently fielded at homestations and small arms direct fire MILES at the Maneuver Combat Training Centers. MILES allows the Army to train as a combined arms combat team with realistic casualty assessment.

MILES 2000 is a technological improvement of basic MILES which provides the following training benefits:

- 8 aspect angles to account for side, flank, corner and rear shots. Each aspect angle has its own associated probability of kill.
- Increased programmability of weapon characteristics, probability of kill, ranges, and basic weapon ammunition loads.
- Event recording and display.
- Discrete player ID for all participants. This enhances training in terms of After-Action Review, and aids in identifying training against fratricide.
- Replication of all weapon capabilities and vulnerabilities through laser simulation of weapon firing effects, and through programmed simulation of vulnerabilities.
- Enhanced audio-visual cueing effects to replicate battlefield weapon effects.

**JUSTIFICATION:**

FY01 reaches full rate production. Basic MILES is currently obsolete technically and is uneconomical to repair and sustain. Devices are to be fielded as battalion sets. The program continues fielding until MILES 2000 completely replaces existing MILES in the field.

Exhibit P-5, Weapon OPA Cost Analysis		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment			P-1 Line Item Nomenclature: Multiple Integrated Laser Engagement System (MILES 2000) (NA0101)			Weapon System Type:			Date: February 2000		
Cost Elements	ID CD	FY98			FY99			FY00			FY01		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. M16A2 Rifle	A						11052	7945	1	9602	5612	2	
B. M24 Sniper Rifle	A						78	54	1	221	147	2	
C. M249 Squad Automatic Weapon (SAW)	A						1257	1089	1	1912	1593	1	
D. AT-4 Weapon	A						3222	965	3	5322	1215	4	
E. TOW	A									327	28	12	
F. M240 Machine Gun	A						870	512	2	1266	745	2	
G. M2 Machine Gun	A						143	77	2	606	464	1	
H. M113 Armored Personnel Carrier (APC)	A				858	150	6	1576	273	6	2857	635	4
I. M2/M3 Fighting Vehicle	A				1463	101	14	2163	148	15	4736	428	11
J. M1A1 Tank	A				1591	135	12	820	58	14	1915	270	7
K. Independent Target System	A				524	150	3	1468	413	4	3494	1182	3
L. Controller Device	A							374	251	1	755	487	2
M. Small Arms Alignment	A				940	108	9				3719	260	14
N. Main Gun Signature Simulator	A				809	135	6	393	58	7	1237	270	5
O. Initial Brigade Combat Team Vehicle Kits											4998	145	34
P. Interim Contractor Logistics Support					252						1599		
Q. Engineering Change Proposals (ECPs)								1920			1461		
R. Contractor Engineering Support					350			350					
S. Other Government Agencies Support					106			300			300		
T. Testing (Functional User)					100			200			200		
U. In-House Government Support					833			1100			1200		
V. Technical Documentation											2000		
W. System Fielding								1732					
<b>TOTAL</b>					<b>7826</b>			<b>29018</b>			<b>49727</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Multiple Integrated Laser Engagement System (MILES 2000) (NA0101)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
A. M16A2 Rifle FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Oct-00 Aug-01	7945 5612	1 2	Yes Yes			
B. M24 Sniper Rifle FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	54 147	1 2	Yes Yes			
C. M249 Squad Automatic Weapon (SAW) FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	1089 1593	1 1	Yes Yes			
D. AT-4 Weapon FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	965 1215	3 4	Yes Yes			
E. TOW FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Dec-00	Jul-01	28	12	Yes			
F. M240 Machine Gun FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	512 745	2 2	Yes Yes			
G. M2 Machine Gun FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	77 464	2 1	Yes Yes			

**REMARK** Naval Air Warfare Center - NAWC  
 Contract Type - C/FFP  
 Delivery Sites - Army Wide  
 Ready for Training Date - 1QFY00  
 Increase in some FY01 unit costs due to necessity of renegotiation of prices.

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Multiple Integrated Laser Engagement System (MILES 2000) (NA0101)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
H. M113 Armored Personnel Carrier (APC) FY99 FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99 Feb-00 Dec-00	Apr-00 Sep-00 Aug-01	150 273 635	6 6 4	Yes Yes Yes		
I. M2/M3 Fighting Vehicle FY99 FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99 Feb-00 Dec-00	Apr-00 Sep-00 Aug-01	101 148 428	14 15 11	Yes Yes Yes		
J. M1A1 Tank FY99 FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99 Feb-00 Dec-00	Apr-00 Sep-00 Aug-01	135 58 270	12 14 7	Yes Yes Yes		
K. Independent Target System FY99 FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99 Feb-00 Dec-00	Apr-00 Sep-00 Aug-01	150 413 1182	3 4 3	Yes Yes Yes		
L. Controller Device FY00 FY01	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Feb-00 Dec-00	Sep-00 Aug-01	251 487	1 2	Yes Yes		
M. Small Arms Alignment FY99	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99	Apr-00	108	9	Yes		

**REMARK** Naval Air Warfare Center - NAWC  
Contract Type - C/FFP  
Delivery Sites - Army Wide  
Ready for Training Date - 1QFY00  
Increase in some FY01 unit costs due to necessity of renegotiation of prices.

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Multiple Integrated Laser Engagement System (MILES 2000) (NA0101)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
FY01				Dec-00	Aug-01	260	14	Yes			
N. Main Gun Signature Simulator											
FY99	Cubic Defense, San Diego, CA	Option	NAWC, Orlando, FL	Apr-99	Apr-00	135	6	Yes			
FY00				Feb-00	Oct-00	58	7	Yes			
FY01				Dec-00	Sep-01	270	5	Yes			

**REMARK** Naval Air Warfare Center - NAWC  
 Contract Type - C/FFP  
 Delivery Sites - Army Wide  
 Ready for Training Date - 1QFY00  
 Increase in some FY01 unit costs due to necessity of renegotiation of prices.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment  
 P-1 Item Nomenclature: Engagement Skills Trainer (EST) (NA0101)

Program Elements for Code B Items: 654715  
 Code: B  
 Other Related Program Elements: OMA - 115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	4.1	3.1	0.0	2.8	0.0	0.0	0.0	0.0	10.0
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	4.1	3.1	0.0	2.8	0.0	0.0	0.0	0.0	10.0
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	4.1	3.1	0.0	2.8	0.0	0.0	0.0	0.0	10.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

The Engagement Skills Trainer (EST) provides individual and crew weapon marksmanship at the squad level for collective training. Squad leaders are able to control and evaluate individual, team and squad performance. Included in the EST are the M16A2, M9 pistol, MK19, M249 SAW, M60 Machine Gun, M2 Machine Gun and the capabilities to include many others. Three EST subsystems equal one system.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment			P-1 Line Item Nomenclature: Engagement Skills Trainer (EST) (NA0101)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
A. Hardware (Subsystems)	B				3120	39	80	2160	27	80			
B. Contractor Engineering Support					128			213					
C. In-House Government Support					782			600					
D. Interim Contractor Logistics Support					117			81					
<b>TOTAL</b>					<b>4147</b>			<b>3054</b>					

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: Engagement Skills Trainer (EST) (NA0101)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. Hardware (Subsystems) FY 99 FY 00	ECC Inc., Orlando, FL	FFP Option	NAWC, Orlando, FL	Mar-00 Mar-00	Oct-00 Oct-00	39 27	80 80	Yes Yes		

**REMARK** Naval Air Warfare Center (NAWC)  
 This contract is follow-on contract to the RDTE Contract awarded Nov 98. Revised award date is a result of a protest from a losing offeror.  
 Delivery Site - Army Wide  
 Ready for Training Date - 1Q01  
 Unit Costs based on quantities procured.

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT /Other Support Equipment

P-1 Item Nomenclature:

Tank Weapon Gun Sim Sys/Precision Gun Sys (TWGSS/PGS) (NA0101)

Program Elements for Code B Items:

Code:

A

Other Related Program Elements:

OMA - 115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	24.4	18.6	9.5	19.1	15.6	35.3	0.0	0.0	0.0	0.0	0.0	122.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	24.4	18.6	9.5	19.1	15.6	35.3	0.0	0.0	0.0	0.0	0.0	122.4
Initial Spares												
Total Proc Cost	24.4	18.6	9.5	19.1	15.6	35.3	0.0	0.0	0.0	0.0	0.0	122.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

An appended, laser-based device used for precision gunnery on Abrams Tanks (TWGSS) and Bradley Fighting Vehicles (PGS) gunnery tables day/night and training at platoon, company and battalion level during exercises. Device superimposes real-time tracer image over sight picture in gunner's and commander's sights and simulates burst over calculated impact point. System operates in real-time. System simulates the main guns (120MM, 105MM, 25MM, 7.62MM coax machine guns and TOW Missiles). Aural effects are provided to crew along with sight obscuration. System has onboard display for crew evaluation (also built in test (bit), ammunition count, automatic alignment) and an After Action Review System. TWGSS/PGS is fully integrated with the vehicle's fire control system requiring crews to use fire control procedures as if firing live ammunition. System utilizes time of flight ballistics and target modeling incorporating aspect angle, ammunition type, range, armor, tilt (forwards/backwards), cant (side/side), and defilade condition to determine target vulnerability. TWGSS/PGS improves crew/gunner's ability to destroy enemy tanks by replicating ballistics, probability of hit/probability of kill, and angle of kill when assessing target hits.

**JUSTIFICATION:**

The FY01 funding continues production of the TWGSS/PGS program, and thru FY01 the program procures 1140/1044 of the approved total requirement of 1191/1147 TWGSS/PGS systems. The TWGSS/PGS trains active and reserve components precision gunnery training in support of the Army's combat capability. Reduction in full caliber ammunition and OPTEMPO resource restrictions has increased the problem of annual peak gunnery proficiency followed by proficiency slump for the active component, National Guard and Army Reserves. Simulated non-firing crew drills, subcaliber firing, and actual main gun firing are the current method of obtaining gunnery proficiency. This strategy peaks the vehicle crews during qualification exercises, but does not sustain the crew's gunnery skills. Thus, combat readiness degradation occurs in between peak gunnery periods.

<b>Exhibit P-40C Budget Item Justification Sheet</b>		Date February 2000
Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT /Other Support Equipment		P-1 Item Nomenclature Tank Weapon Gun Sim Sys/Precision Gun Sys (TWGSS/PGS) (NA0101)
Program Elements for Code B Items	Code A	Other Related Program Elements OMA - 115013
<p>The TWGSS/PGS, with its ability to be used anywhere, anytime, allows the active component, National Guard, and Army Reserve to continue to train and hone gunnery skills on a year round basis at any location (motor pool, local training area, major training area, armory). This ensures that the armor force maintains its combat capability at all times. TWGSS/PGS is one of the cornerstones of the combined arms training strategy. It is the basis for much of the gunnery training and sustainment. With TWGSS/PGS we have, for the first time, the ability to analyze errors and make an accurate evaluation of the crew and unit gunnery capabilities, all without firing ammunition. Reduction in ammunition allocations, as a result of TWGSS/PGS fielding, saves \$24K per system per year. This is a return on investment in less than 28 months.</p>		

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment / 53702062			P-1 Line Item Nomenclature: Tank Weapon Gun Sim Sys/Precision Gun Sys (TWGSS/PGS) (NA0101)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. TWGSS	A				7867	153	51	7320	133	55	13197	225	59
B. PGS	A				8575	156	55	7506	128	59	13250	212	63
C. In-House Government Support					285			613			596		
D. Contractor Engineering Support					53			130			160		
E. ECPs					848			50			50		
F. Interim Contractor Logistics Support*											8000		
*Spares provided by SAAB under current contract. This support ends with final production. Initial spares need to be procured prior to transition to CLS umbrella contract.													
FY99 Operational Rapid Response Tranfer Fund (ORRTF)													
<b>TOTAL</b>					<b>19075</b>			<b>15619</b>			<b>35253</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment / 53702062		Weapon System Type:			P-1 Line Item Nomenclature: Tank Weapon Gun Sim Sys/Precision Gun Sys (TWGSS/PGS) (NA0101)						
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
<b>A. TWGSS</b>											
FY 99	SAAB Training Sys, Sweden	Option	NAWC, Orlando, FL	Dec-98	May-99	153	51	Yes			
FY 00		Option		Dec-99	May-00	133	55	Yes			
FY 01		Option		Oct-00	Mar-01	225	59	Yes			
<b>B. PGS</b>											
FY 99	SAAB Training Sys, Sweden	Option	NAWC, Orlando, FL	Dec-98	May-99	156	55	Yes			
FY 00		Option		Dec-99	May-00	128	59	Yes			
FY 01		Option		Oct-00	Mar-01	212	63	Yes			

**REMARK** Naval Air Warfare Center (NAWC)  
 Delivery Sites - Army Wide  
 Ready for Training Date - 3QFY95  
 Contract Type - C/FFP







**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

NSTD RANGE MODERNIZATION (NA0105)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	5.6	19.2	2.4	11.8	19.4	5.2	0.0	0.2	13.5	18.6	0.0	95.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	5.6	19.2	2.4	11.8	19.4	5.2	0.0	0.2	13.5	18.6	0.0	95.9
Initial Spares												
Total Proc Cost	5.6	19.2	2.4	11.8	19.4	5.2	0.0	0.2	13.5	18.6	0.0	95.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:**

Range Modernization consists of ranges that incorporate infantry and armor targets, both stationary and moving, that portray realistic opposing target threat to the American Soldier using simulated battlefield conditions. Range Modernization facilitates training in detection, identification, rapid engagement and proper leading of moving targets under day/night conditions, all of which will be required in a fast moving war. The quantities of each component are tailored to the range configuration of which there are currently 14 different types. Range designs provide training for the basic and advanced rifle marksmanship programs and combined arms training of M1 Tank and Bradley Fighting Vehicles, Aerial Gunnery, Cobra and Apache Attack Helicopter, Air Defense Artillery (ADA), and Vulcan. The training ranges can be operated by an operator-programmer via a computer-controlled console located in the range tower or by a hand-held receiver transmitter. New Generation Army Target System (NGATS) supports the Army's Range Modernization initiatives. The system consists of live-fire target mechanisms (infantry and armor, stationary and moving), control systems and interfaces to other training systems. NGATS equipment is typically portable, radio-controlled and commercially available.

**JUSTIFICATION:**

The FY01 program supports procurement and in-house support for range targetry on four armor ranges and one infantry range. An armor range consists of a range control station and varying quantities of infantry, stationary and moving armor targets, and simulators. An infantry range typically consists of a range control station and varying quantities of infantry targets and simulators.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: NSTD RANGE MODERNIZATION (NA0105)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. Pneumatic Ranges					1868	6	311						
B. GSA Ranges					1872	6	312						
C. Range Control Stations					48	2	24	364	13	28	84	3	28
D. Hand Held Controller					322	23	14	42	3	14			
E. Stationary Infantry Mechanism					1908	477	4	1980	660	3	885	295	3
F. Double Stationary Infantry Mech								1400	350	4	120	30	4
G. Stationary Armor Target					1104	138	8	1000	125	8	688	86	8
H. Moving Armor Target					1411	17	83	1700	20	85	1615	19	85
I. Moving Infantry Target					627	33	19	1121	59	19	708	59	12
J. Sound Effects Simulator					66	22	3	192	64	3	135	45	3
K. Miles Shoot Back Device								204	204	1			
L. Muzzle Flash Simulator								103	103	1			
M. Battle Effects Simulator											100	25	4
N. Hit Detection Device					582	97	6	630	126	5	515	103	5
O. Ft. Knox Urban Training Range					1400	1	1400						
P. Ft. Riley Heavy Lifters					108	12	9						
Q. Armor Moving Target Carrier Retrofit								7480	136	55			
R. System Upgrade								2425					
S. Engineering Support					349			588			232		
T. Quality Assurance					130			150			75		
<b>TOTAL</b>					<b>11795</b>			<b>19379</b>			<b>5157</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: NSTD RANGE MODERNIZATION (NA0105)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. Pneumatic Ranges FY 99	Action Target, Provo, Utah	Option	TACOM, Rock Island, IL	Mar-99	Jun-99	6	311	Yes		
B. GSA Ranges FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	6	312	Yes		
C. Range Control Stations FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	2	24	Yes		
FY 00		Option		Jan-00	May-00	13	28			
FY 01		Option		Jan-01	May-01	3	28			
D. Hand Held Controller FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	23	14	Yes		
FY 00		Option		Jan-00	May-00	3	14			
E. Stationary Infantry Mechanism FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	477	4	Yes		
FY 00		Option		Jan-00	May-00	660	3			
FY 01		Option		Jan-01	May-01	295	3			
F. Double Stationary Infantry Mech FY 00	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Jan-00	May-00	350	4	Yes		
FY 01				Jan-01	May-01	30	4			
G. Stationary Armor Target FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	138	8	Yes		
FY00		Option		Jan-00	May-00	125	8			
FY01		Option		Jan-01	May-01	86	8			

REMARK

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: NSTD RANGE MODERNIZATION (NA0105)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
H. Moving Armor Target FY 99 FY 00 FY 01	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	17	83	Yes		
		Option		Jan-00	May-00	20	85			
		Option		Jan-01	May-01	19	85			
I. Moving Infantry Target FY 99 FY 00 FY 01	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	33	19	Yes		
		Option		Jan-00	May-00	59	19			
		Option		Jan-01	May-01	59	12			
J. Sound Effects Simulator FY 99 FY 00 FY 01	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	22	3	Yes		
		Option		Jan-00	May-00	64	3			
		Option		Jan-01	May-01	45	3			
K. Miles Shoot Back Device FY 00	Caswell International, Min., MN	Option	TACOM, Rock Island, IL	Jan-00	Jun-00	204	1	Yes		
L. Muzzle Flash Simulator FY 00	Caswell International, Min., MN	Option	TACOM, Rock Island, IL	Jan-00	Jun-00	103	1	Yes		
M. Battle Effects Simulator FY 01	Caswell International, Min., MN	Option	TACOM, Rock Island, IL	Jan-01	May-01	25	4	Yes		

REMARK

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: NSTD RANGE MODERNIZATION (NA0105)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
N. Hit Detection Device FY 99 FY 00 FY 01	Caswell International, Min., MN	Option	TACOM, Rock Island, IL	Mar-99 Jan-00 Jan-01	Jun-99 May-00 May-01	97 126 103	6 5 5	Yes		
O. Ft. Knox Urban Training Range FY 99	Corps of Engr, Louisville, KY	SS/FFP	TACOM, Rock Island, IL	Mar-99	Jul-99	1	1400	Yes		
P. Ft. Riley Heavy Lifters FY 99	Caswell International, Min., MN	CFFP	TACOM, Rock Island, IL	Mar-99	Jun-99	12	9	Yes		
Q. Armor Moving Target Carrier Retrofit FY 00	TBS	CFFP	TACOM, Rock Island, IL	May-00	Oct-00	136	55	Yes		

REMARK



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CLOSE COMBAT TACTICAL TRAINER (NA0170)

Program Elements for Code B Items: Code: A Other Related Program Elements: OMA -115013/121014

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	93.5	45.3	74.3	87.9	64.7	81.2	35.0	7.7	0.0	0.0	0.0	489.6
Less PY Adv Proc			18.9									18.9
Plus CY Adv Proc		18.9										18.9
Net Proc (P-1)	93.5	64.2	55.4	87.9	64.7	81.2	35.0	7.7	0.0	0.0	0.0	489.6
Initial Spares												
Total Proc Cost	93.5	64.2	55.4	87.9	64.7	81.2	35.0	7.7	0.0	0.0	0.0	489.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Close Combat Tactical Trainer (CCTT) is a networked system of manned simulators (Tank, Bradley, FIST-V, HMMWV, M113A3) supported by emulators and semi-automated forces that provide combat support, combat service support and both friendly and opposing forces. It trains crew through battalion level combat elements of close combat units of both the Reserve Component (RC) and Active Component (AC) in their collective tasks. The Army will field simulator modules to populate 8 fixed company-level production sites and 9 mobile platoon-level sets. Each fixed system will contain a maximum of 40 simulator modules, which are based on the locations of AC divisions and regiments, and will service both AC and RC units. The CCTT fixed facility contains: a simulation bay, sized to accommodate from 27 to 40 manned modules; an Observer Control (OC) and a Tactical Operation Center (TOC); five After Action Rooms (AARs); two Semi-Automated Forces (SAF) Rooms (Blue and Red) each containing five SAF workstations; Maintenance Control Console (MCC) Room; and a Master Console (MC). The mobile platoon sets contain 4 simulator modules in the tank platoon version and 5 simulator modules in the infantry/cavalry platoon version. Dedicated to the RCs, these mobile systems will be based out of AC installation Training Support Centers (TSCs) but will travel to RC unit armories for training at home station.

In order to train the new digitized force, CCTT will incorporate the Force XXI digitized Battle Command systems. This digital expansion of CCTT is called CCTT XXI and will integrate the Army's advanced close combat heavy battalion task force and below into the CCTT virtual training system, and supports Digitized Battle Command and Staff training for brigade and below. CCTT XXI also provides the unique capability to support the development, experimentation and testing of Force XXI Tactics, Techniques and Procedures (TTPs) and the validation of emerging Force XXI concepts and Battle Command system capabilities in a combined arms battlefield environment prior to the investment in costly live exercises.

**Exhibit P-40C Budget Item Justification Sheet**

Date

February 2000

Appropriation / Budget Activity/Serial No.

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature

CLOSE COMBAT TACTICAL TRAINER (NA0170)

Program Elements for Code B Items

Code

Other Related Program Elements

A

OMA -115013

JUSTIFICATION: FY01 funding is for the production of mobile tank and Bradley configurations and fixed site assets. Funding for FY01 provides production buys of 54 fixed site modules and 5 mobile modules. FY01 funds Engineering Change Proposals (ECPs) to upgrade CCTT with modification kits for Dismounted Infantry (DI) improvements, Multi Purpose Anti-tank Munitions (MPAT), vehicular intercommunications system (VIS), and High Level Architecture (HLA). Fielding schedules have been established to support the AC and RC in training the total Combined Arms Force as a simulated, fully interactive battlefield. The need is to train and sustain collective (crew through battalion) tasks and skills in command and control, communications and maneuver, and to integrate the functions of combat support and combat service support units. These production systems support urgent training requirements of Army to redress the lack of training opportunity for platoon/company team elements. Initial Test and Evaluation (IOT&E) completed May 1998. Milestone III was approved November 1998.

The FY01 funding also procures equipment to provide the digitized force both a robust virtual combined arms environment that supports training and a continuous experimentation environment that supports development across the spectrum of Doctrine, Training, Leader Development, Organizations, Materiel, and Soldiers (DTLOMS). FY01 OPTEMPO funding has been reduced based on the fielding of CCTT.

**DELIVERY SITES AND READY FOR TRAINING DATES (RFT):**

Fixed Sites	RFT	Mobile Sites	RFT	
Knox	Feb 99	Leesburg	Jul 99	Tank / Bradley
Benning	Aug 99	Knoxville	Sep 00	Tank / Bradley
Stewart	Mar 00	San Luis Opispo	Aug 01	Tank
Hood	May 00	San Luis Opispo	Aug 02	Bradley
Carson	Jan 01			
Riley	Jul 01			
USARUER	Feb 02			
EUSA	Jun 02			

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CLOSE COMBAT TACTICAL TRAINER (NA0170)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. MODULES & SITE EQUIPMENT	A				48591	60	810	36017	47	766	44950	59	762
B. COMMERCIAL TRAILERS	A				3250	9	361	1478	4	370	1838	5	368
C. COMMERCIAL IMAGE GENERATORS	A				22209	90	247	12500	56	223	16103	79	204
D. PRODUCTION ENGINEERING AND PMO SUPPORT BY STRICOM/NAWC-TSD					2689			2776			2749		
E. PRODUCTION ENGINEERING SUPPORT BY CONTRACTORS					1653			1415			1482		
F. PRODUCTION ENGINEERING SUPPORT BY GOVT. AGENCIES					1702			551			480		
G. ENGINEERING CHANGE PROPOSALS					2981			1030			3559		
H. IMAGE GENERATOR/PROCESSOR UPGRADES FOR FIELDDED MODULES					1100			372			2730		
I. SOFTWARE MAINTENANCE SUPPORT					1771			4146			4417		
J. FORCE XXI DIGITIZATION UPGRADES								1500			742		
K. INTERIM CONTRACTOR LOGISTIC SPT					2000			2928			2110		
<b>TOTAL</b>					<b>87946</b>			<b>64713</b>			<b>81160</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CLOSE COMBAT TACTICAL TRAINER (NA0170)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
<b>A. MODULES &amp; SITE EQUIPMENT</b>										
FY 99	Lockheed Martin Info System Orlando, FL	C/FFP	NAWC, Orlando, FL	Jan-99	Aug-99	60	810			
FY 00	Lockheed Martin Info System Orlando, FL	C/FFP	NAWC, Orlando, FL	Dec-99	Aug-00	47	766			
FY 01	Lockheed Martin Info System Orlando, FL	C/FFP	NAWC, Orlando, FL	Nov-00	Aug-01	59	762			
<b>C. COMMERCIAL IMAGE GENERATORS</b>										
FY 00	Evans & Sutherland Salt Lake City, UT	FFP	NAWC, Orlando, FL	Feb-00	Aug-00	56	223			
FY 01	Evans & Sutherland Salt Lake City, UT	FFP	NAWC, Orlando, FL	Nov-00	Aug-01	79	204			

**REMARK** NAWC = Naval Air Warfare Center  
Delivery Sites = Army Wide

C. COMMERCIAL IMAGE GENERATORS - FY00 is the first year of a separate contract buy.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment P-1 Item Nomenclature: AVIATION COMBINED ARMS TACTICAL TRAINER (NA0173)

Program Elements for Code B Items: 64780 Code: B Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	14.7	38.7	39.3	40.2	41.0	0.0	173.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	14.7	38.7	39.3	40.2	41.0	0.0	173.9
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	14.7	38.7	39.3	40.2	41.0	0.0	173.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Aviation Combined Arms Tactical Trainer—Aviation Reconfigurable Manned Simulator (AVCATT-A) is an Army aviation training system for both the AC and RC. A single suite of equipment consists of six (6) reconfigurable networked simulators that support the AH-64A/D, UH-60A/L, CH-47D, OH-58D, UH-1H and AH-1F platforms. Supporting roleplayer, semi-automated blue and opposing forces (SAF), and after action review (AAR) workstations are also provided as part of each suite. AVCATT-A is a fully mobile system, capable of utilizing shore and generator power and is deployable worldwide. The AVCATT-A system will permit various aviation units to conduct collective task training on a real-time, computerized battlefield in a combined arms scenario. Other required elements that are present on the modern, high intensity battlefield, such as the combat support and combat service support elements are an integral part of the simulation database. AVCATT-A is designed to provide realistic, high intensity collective and combined arms training to aviation units.

**JUSTIFICATION:** The FY 01 funding provides a Low Rate Initial Production (LRIP) suite consisting of 6 reconfigurable networked simulators to overcome the current training deficiencies. The Basis of Issue totals 18 suites (12 Active Army suites and 6 Reserve Component suites). The existing aviation simulation training capability does not fully support the Aviation Combined Arms Training Strategy due to limited realism, intensity, and integration provided in the current environment to prepare aviation to operate effectively on the joint/combined arms battlefield. Existing simulation is limited primarily to individual/crew trainers that are not designed for interoperable combined exercises. Field training exercises are increasingly constrained by high cost, environmental and safety restrictions, limited maneuver areas and ranges, and inadequate threat/target representations. Neither are capable of realistically simulating the joint/combined arms battlefield, providing effective joint task force/combined arms training, or supporting mission rehearsal in a joint/combined arms environment. Due to the increasing constraints on live gunnery training, simulation must be used to work through primary and secondary weapon systems training deficiencies on utility and attack aircraft.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: AVIATION COMBINED ARMS TACTICAL TRAINER (NA0173)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. AVCATT-A SUITES											13453	1	13453
B. PRODUCTION ENGINEERING AND PMO SUPPORT BY STRICOM/NAWC-TSD											410		
C. PRODUCTION ENGINEERING SUPPORT BY CONTRACTORS											74		
D. PRODUCTION ENGINEERING SUPPORT BY GOVT. AGENCIES											45		
E. INTERIM CONTRACTOR LOGISTIC SUPPORT											762		
<b>TOTAL</b>											<b>14744</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: AVIATION COMBINED ARMS TACTICAL TRAINER (NA0173)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
A. AVCATT-A SUITES  FY 01	Raytheon Systems Company Arlington, TX	FPIF OPTION	NAWC, ORLANDO, FL	Nov-00	Dec-01	1	13453	Yes		Mar 99

**REMARKS:** Suite delivery scheduled for Dec 01 to Eastover, SC.

Contract option for a Low Rate Initial Production (LRIP) suite will be exercised subsequent to the RDT&E Suite 1 progress assessment (currently scheduled for mid 4QFY00). This suite is required to provide an initial production base for the system, to permit an orderly increase in the production rate, and to ensure that economic savings are preserved.



**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: FIRE SUPPORT COMBINED ARMS TACTICAL TRAI (NA0174)

Program Elements for Code B Items: 654715  
 Code: B  
 Other Related Program Elements: OMA - 115013

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	22.0	5.7	15.7	24.4	1.5	0.0	0.0	0.0	0.0	0.0	69.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	22.0	5.7	15.7	24.4	1.5	0.0	0.0	0.0	0.0	0.0	69.3
Initial Spares												
Total Proc Cost	0.0	22.0	5.7	15.7	24.4	1.5	0.0	0.0	0.0	0.0	0.0	69.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Fire Support Combined Arms Tactical Trainer (FSCATT) is a two-phased effort to provide training for the field artillery gunnery team. FSCATT Phase I provides individual and crew-level skills training. FSCATT Phase II will be a collective trainer that simulates fire support within the combined arms tactical trainer. The goal of FSCATT Phase I is to exercise the artillery gunnery team in realistic fire missions with a reduction in expenditure of ammunition and related operational costs. FSCATT Phase I provides battery-level training and feedback in individual skills, crew drills, and partial unit drills in executing indirect fire missions. FSCATT Phase I monitors activities, records performance and produces After Action Review Reports. FSCATT Phase I consists of the following four elements: a simulator that replicates an actual M109A5/A6 self-propelled howitzer turret; a fire direction center simulator; a collective training controller, and a forward observer trainer interface. Each FSCATT Phase I training sub-system is capable of being configured to support stand-alone, interactive, and closed-loop operational training modes. In the past, field artillery gunnery team training has been conducted through the use of live fire exercises which lack realism due to safety constraints (e.g. no enemy maneuver or fire). This training is costly in terms of range suitability and availability, ammunition expenditure and travel related Petroleum, Oil, and Lubricants (POL) costs. Fiscal constraints through FY03 mandate a significant reduction of ammunition resources for training units. Reduced training resources and increasing ammunition costs prohibit firing sufficient quantities of ammunition to attain/sustain the required level of field artillery gunnery team proficiency.

**JUSTIFICATION:**  
 FY01 funds will provide for final engineering changes to FSCATT to interface with the digitization of communications software. Funds will also be used for contract closure.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: FIRE SUPPORT COMBINED ARMS TACTICAL TRAI (NA0174)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
A. Howitzer Crew Trainer M109A5	B				10016	16	626						
B. Howitzer Crew Trainer M109A6	B							21440	16	1340			
C. Collective Training Control System	B				1100	30	37						
D. Award Fee					1667								
E. Site Installation Costs					400			400					
F. In-House Government Support					769			748			595		
G. Data/Documentation					185			165					
H. Interim Contractor Logistic Support					1426			1545					
I. Contractor Engineering Support					165			116			125		
J. ECPS											737		
<b>TOTAL</b>					<b>15728</b>			<b>24414</b>			<b>1457</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:		P-1 Line Item Nomenclature: FIRE SUPPORT COMBINED ARMS TACTICAL TRAI (NA0174)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
A. Howitzer Crew Trainer M109A5 FY 99	Raytheon, Orlando, FL	FPAF Option	NAWC, Orlando, FL	Feb-99	May-00	16	626	Yes			
B. Howitzer Crew Trainer M109A6 FY 00	Raytheon, Orlando, FL	FFP Option	NAWC, Orlando, FL	Jan-00	Oct-01	16	1340	Yes			
<b>REMARKS:</b> Naval Air Warfare Center (NAWC) Delivery Sites - Army Wide Ready for Training Date - 3QFY00 (Lot III)											







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	6.1	9.8	11.4	18.8	15.9	16.6	17.7	17.7	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	6.1	9.8	11.4	18.8	15.9	16.6	17.7	17.7	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	6.1	9.8	11.4	18.8	15.9	16.6	17.7	17.7	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Calibration Sets Equipment comprises calibration standards (hardware), accessories, and repair equipment required to perform the Army-wide test, measurement, and diagnostic equipment (TMDE) calibration and repair mission. This equipment provides for accuracy verification of TMDE by maintaining legal traceability to standards established and maintained by the U.S. National Institute of Standards and Technology. The AN/GSM-286 and AN/GSM-287 Calibration Sets and the Reference Calibration Sets are an integral part of the Army calibration system and are used by direct support/general support maintenance units worldwide. This program supports the TMDE required to assure the operability, accuracy, and effectiveness of Army weapon systems.

**JUSTIFICATION:** The FY 2001 funds will be used to procure microwave frequency counters, function generators, load cell sets, digitizing oscilloscopes, oscilloscope workstations, hydraulic pressure standards, and a 100 thousand-pound force calibration system to replace obsolete equipment which is becoming unsupported and is very expensive to maintain. The Calibration Sets Equipment funding provides for replacement of obsolete and worn-out calibration standards and for procurement of state-of-the-art equipment required to ensure advanced technology weapon systems such as the Multiple Launch Rocket System, Apache, Bradley Fighting Vehicle, and Patriot are maintained in the proper state of readiness. The type IV power meters and synthesized sweep generators being procured during this period will extend the capabilities of the calibration sets and allow transfer of some workloads to lower echelon calibration laboratories with both time and monetary savings. The photonics transfer standards and infrared cameras are required to support new and emerging photonics test equipment, and the electro-optics calibration workstation adds high accuracy reference level calibration capability for the transfer level improved Electro-Optics Test Set (EOTS) as well as existing EOTSs and optical fiber power meters. Procurement of a downsized calibration set with upgraded capabilities will begin in FY 2001. This redesigned calibration set will alleviate the serious deployability, mobility, and survivability shortfalls with the current tactical calibration sets and will produce significant operations and support cost savings.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
<b>Hardware:</b>													
Attenuator Calibrator	A				539	79	7						
Wattmeter RF Amplifier	A				1112	31	36						
Instrument Controller	A				1048	262	4						
X-Ray Calibration Measurement System	A				205	1	205						
M41 PATS Calibration and Repair System	A				210	1	210						
Gage Block Sets (Transfer)	A				476	166	3						
Force/Torque Calibration System (APSL/Ref)	A				304	19	16						
Hydraulic Pressure Standard	A				929	101	9				420	40	11
Photonics Transfer Standards	A				245	2	123				1875	15	125
Infrared Camera	A				127	2	64				1125	15	75
Synthesized Sweep Generator	A				1051	55	19	1090	63	17	1540	89	17
High Power RF Calibrator	A				380	60	6	347	55	6			
Force/Torque Calibration System (Transfer)	A							1536	135	11			
Auto Switched Bandpass Filters	A							560	14	40			
Precision Digital Thermometer	A							225	15	15			
Dimensional Calibrator	A							462	138	3			
Liquid Flow Calibration System	A							350	1	350			
RF Amplifier with Filters	A							175	1	175			
Gage Block Sets (Metric)	A							255	24	11			
Calorimeter	A							225	15	15			
TMDE Management Software	A							1200	152	8			
Electro-Optics Test Set Modernization	A							85	2	43	225	15	15
Function Generator	A							1032	97	11	585	55	11
Electronic Filter	A							272	97	3	154	55	3
Tachometer Calibrator	A										420	30	14
Type IV Power Meter	A										970	97	10
Microwave Frequency Counter	A										776	97	8
HP8902 Reference Upgrade	A										640	16	40
Electro-Optics Calibration Workstation	A										300	5	60
Load Cell Sets	A										260	26	10
Digitizing Oscilloscope	A										1455	97	15
Oscilloscope Workstation (VXI)	A										1584	55	29
Flow Computer System	A										255	30	9
100K lb Force Calibration System	A										1300	1	1300
CALSET 2000 Calibration Set	A										2000	2	1000
Acquisitions Totaling Less than \$200,000	A				1055			1344			694		
Contractual Engineering/Technical Services					120			150			150		
Government Engineering/Support					1750			1900			1900		
New Equipment Training					200			150			200		
<b>TOTAL</b>					<b>9751</b>			<b>11358</b>			<b>18828</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
Attenuator Calibrator FY 99	Axion Corp, Huntsville, AL	C/Option	AMCOM	Dec-98	Jul-99	79	7	Y			
Wattmeter RF Amplifier FY 99	Antenna Research, Beltsville, MD	C/Option	AMCOM	Jan-99	Apr-99	31	36	Y			
Instrument Controller FY 99	Dynamic Engineering, Newport News, VA	C/Option	AMCOM	Dec-98	Jul-99	262	4	Y			
X-Ray Calibration Measurement System FY 99	Pantak, Inc., East Haven, CT	C/FP	AMCOM	Mar-99	Jul-99	1	205	Y			
M41 PATS Calibration and Repair System FY 99	TSI, Inc., Shoreview, MN	SS/FP	AMCOM	Mar-99	Oct-99	1	210	Y			
Gage Block Sets (Transfer) FY 99	Tool and Gage House Co, Charlotte, NC	C/FP	AMCOM	Apr-99	Oct-99	166	3	Y			
Force/Torque Calibration System (APSL/Ref) FY 99	Spectris Tech, Norcross, GA	MIPR	Air Force	Mar-99	Apr-99	19	16	Y			
Hydraulic Pressure Standard FY 99 FY 01	DH Instruments, Tempe, AZ DH Instruments, Tempe, AZ	C/FP C/FP	AMCOM AMCOM	Dec-98 Dec-00	Apr-99 Mar-01	101 40	9 11	Y Y	N/A	FSS	

**REMARKS:** This item was funded in OPA2 prior to FY 1998.  
 Numerous items are procured under the Calibration Sets Equipment program. Only those acquisitions totaling \$200,000 or more are being identified individually.  
 FSS in the RFP Issue Date column indicates an item planned for procurement through a General Services Administration Federal Supply Schedule.  
 The M41 PATS Calibration and Repair System was procured sole source to ensure compatibility with equipment previously procured from the same manufacturer.

**Exhibit P-5a, Budget Procurement History and Planning**

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Photonics Transfer Standards FY 99 FY 01	Dynetics, Inc., Huntsville, AL Dynetics, Inc., Huntsville, AL	C/Option C/Option	AMCOM AMCOM	Mar-99 Dec-00	May-99 Mar-01	2 15	123 125	 Y		
Infrared Camera FY 99 FY 01	Cincinnati Elect, Mason, OH Cincinnati Elect, Mason, OH	C/Option C/Option	AMCOM AMCOM	Dec-98 Dec-00	Mar-99 Mar-01	2 15	64 75	 Y		
Synthesized Sweep Generator FY 99 FY 00 FY 01	Anritsu Wiltron, Gaithersburg, MD Anritsu Wiltron, Gaithersburg, MD Anritsu Wiltron, Gaithersburg, MD	MIPR MIPR MIPR	Navy Navy Navy	Feb-99 Dec-99 Dec-00	May-99 Mar-00 Mar-01	55 63 89	19 17 17	 Y Y		
High Power RF Calibrator FY 99 FY 00	Bird Electronics, Solon, OH Bird Electronics, Solon, OH	C/FP C/Option	AMCOM AMCOM	Mar-99 Nov-99	May-99 Jul-00	60 55	6 6	 Y		
Force/Torque Calibration System (Transfer) FY 00	Spectris Tech, Norcross, GA	MIPR	Air Force	Dec-99	Mar-00	135	11	Y		
Auto Switched Bandpass Filters FY 00	TBS	C/FP	AMCOM	Apr-00	Oct-00	14	40	Y		Sep 99
Precision Digital Thermometer FY 00	TBS	C/FP	AMCOM	May-00	Nov-00	15	15	Y		Oct 99

REMARKS:

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Dimensional Calibrator FY 00	TBS	C/FP	AMCOM	May-00	Nov-00	138	3	Y		Oct 99
Liquid Flow Calibration System FY 00	TBS	C/FP	AMCOM	Jun-00	Dec-00	1	350	Y		Nov 99
RF Amplifier with Filters FY 00	DB Control, Fremont, CA	C/FP	AMCOM	Dec-99	Mar-00	1	175	Y		Sep 99
Gage Block Sets (Metric) FY 00	TBS	C/FP	AMCOM	Mar-00	Sep-00	24	11	Y		Sep 99
Calorimeter FY 00	TBS	C/FP	AMCOM	Jun-00	Dec-00	15	15	Y		Feb 00
TMDE Management Software FY 00	TBS	C/FP	AMCOM	Jun-00	Sep-00	152	8	N	Mar 00	Mar 00
Electro-Optics Test Set Modernization FY 00 FY 01	TBS TBS	C/FP C/Option	AMCOM AMCOM	Jun-00 Dec-00	Dec-00 Feb-01	2 15	43 15	N N	Feb 00 Feb 00	Mar 00 Mar 00
Function Generator FY 00 FY 01	TBS TBS	C/FP C/Option	AMCOM AMCOM	May-00 Dec-00	Nov-00 May-01	97 55	11 11	Y Y		Oct 99 Oct 99

REMARKS:

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Electronic Filter FY 00	Krohn Hite, Avon, MA	SS/FP	AMCOM	Apr-00	Oct-00	97	3	Y		Feb 00
FY 01	Krohn Hite, Avon, MA	SS/Option	AMCOM	Dec-00	Jun-01	55	3	Y		Feb 00
Tachometer Calibrator FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	30	14	N	Sep 00	Dec 00
Type IV Power Meter FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	97	10	N	Sep 00	Dec 00
Microwave Frequency Counter FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	97	8	N	Sep 00	Nov 00
HP8902 Reference Upgrade FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	16	40	N	Sep 00	Dec 00
Electro-Optics Calibration Workstation FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	5	60	N	Aug 00	Oct 00
Load Cell Sets FY 01	TBS	C/FP	AMCOM	Apr-01	Sep-01	26	10	N	Aug 00	Oct 00
Digitizing Oscilloscope FY 01	TBS	C/FP	AMCOM	Jun-01	Dec-01	97	15	N	Oct 00	Dec 00

**REMARKS:** The Electronic Filters are being procured sole source because they are replacement items and must be compatible with existing equipment.

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CALIBRATION SETS EQUIPMENT (N10000)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Oscilloscope Workstation (VXI) FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	55	29	N	Aug 00	Oct 00
Flow Computer System FY 01	TBS	C/FP	AMCOM	Mar-01	Sep-01	30	9	N	Aug 00	Oct 00
100K lb Force Calibration System FY 01	TBS	C/FP	AMCOM	Jun-01	Dec-01	1	1300	N	Oct 00	Dec 00
CALSET2000 Calibration Set FY 01	TBS	C/FP	AMCOM	Feb-01	Feb-02	2	1000	N	Aug 00	Sep 00

REMARKS:

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE) (MB4000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	38.6	69.4	61.7	65.4	52.1	55.1	29.0	26.4	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	38.6	69.4	61.7	65.4	52.1	55.1	29.0	26.4	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	38.6	69.4	61.7	65.4	52.1	55.1	29.0	26.4	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Integrated Family of Test Equipment (IFTE) is the Army's program to provide automatic test equipment capable of supporting multiple weapon systems. The IFTE systems provide electronic fault isolation, test, and repair capabilities at all levels of maintenance, and do it more cost effectively than system-specific testers. The IFTE family consists of four systems: The Base Shop Test Facility for direct and general support, the Contact Test Set (Soldier Portable On-System Repair Tool) for organizational support, the Electro-Optics Test Facility for electro-optical support, and the Electronic Repair Shelter for circuit card testing and repair. The following weapon systems depend in whole or in part upon IFTE for maintenance support: Abrams, Bradley, Avenger, Kiowa Warrior, Longbow Apache, Multiple Launch Rocket System (MLRS), Paladin, Sentinel, Joint Tactical Unmanned Aerial Vehicle, Blackhawk and Chinook helicopters, and the Army's entire fleet of diesel engine-powered wheeled and tracked vehicles.

**JUSTIFICATION:** The FY 2001 funds provide for procurement of test equipment to support the Kiowa Warrior, Longbow Apache, MLRS, Abrams, Bradley, Family of Medium Tactical Vehicles, and other Army weapons and support systems. The IFTE provides the capability to support existing weapon systems and electronics-intensive systems planned for future fielding. The IFTE has been designated the Army's standard family of automatic test equipment (one of two Department of Defense standard families), and Army policy mandates its use by weapon system developers. The capability of IFTE to support many different weapon systems at all levels of maintenance generates substantial long-term operations and support cost savings by eliminating the need for more costly system-specific testers and by enabling retirement of the aging and increasingly unsupportable testers currently in the field.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE) (MB4000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
ELECTRONIC REPAIR SHELTER													
Hardware	A				1535	2	768	1565	2	783	3188	4	797
Other					2110			8853			3206		
<b>SUBTOTAL</b>					<b>3645</b>			<b>10418</b>			<b>6394</b>		
BASE SHOP TEST FACILITY													
Hardware	A				13047			3383			6696		
Other													
<b>SUBTOTAL</b>					<b>13047</b>			<b>3383</b>			<b>6696</b>		
CONTACT TEST SET (SPORT)													
Hardware	A				19980	1498	13	23129	1990	12	35516	2935	12
Other					3382			2118			1565		
<b>SUBTOTAL</b>					<b>23362</b>			<b>25247</b>			<b>37081</b>		
ELECTRO-OPTIC EQUIPMENT													
Hardware	A				15813	7	2259	15442	6	2574	10400	4	2600
Other					13507			7233			4810		
<b>SUBTOTAL</b>					<b>29320</b>			<b>22675</b>			<b>15210</b>		
<b>TOTAL</b>					<b>69374</b>			<b>61723</b>			<b>65381</b>		
NOTE: Congressional add of \$10 million in FY 2000 was put into an incorrect program. The increase is being reported in the correct program (Electro-Optic Equipment).													

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ELECTRONIC REPAIR SHELTER (MB2201)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			3	2	2	4	3	2				16
Gross Cost	0.0	0.0	5.4	3.6	10.4	6.4	5.1	4.2	0.1	0.0	0.0	35.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	5.4	3.6	10.4	6.4	5.1	4.2	0.1	0.0	0.0	35.3
Initial Spares												
Total Proc Cost	0.0	0.0	5.4	3.6	10.4	6.4	5.1	4.2	0.1	0.0	0.0	35.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Electronic Repair Shelter (ERS) provides a capability for field level repair of circuit card assemblies in line replaceable units (LRU) and shop replaceable units (SRU) after fault isolation on an Integrated Family of Test Equipment (IFTE) Base Shop Test Facility or other test equipment. This system also provides a capability for testing and fault isolation of printed circuit boards. The ERS consists of a circuit card tester and two electronic repair workstations, all housed in an environmentally-controlled shelter. It will be fielded to general support maintenance units at corps level and above.

**JUSTIFICATION:** The FY 2001 funds will procure equipment to fill ERS requirements in four Army general support units in the continental United States, Europe, and Hawaii. The ERS provides for field level testing and repair of LRUs, SRUs, and circuit card assemblies and will avoid the need for evacuation of faulty components to depots or contractors' plants for repair. It corrects a finding reported by the Army Audit Agency that Army field units have not been equipped with a cost-effective means for repair of circuit cards and satisfies a Chief of Staff of the Army initiative to lower operating costs through circuit card screening and repair in the field.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ELECTRONIC REPAIR SHELTER (MB2201)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Components/Shelter Refurbishment/Unit Assembly	A				1535	2	768	1565	2	783	3188	4	797
Engineering Changes					130			172					
Test Program Sets					561			6949			1348		
Production Engineering					263			246			266		
Quality Assurance					185			185			105		
Configuration Management					82			82			50		
Logistics Products/Support					432			427			450		
Government Technical Support					21			150			250		
Contractual Engineering/Technical Services								207			285		
Interim Contractor Support					436			280			150		
Initial Spares								155			302		
<b>TOTAL</b>					<b>3645</b>			<b>10418</b>			<b>6394</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ELECTRONIC REPAIR SHELTER (MB2201)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Electronic Repair Shelter										
FY 99	Tec-Masters, Inc., Huntsville, AL	SS/FP	AMCOM	Jan-99	May-99	2	768			
FY 00	Tec-Masters, Inc., Huntsville, AL	SS/Option	AMCOM	Jan-00	May-00	2	783	Y		
FY 01	Tec-Masters, Inc., Huntsville, AL	SS/Option	AMCOM	Jan-01	May-01	4	797	Y		

**REMARKS:** This item is being procured sole source from the prime contractor since documentation is not adequate for full and open competition.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: BASE SHOP TEST FACILITY (MB4001)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			9									9
Gross Cost	0.0	0.0	21.6	13.0	3.4	6.7	1.7	0.0	0.0	0.0	0.0	46.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	21.6	13.0	3.4	6.7	1.7	0.0	0.0	0.0	0.0	46.4
Initial Spares												
Total Proc Cost	0.0	0.0	21.6	13.0	3.4	6.7	1.7	0.0	0.0	0.0	0.0	46.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Base Shop Test Facility (BSTF) satisfies the Army's requirement for general purpose, automatic electronic testing at the direct and general support (DS/GS) levels of maintenance. It automatically identifies faults in electronic circuitry and enables immediate repair in the field through circuit card screening and replacement. The BSTF is fielded to DS/GS companies in division main support battalions, corps and non-divisional DS/GS maintenance companies, and aviation maintenance companies. The BSTF in the field is self-contained, consisting of the tester and associated test program sets mounted in two S-280 shelters, on two five-ton trucks, powered by two 60kw generators. The capabilities of this reconfigurable automatic test equipment can be expanded with minimal development to meet new test requirements. The following weapon systems are supported in whole or in part by the BSTF and its commercial equivalent which is used for factory and depot level support: Avenger, Kiowa Warrior, Multiple Launch Rocket System, Paladin, TOW, and Dragon.

**JUSTIFICATION:** The FY 2001 funds will procure test program sets and government furnished equipment and continue quality assurance, depot and logistics support, and other government and contractual services required for fielding of BSTFs. The BSTF is an Army standard general-purpose tester, and Army policy requires that it be used in support of weapon systems currently being developed. The BSTF is also facilitating the retirement of older, less reliable testers whose operating and support costs are becoming prohibitive. It will assume the workloads of and replace the Land Combat Support System, the Electronic Quality Assurance Test Equipment, and the Test Support System with substantial annual operations and support cost savings.

**NOTE:** This item was funded in OPA2 prior to FY 1998.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: BASE SHOP TEST FACILITY (MB4001)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware	A												
Government Furnished Equipment					1304			170			100		
Test Program Sets					3162			305			680		
Engineering Changes					3266								
Depot Support					1360			343			717		
Production Engineering					492			227					
Software Engineering/Support					653			600					
Configuration Management					134			82					
Quality Assurance					138			138			157		
Logistics Products/Support					533			443			510		
Government Technical Services					248			210			214		
Contractual Engineering/Technical Services					1174			475			350		
Component Repair					442			140					
Total Package Fielding					141			250			500		
Initial Spares											3468		
<b>TOTAL</b>					<b>13047</b>			<b>3383</b>			<b>6696</b>		
<p>NOTE: Congressional add of \$10 million in FY 2000 was put into this program incorrectly. The increase is being reported in the Electro-Optic Equipment program.</p>													

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: BASE SHOP TEST FACILITY (MB4001)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Base Shop Test Facility FY 98	Northrop Grumman, Rolling Meadows, IL	SS/Option	AMCOM	Aug-98	Oct-99	9	1782			

**REMARKS:** This item was funded in OPA2 prior to FY 1998.  
Army Acquisition Objective was reduced to 103; Army procurement of this item completed in FY 1998.



**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

CONTACT TEST SET (SPORT) (MB4002)

Program Elements for Code B Items:

Code:

A

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty			719	1498	1990	2935	3247	3627	1615	1615	Cont	Cont
Gross Cost	0.0	0.0	11.6	23.4	25.2	37.1	34.6	38.5	17.1	17.1	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	11.6	23.4	25.2	37.1	34.6	38.5	17.1	17.1	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	11.6	23.4	25.2	37.1	34.6	38.5	17.1	17.1	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Contact Test Set (Soldier Portable On-System Repair Tool) (CTS (SPORT)) is a lightweight, ruggedized, portable on-system tester. It is used at all levels of maintenance to automatically diagnose weapon system operations, both electronic and automotive, and identify faulty components for immediate replacement. Because it is a portable automatic tester with all the inherent computer capabilities and is used by many different maintenance specialties, the CTS (SPORT) is the Army's primary platform for paperless interactive and electronic technical manuals and for downloading mission-critical software into weapon system on-board computer processors. The CTS (SPORT) and its predecessor are in wide use throughout the Army's ground combat and combat service support vehicle fleets as well as in the Army aviation fleet.

**JUSTIFICATION:** The FY 2001 funds will procure hardware and software to support Longbow Apache, Kiowa Warrior, Bradley Fighting Vehicle System (M2A3), Abrams Tank, Multiple Launch Rocket System, and the Family of Medium Tactical Vehicles and other Army wheeled vehicles. The CTS (SPORT) is the Army's standard on-system tester and is an essential maintenance tool in the support plans for the Army's ground vehicle and aviation fleets. It provides testing and diagnostic support and maintenance automation capabilities which are critical to the readiness of Army units and weapon systems.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: CONTACT TEST SET (SPORT) (MB4002)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
Hardware/Accessories	A				19980	1498	13	23129	1990	12	35516	2935	12
Support Equipment					25								
Equipment Refurbishment					66								
Production Engineering					664			683			315		
Software Engineering/Support					1024			654			650		
Quality Assurance					105			50			50		
Logistics Products/Support					335			260			300		
Technical Publications					250								
Government Technical Services					392			220			125		
Contractual Engineering/Technical Services					521			251			125		
<b>TOTAL</b>					<b>23362</b>			<b>25247</b>			<b>37081</b>		

## Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: CONTACT TEST SET (SPORT) (MB4002)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Contact Test Set (SPORT)										
FY 99	Miltope Corp, Hope Hull, AL	C/Option	AMCOM	Dec-98	Apr-99	1498	13			
FY 00	Miltope Corp, Hope Hull, AL	C/Option	AMCOM	Jan-00	May-00	1990	12	Y		
FY 01	Miltope Corp, Hope Hull, AL	C/Option	AMCOM	Jan-01	May-01	2935	12	Y		

**REMARKS:**

This item was funded in OPA2 prior to FY 1998.  
Unit prices vary based on the configuration procured. Unit prices for FY 1999 through FY 2001 exceed the average because of the large number of units requiring internal combustion engine testing capability.





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ELECTRO OPTIC EQUIPMENT (MB4003)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty				7	6	4	2	2	2	2		25
Gross Cost	0.0	0.0	0.0	29.3	22.7	15.2	10.7	12.4	11.7	9.3	0.0	111.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	29.3	22.7	15.2	10.7	12.4	11.7	9.3	0.0	111.4
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	29.3	22.7	15.2	10.7	12.4	11.7	9.3	0.0	111.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Integrated Family of Test Equipment (IFTE) Electro-Optics Test Facility (EOTF) will satisfy test and diagnostic requirements for forward-looking infrared systems, thermal imaging devices, laser designators/range finders, television cameras and display systems, direct view optics systems, and trackers. The EOTF capitalizes on Army and Department of Defense (DoD) investments by integrating components from the IFTE Base Shop Test Facility and the Navy's standard electro-optics (EO) tester within a commercial open architecture for electronics. The IFTE EO program is in concert with Army and DoD policies on general-purpose test equipment. This system will support Kiowa Warrior initially and will be capable of replacing aging EO test equipment such as the Electronic Equipment Test Facility currently supporting other Army systems in the field when it becomes cost effective to do so.

**JUSTIFICATION:** The FY 2001 funding will procure equipment to meet EO test and diagnostic requirements for the Kiowa Warrior. The IFTE EOTF is the Army standard off-system EO automatic tester and is capable of supporting multiple weapon systems. It will produce significant operations and support cost savings over use of system-specific testers.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ELECTRO OPTIC EQUIPMENT (MB4003)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware/System Integration	A				15813	7	2259	15442	6	2574	10400	4	2600
Government Furnished Equipment					11836			5411			3600		
Support Equipment					383								
Quality Verification Testing								32					
Interim Contractor Support											176		
Depot Support											100		
Production Engineering					265			265			200		
Software Engineering/Support								151			100		
Configuration Management					82			82			75		
Quality Assurance					118			118			50		
Logistics Products/Support					602			628			250		
Government Technical Services					221			407					
Contractual Engineering/Technical Services								39					
Initial Spares								100			259		
<b>TOTAL</b>					<b>29320</b>			<b>22675</b>			<b>15210</b>		
<p>NOTE: Congressional add of \$10 million in FY 2000 was put into another program incorrectly. It is being reported in this program.</p>													

### Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ELECTRO OPTIC EQUIPMENT (MB4003)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Electro-Optics Test Facility FY 99	Northrop Grumman, Rolling Meadows, IL	SS/Option	AMCOM	Jun-99	Dec-00	7	2259			
FY 00	Northrop Grumman, Rolling Meadows, IL	SS/Option	AMCOM	Mar-00	Sep-01	6	2574	Y		
FY 01	Northrop Grumman, Rolling Meadows, IL	SS/Option	AMCOM	Jan-01	Jul-02	4	2600	Y		

**REMARKS:**

This item was funded in OPA2 prior to FY 1998.  
 Addition of digital testing and circuit card testing and repair capabilities have increased the unit price for FY 1999 and future years' procurements. Circuit card testing and repair components are being provided as government furnished equipment.  
 Unit price varies based on total quantity procured each year. Total quantity procured may include purchases by other customers that are not reflected above.  
 This item is being procured sole source from the prime contractor since documentation is not adequate for full and open competition.







**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: TEST EQUIPMENT MODERNIZATION (TEMOD) (N11000)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	6.2	13.9	14.2	18.7	15.6	17.1	18.1	18.1	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	6.2	13.9	14.2	18.7	15.6	17.1	18.1	18.1	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	6.2	13.9	14.2	18.7	15.6	17.1	18.1	18.1	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The objectives of the Test Equipment Modernization (TEMOD) program are to improve the materiel readiness of Army weapon systems; reduce test, measurement, and diagnostic equipment (TMDE) proliferation and obsolescence; and decrease TMDE support costs. These objectives are accomplished through acquisition of state-of-the-art test equipment to provide new measurement capabilities and to replace obsolete items in the existing inventory of general purpose test equipment at the direct and general support levels. The TEMOD program supports a wide variety of communications and electronics systems, and purchases equipment that is essential to continued support of the Abrams tank, Bradley Fighting Vehicle, Apache helicopter, Patriot, Single-Channel Ground and Airborne Radio System, and other major weapons and support systems. The TEMOD procurements are primarily commercial items, and they have a significant impact on the readiness, power projection, safety, and training operations of active Army, Army Reserve, and National Guard units.

**JUSTIFICATION:** The FY 2001 funding will provide for procurement of Local Area Network/Wide Area Network (LAN/WAN) Analyzers and Identification Friend or Foe (IFF) Radar Test Sets. Initial quantities of these items were procured in FY 1999, and additional quantities are required to satisfy the total Army requirement. The LAN/WAN Analyzer will support emerging technologies associated with the worldwide defense communications networks. The IFF Radar Test Set will be capable of testing MK X and MK XII compatible IFF equipment and will be used primarily in the maintenance of missile and aviation systems. It will alleviate operational and personnel safety problems associated with the aging and deficient IFF test sets currently in the field. The FY 2001 funding will also procure SG-1207A Signal Generators to complete the total planned acquisition of this item. Signal generators provide essential capabilities for repair of tactical and strategic communications systems, and this equipment will replace items fielded in the early 1980s that are now obsolete and becoming unsupportable. Spectrum analyzers and oscilloscopes will be procured in FY 2001 to replace obsolete and unsupportable equipment and to fill shortages that are having a negative impact on field readiness rates.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: TEST EQUIPMENT MODERNIZATION (TEMOD) (N11000)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware:													
TS-4463 Pitot-Static Test Set	A			1016	32	32							
SG-1207A Signal Generator	A			1890	432	4	1953	448	4	1876	429	4	
Radar Test Set, Identification Friend or Foe	A			5076	38	134	6014	46	131	8903	71	125	
TS-4511 Local/Wide Area Network Analyzer	A			1837	48	38	1609	65	25	1436	58	25	
Spectrum Analyzer	A									1020	51	20	
Oscilloscope	A									954	159	6	
Maintenance/Calibration Accessories				114			1370						
Publications/Technical Data				1565			152			906			
Production Engineering				577			575			575			
Quality Assurance				144			150			150			
Integrated Logistics Support				680			713			712			
Other Government Support/Services				493			639			762			
Contractual Engineering/Technical Services				196			186			199			
Technical Assistance Services				165			301			311			
New Equipment Training				89			320			300			
Warranties				78			139			126			
Initial Spares							75			508			
<b>TOTAL</b>					<b>13920</b>		<b>14196</b>			<b>18738</b>			

## Exhibit P-5a, Budget Procurement History and Planning

Date:  
February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment				Weapon System Type:			P-1 Line Item Nomenclature: TEST EQUIPMENT MODERNIZATION (TEMOD) (N11000)				
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
TS-4463 Pitot-Static Test Set FY 99	Druck, Inc., New Fairfield, CT	SS/Option	AMCOM	Dec-98	Jan-99	32	32				
SG-1207A Signal Generator FY 99	Wayne Kerr, Woburn, MA	C/Option	AMCOM	Jan-99	Mar-00	432	4				
FY 00	Wayne Kerr, Woburn, MA	C/Option	AMCOM	Jan-00	Dec-00	448	4	Y			
FY 01	Wayne Kerr, Woburn, MA	C/Option	AMCOM	Jan-01	Jun-01	429	4	Y			
Radar Test Set, Identification Friend or Foe FY 99	NavCom Def Elect, El Monte, CA	SS/FP	Naval Air Systems Cmd	May-99	Nov-00	38	134				
FY 00	NavCom Def Elect, El Monte, CA	SS/Option	Naval Air Systems Cmd	May-00	Jun-01	46	131	Y			
FY 01	NavCom Def Elect, El Monte, CA	SS/Option	Naval Air Systems Cmd	May-01	May-02	71	125	Y			
TS-4511 Local/Wide Area Network Analyzer FY 99	Agilent Tech, Colorado Springs, CO	C/FP	AMCOM	Mar-99	Nov-00	48	38				
FY 00	Agilent Tech, Colorado Springs, CO	C/Option	AMCOM	Mar-00	Mar-01	65	25	Y			
FY 01	Agilent Tech, Colorado Springs, CO	C/Option	AMCOM	Jan-01	Aug-01	58	25	Y			
Spectrum Analyzer FY 01	TBS (1)	C/FP	AMCOM	Mar-01	Sep-02	51	20	Y		Feb 00	
Oscilloscope FY 01	TBS (2)	C/FP	AMCOM	Apr-01	Oct-02	159	6	N	Mar 00	May 00	

**REMARKS:** FY 1999 unit price for the TS-4511 Local/Wide Area Network Analyzer includes "first article" costs.  
The TS-4463 Pitot-Static Test Set was procured sole source because there was only one responsive bidder. The Radar Test Set, Identification Friend or Foe is being procured sole source because documentation is not adequate for full and open competition.













**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ARMY DIAGNOSTICS IMPROVEMENT PROGRAM (ADIP) (N11400)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	5.2	17.3	17.0	6.8	6.7	5.8	Cont	Cont
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	5.2	17.3	17.0	6.8	6.7	5.8	Cont	Cont
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	5.2	17.3	17.0	6.8	6.7	5.8	Cont	Cont
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Army Diagnostics Improvement Program (ADIP) is a Chief of Staff of the Army initiative to implement improved diagnostic/prognostic strategies and technologies in the maintenance of Army equipment with the objective of reducing operations and support costs while advancing equipment readiness. It supports the vision of the digitized Army and the Army After Next, as well as near-term and interim goals. The ADIP uses a horizontal technology integration approach to develop, manage, integrate, and field components with a common diagnostic architecture across families of weapon systems. It provides an avenue for improving diagnostics on current weapon systems using available tools and test equipment and optimizes the use of common diagnostic technologies in support of currently fielded and emerging weapon systems.

**JUSTIFICATION:** The FY 2001 funds will provide adapters, connectors, software, and other items required to transition on-system support for the Abrams Tank and the Bradley Fighting Vehicle to a Soldier Portable On-System Repair Tool-based maintenance system. The test equipment currently employed in support of the Abrams and Bradley is obsolete, has major technical limitations, and is incapable of handling the new electronics being incorporated into the Abrams M1A2 and the Bradley M2A3. The FY 2001 funds will also be used to rehost and procure test program sets to transition weapon system support workloads from the Electronic Quality Assurance Test Equipment (EQUATE) to the Integrated Family of Test Equipment (IFTE). The EQUATE is becoming obsolete and is very expensive to operate and maintain. It will be retired as soon as the workload can be transitioned to the Electronic Repair Shelter and other IFTE testers.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ARMY DIAGNOSTICS IMPROVEMENT PROGRAM (ADIP) (N11400)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
ARMY DIAGNOSTICS IMPROVEMENT PROGRAM													
Hardware Components	A							3145					
Other								2027					
<b>SUBTOTAL</b>								<b>5172</b>					
IMPROVED SIMPLIFIED TEST EQUIPMENT M1/FVS													
Hardware Components	A										8915		
Other											1582		
<b>SUBTOTAL</b>											<b>10497</b>		
IFTE TEST PROGRAM SETS													
Hardware Components	A										2480		
Other											4323		
<b>SUBTOTAL</b>											<b>6803</b>		
<b>TOTAL</b>								<b>5172</b>			<b>17300</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ARMY DIAGNOSTICS IMPROVEMENT PROGRAM (N11100)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	5.2	0.0	0.0	0.0	0.0	0.0	0.0	5.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This Army Diagnostics Improvement Program initiative will provide hardware components, software, and other items required to transition on-system support for the Abrams Tank and Bradley Fighting Vehicle to a Soldier Portable On-System Repair Tool-based maintenance system. The test equipment currently employed in support of the Abrams and Bradley is obsolete, has major technical limitations, and is incapable of handling the new electronics being incorporated into the Abrams M1A2 and the Bradley M2A3.

**NOTE:** This item is funded as SSN N11104, Improved Simplified Test Equipment M1/FVS, beginning in FY 2001.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ARMY DIAGNOSTICS IMPROVEMENT PROGRAM (N11100)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Components	A							3145					
Systems Engineering								950					
Software Engineering/Support								450					
Technical Data								255					
Quality Assurance								50					
Logistics Support								100					
Depot Support								78					
Government Technical Services								144					
<b>TOTAL</b>								<b>5172</b>					
<p>This program will provide hardware components and software to be intergrated with Soldier Portable On-System Repair Tool (SPORT) units being procured under SSN MB4002 to provide test and diagnostic support for the Abrams and Bradley fleets.</p>													

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: IMPROVED SIMPLIFIED TEST EQUIPMENT M1/FVS (N11104)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	10.5	10.3	0.0	0.0	0.0	0.0	20.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	10.5	10.3	0.0	0.0	0.0	0.0	20.8
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	10.5	10.3	0.0	0.0	0.0	0.0	20.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This initiative under the Army Diagnostics Improvement Program will provide hardware components, software, and other items required to transition on-system support for the Abrams Tank and Bradley Fighting Vehicle to a Soldier Portable On-System Repair Tool (SPORT)-based maintenance system.

**JUSTIFICATION:** The FY 2001 funds will provide adapters, connectors, software, and other items required for use with the SPORT to satisfy on-system test and diagnostic requirements of the Abrams Tank and the Bradley Fighting Vehicle System. The test equipment currently employed in support of the Abrams and Bradley, the Simplified Test Equipment-M1/Fighting Vehicle System (STE-M1/FVS), is obsolete, has major technical limitations, and is incapable of handling the new electronics being incorporated into the Abrams M1A2 and the Bradley M2A3. Replacement of the STE-M1/FVS as planned will return a projected \$6.4 million operations and support cost avoidance per year when fully implemented.

**NOTE:** This item was funded as SSN N11100, Army Diagnostics Improvement Program, in FY 2000.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: IMPROVED SIMPLIFIED TEST EQUIPMENT M1/FVS (N11104)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Components	A										8915		
Systems Engineering											619		
Software Engineering/Support											516		
Quality Assurance											50		
Logistics Support											161		
Depot Support											86		
Government Technical Services											150		
<b>TOTAL</b>											<b>10497</b>		
<p>This program will provide hardware components and software to be integrated with Soldier Portable On-System Repair Tool (SPORT) units being procured under SSN MB4002 to provide test and diagnostic support for the Abrams and Bradley fleets.</p>													

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

IFTE TEST PROGRAM SETS (TPS) (N11103)

Program Elements for Code B Items:

Code:

A

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.0	0.0	0.0	0.0	0.0	6.8	6.8	6.8	6.7	5.8	0.0	32.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.0	0.0	0.0	0.0	0.0	6.8	6.8	6.8	6.7	5.8	0.0	32.9
Initial Spares												
Total Proc Cost	0.0	0.0	0.0	0.0	0.0	6.8	6.8	6.8	6.7	5.8	0.0	32.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This initiative under the Army Diagnostics Improvement Program will provide test program sets to transition workloads from aging and obsolete testers such as the Electronic Quality Assurance Test Equipment (EQUATE) to the Integrated Family of Test Equipment (IFTE) and allow retirement of the older systems.

**JUSTIFICATION:** The FY 2001 funds will be used to rehost test program tests for the Sentinel, Apache, Multiple Launch Rocket System (M270A1), and other weapon systems for use on the Electronic Repair Shelter (ERS). Test program sets for the Abrams, Firefinder, Linebacker, Avenger, and Bradley TOW will also be replicated and distributed to ERS locations with the FY 2001 funding. These test program sets will transition weapon system support workloads from the EQUATE to the IFTE. The EQUATE is becoming obsolete and is very expensive to operate and maintain. It will be retired as soon as the workload can be transitioned to the ERS and other IFTE testers to help reduce the Army's operation and support cost burdens.

**NOTE:** This item is funded as part of SSN MB2201, Electronic Repair Shelter, in FY 2000.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: IFTE TEST PROGRAM SETS (TPS (N11103)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Hardware Components	A										2480		
Software											3719		
Production Engineering											424		
Logistics Products/Support											120		
Quality Assurance											60		
<b>TOTAL</b>											<b>6803</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: RECONFIGURABLE SIMULATORS (KA6000)

Program Elements for Code B Items: Code: A Other Related Program Elements: OMA - 121014

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	12.2	2.3	13.3	1.0	2.4	2.3	0.4	0.1	0.1	0.1	0.0	34.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	12.2	2.3	13.3	0.7	2.4	2.3	0.4	0.1	0.1	0.1	0.0	34.0
Initial Spares												
Total Proc Cost	12.2	2.3	13.3	0.7	2.4	2.3	0.4	0.1	0.1	0.1	0.0	34.0
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This program provides reconfigurable simulators to support combat development simulation activities in the Army's Core Distributed Interactive Simulator Facilities (CDF) and Battle Laboratories. These simulators are combat development simulation tools which will provide the ability to conduct experiments and demonstrations cost effectively by having multiple vehicles represented in the synthetic environment by use of a single simulator. The CDFs are centrally-managed and equipped Army simulation facilities which can link and operate interactively with each other and other geographically-separated simulation sites. The CDFs are available to customers who want to conduct experiments and demonstrations using the synthetic environment. The CDF upgrades will enhance the capability of the Army to analyze user requirements and evaluate alternative technical approaches for satisfying those requirements. These upgrades will increase capabilities of simulator visual display systems, computer image generators, host computer processing power and network interface standards to provide a more realistic synthetic environment. The Synthetic Theater of War-Architecture (STOW-A) is a network of simulation training hub and remote sites which provides the capability of geographically-remote units to realistically train together, virtual testing of new equipment, analysis of alternative force structure designs, soldier training for operations in hazardous conditions without risk, and preparation of units for military operations through mission rehearsal to insure success on the battlefield.

**JUSTIFICATION:** The FY01 funding supports procurement of additional full fidelity ground and aviation Advanced Concepts Research Tools (ACRT). The ACRT effort is focused on procuring and installing a sufficient number of reconfigurable simulation devices at various CDFs for the purpose of upgrading and extending the current Modeling and Simulation (M&S) synthetic environment infrastructures. Once integrated, the technology will be exploited to conduct experimentation into new warfighting concepts, as well as proof of principle experimentation by HQs

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: PHYSICAL SECURITY SYSTEMS (OPA3) (MA0780)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	6.2	7.1	6.9	14.8	19.6	18.9	19.2	19.4	19.7	20.1	0.0	151.9
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	6.2	7.1	6.9	14.8	19.6	18.9	19.2	19.4	19.7	20.1	0.0	151.9
Initial Spares												
Total Proc Cost	6.2	7.1	6.9	14.8	19.6	18.9	19.2	19.4	19.7	20.1	0.0	151.9
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Physical Security Systems protect high dollar, critical assets that are vulnerable to determined, skilled intruders or saboteurs intending to deprive the United States of these resources prior to armed conflict or to disrupt the Government during peace time. Physical Security Systems include the Integrated Commercial Intrusion Detection System (ICIDS), the Joint-Services Interior Intrusion Detection System (J-SIIDS), Commercial Intrusion Detection Systems (CIDS) and other force protection equipment. The goal is to provide security to units, families and facilities thus reducing the number of soldiers used for force protection missions.

**JUSTIFICATION:** FY 2001 funding procures physical security and other force protection equipment that supports security measures required by regulation for conventional Arms, Ammunition and Explosive storage facilities, Sensitive Compartmented Information Facilities, areas designated mission essential and vulnerable, and other high risk targets. Funding minimizes risks and vulnerabilities by providing commanders with the appropriate levels of protection through the use of available technology to safeguard personnel and Army assets. Funding provides for the protection of personnel, facilities and equipment from terrorists and criminal threats. By increasing the protection of personnel, facilities and equipment, the program supports unit readiness and deployments by reducing the vulnerability of units and installations to terrorist threats.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: PHYSICAL SECURITY SYSTEMS (OPA3) (MA0780)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000	TotalCost \$000	Qty Each	UnitCost \$000
JSIDS/CIDS (OPA3)					10090			12667			12634		
ICIDS (OPA3)					4717			6047			5353		
MOBILE DETECTION ASSESSMENT RESPONSE S								883			869		
<b>TOTAL</b>					<b>14807</b>			<b>19597</b>			<b>18856</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: JSIDS/CIDS (OPA3) (MA0781)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	1.6	1.7	1.9	10.1	12.7	12.6	12.7	12.8	12.9	13.2	0.0	92.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	1.6	1.7	1.9	10.1	12.7	12.6	12.7	12.8	12.9	13.2	0.0	92.2
Initial Spares												
Total Proc Cost	1.6	1.7	1.9	10.1	12.7	12.6	12.7	12.8	12.9	13.2	0.0	92.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The J-SIIDS is a Type Classified Standard interior intrusion detection system used to secure arms rooms, nuclear/chemical and conventional ammunition magazines, drug storage, automatic data processing centers, communications and financial facilities. The goal is to provide security to units, families and facilities thus reducing the number of soldiers used for force protection missions.

Commercial Intrusion Detection Systems (CIDS) is used for smaller projects where ICIDS or J-SIIDS would be cost prohibitive or inappropriate. CIDS funds the purchase of equipment to meet these nonstandard, time sensitive requirements. Funds are sent to individual posts, camps, and stations worldwide. The goal is to provide security to units, families and facilities thus reducing the number of soldiers used for force protection missions.

Force Protection Equipment (FPE) provides enhancement of security for personnel, equipment and facilities from a terrorist/criminal threat. This equipment applies defensive measures to reduce vulnerabilities to individuals, installations and property. This program excludes computer network security, COMSEC, preventive medicine and armored vehicles.

**JUSTIFICATION:** The FY 2001 program funds procurement of physical security and force protection equipment. These funds address the specific modernization of integrated Physical Security Equipment (PSE) for intrusion detection and assessment, access control, electronic surveillance and force protection at Army facilities. Funding provides security measures for nuclear reactors, conventional Arms, Ammunition and Explosive storage facilities, Sensitive Compartmented Information Facilities, areas designated mission essential and vulnerable, and other high risk targets. Funding minimizes risks and vulnerabilities by providing commanders with the appropriate levels of protection through the use of available technology to safeguard personnel and Army assets. Funding protects personnel, facilities and equipment from terrorist or criminal threats. The program supports unit readiness and deployments by reducing unit and installation vulnerability.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: JSIDS/CIDS (OPA3) (MA0781)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
J-SIIDS													
Hardware					553			262			262		
Engineering					132			88			88		
<b>SUBTOTAL</b>					<b>685</b>			<b>350</b>			<b>350</b>		
CIDS					9405			12317			12284		
<b>SUBTOTAL</b>					<b>9405</b>			<b>12317</b>			<b>12284</b>		
<p>Unit cost reflect only an average cost. The unit cost is site dependent. Components are assembled according to individual site security requirements.</p>													
<b>TOTAL</b>					<b>10090</b>			<b>12667</b>			<b>12634</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: ICIDS (OPA3) (MA0782)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	4.6	5.3	5.1	4.7	6.0	5.4	5.6	5.7	5.8	6.0	0.0	54.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	4.6	5.3	5.1	4.7	6.0	5.4	5.6	5.7	5.8	6.0	0.0	54.2
Initial Spares												
Total Proc Cost	4.6	5.3	5.1	4.7	6.0	5.4	5.6	5.7	5.8	6.0	0.0	54.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Integrated Commercial Intrusion Detection System (ICIDS) program consists of commercially available interior and exterior sensor, response, entry control, electronic surveillance, and command and control devices used for the protection of chemical/nuclear and Special Compartmented Information Facilities, sensitive munitions, Conventional Arms, Ammunition and Explosive areas, non-nuclear missiles and rockets in a ready to fire configuration, and critical mission essential assets. These components are assembled as "systems" to meet the site specific requirements of installations on the DA Distribution Plan. The goal is to provide security to units, families and facilities thus reducing the number of soldiers used for force protection missions.

**JUSTIFICATION:** The FY 2001 program funds procurement of Physical Security Equipment at Umatilla Chemical Activity, UT, and Blue Grass Chemical Depot, KY, as prioritized by the DA ICIDS Distribution Plan. These funds will modernize intrusion detection and assessment, access control, and surveillance systems by augmenting current equipment or replacing obsolete equipment with state-of-the-art electronic equipment. Funding provides regulatory security measures for conventional Arms, Ammunition and Explosive storage facilities, Sensitive Compartment Information Facilities, and areas designated mission essential and vulnerable, and other high risk targets. Equipment minimizes risks and vulnerabilities by providing commanders with the appropriate levels of protection by using available electronic technology.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment			P-1 Line Item Nomenclature: ICIDS (OPA3) (MA0782)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
ICIDS Hardware Engineering	A				3221 1496	1	3221	4777 1270	2	2389	4229 1124	2	2115
<b>TOTAL</b>					<b>4717</b>			<b>6047</b>			<b>5353</b>		

Unit cost reflect only an average cost.  
The unit cost is site dependent.  
Components are assembled according  
to individual site security requirements.

## Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: ICIDS (OPA3) (MA0782)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Hardware										
FY 99	Lockheed Martin	C/FP/Opt	CECOM	May-99	Jun-99	1	3221	Yes		
FY 00	Lockheed Martin	C/FP/Opt	CECOM	May-00	Jun-00	2	2389	Yes		
FY 01	Lockheed Martin	C/FP/Opt	CECOM	May-01	Jun-01	2	2115	Yes		

**REMARKS:** Unit cost reflects an average cost. The unit cost is site dependent. Components are assembled according to individual site security requirements.





**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

SYSTEM FIELDING SUPPORT (OPA-3) (MA0070)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	88.7	7.7	6.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.3
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	88.7	7.7	6.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.3
Initial Spares												
Total Proc Cost	88.7	7.7	6.9	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	111.3
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** System fielding support funds provide for First Destination Transportation (FDT), Total Package Fielding (TPF), and New Equipment Training (NET) for all systems and equipment funded within Other Procurement Army, Activity 3, Other Support Equipment. FDT funds provide the movement of Army equipment, modification kits, assemblies, and components from the manufacturing point to a CONUS depot or other points of first acceptance within the CONUS supply system. (NOTE: Excludes transportation costs paid by a vendor as prescribed in a procurement contract.) TPF is the standard method of fielding new equipment developed under the Army's force modernization program. The materiel developer plans, develops, acquires, and deploys the materiel systems, including Associated Support Items of Equipment (ASIOE) and Support List Allowance (SLAC) items through a physical handoff to the user. The TPF costs include SLAC items, deprocessing, Temporary Duty (TDY), salaries, and Army Working Capital Fund (AWCF) management equipment. Beginning in FY 00, System Fielding funds are reflected with individual items of equipment.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: BASE LEVEL COML EQUIPMENT (MB7000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	418.2	6.0	5.1	18.8	6.7	7.4	6.2	6.5	6.9	7.1	0.0	488.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	418.2	6.0	5.1	18.8	6.7	7.4	6.2	6.5	6.9	7.1	0.0	488.8
Initial Spares												
Total Proc Cost	418.2	6.0	5.1	18.8	6.7	7.4	6.2	6.5	6.9	7.1	0.0	488.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Base Level Commercial Equipment (BCE) program procures essential TDA authorized equipment that is not centrally-managed or centrally purchased by the Army. Equipment supports generic and recurring installation level activities of active Army & Reserve components. Equipment must be commercially available and have a unit investment cost of \$100k or greater. Type installation activities supported by equipment include material and cargo handling, engineering and public works, grounds and road maintenance, recreation, kitchen and laundry activities. Funds procurement of new investment items or replacements for existing equipment that is overaged, obsolete, or beyond economical repair.

**JUSTIFICATION:** FY 01 programs funds the critical requirements of approximately 16 active Army and Reserve component MACOMs and their sub-installations.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) (MA4500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	119.3	14.6	18.2	22.7	41.5	28.0	20.4	39.3	18.0	17.2	0.0	339.2
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	119.3	14.6	18.2	22.7	41.5	28.0	20.4	39.3	18.0	17.2	0.0	339.2
Initial Spares												
Total Proc Cost	119.3	14.6	18.2	22.7	41.5	28.0	20.4	39.3	18.0	17.2	0.0	339.2
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This budget line funds OPA-3 modifications of in-service equipment programs. It is used to procure hardware, materials, and installation to complete the modification. Modifications are performed to correct safety deficiencies, increase mission capabilities, extend the useful life, improve supportability, upgrade existing technology, increase efficiency, improve readiness and to meet new legal and regulatory requirements. By modifying existing equipment, the Army maintains a ready, supportable inventory of equipment that meets current requirements and regulations at a cost considerably below that of buying new equipment.

**JUSTIFICATION:** The FY01 Modification of In-Service Equipment program funds modification of the Landing Craft, Mechanized (LCM-8), Marine Communications, Electronics, & Navigation (CEN) Equipment, the M-9 Armored Combat Earthmover (ACE) System Improvement Plan (SIP), Phases 3 & 4, the Remote Ordnance Neutralization System, the Landing Craft, Utility (LCU) 2000, and the Logistics Support Vessel (LSV). These upgrades will extend the service life of effected systems, gain critically-required operational improvements, and maintain compliance with new federal legal mandates in the areas of safety and environmental protection.

**Exhibit P-40M Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No.      P-1 Item Nomenclature  
 OTHER PROCUREMENT / 3 / Other Support Equipment      MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) (MA4500)

Program Elements for Code B Items      Code      Other Related Program Elements

Description		Fiscal Years									
OSIP NO.	Classification	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total
	Landing Craft, Mechanized 8 (No P3a Set)	& PRIOR									
1-TACOM	Equip Upgrade	2.7	2.0	1.4	3.8	3.2	0.1	0.0	0.8	0.0	14.0
	Lighter Amphibious Resupply Cargo 60										
2-TACOM	SLEP	9.9	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9
	Marine CEN Upgrade										
4-TACOM	Equip Upgrade	1.4	0.4	4.1	6.8	2.0	3.9	6.5	2.8	0.0	27.9
	Landing Craft Utility										
1-96-08-3109	Equip Upgrade	0.0	1.8	2.8	5.4	5.4	6.7	6.7	9.2	0.0	38.0
	Logstics Support Vessel										
1-90-08-3130	Equip Upgrade	0.0	2.8	6.1	6.0	0.1	0.0	0.0	0.0	0.0	15.0
	M9 ACE SIP										
9-TACOM	Readiness	16.0	3.7	4.0	4.2	7.0	5.0	0.0	0.0	0.0	39.9
	Combat ID (No P3a Set)										
10-TACOM	Equip Upgrade	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	Laser Leveling Device										
1-98-06-4540	Equip Upgrade	0.0	5.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	6.5
	Material Handling Equip (No P3a Set)										
5-TACOM	Equip Upgrade	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2
	D7 Bulldozer SLEP										
6-TACOM	SLEP	0.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0
	Const Equip SLEP										
7-TACOM	SLEP	0.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0
	Const Equip (Np P3a Set)										
8-TACOM	Equip Upgrade	0.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	1.3

**Exhibit P-40M Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No. OTHER PROCUREMENT / 3 / Other Support Equipment	P-1 Item Nomenclature MODIFICATION OF IN-SVC EQUIPMENT (OPA-3) (MA4500)
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Program Elements for Code B Items	Code	Other Related Program Elements
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Description	Fiscal Years										
OSIP NO.	Classification	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	TC	Total

Remote Ordnance Neutralization System (No P3a Set)											
20-TACOM	Equip Upgrade	0.0	2.0	3.1	0.3	0.0	0.0	0.0	0.0	0.0	5.4
Combat Svc Spt Equipment (No P3a Set)											
7-SBCCOM	Equip Upgrade	1.0	0.0	0.0	0.0	0.4	23.6	4.8	4.4	0.0	34.2
Driver's Vision Enhancer for M56 (No P3a Set)											
5-SBCCOM	Equip Upgrade	0.0	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9
Smoke Generator, M157 (No P3A Set)											
XX-SBCCOM	Modernization	0.0	0.0	2.9	1.5	2.3	0.0	0.0	0.0	0.0	6.8
Total		31.0	22.7	41.5	28.0	20.4	39.3	18.0	17.2	0.0	218.2

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Lighter Amphibious Resupply Cargo 60 2-TACOM

**MODELS OF SYSTEMS AFFECTED:** Lighter Amphibious Resupply Cargo - 60 (LARC-60)

**DESCRIPTION / JUSTIFICATION:**

This Service Life Extension Program (SLEP) originally involved the modification of 11 craft to extend their useful life by 20 years. Maintenance and operational capability improvements for Logistics-Over-the-Shore (LOTS) operations have been accomplished. Current speed and mobility have been increased. Capability to operate on unimproved beaches is enhanced. Recently, action has been taken to reduce quantities of TOE required LARCs by 4 vessels. Work on the last 4 units is now held in abeyance indefinitely. Funds have been shifted to cover other watercraft modification efforts.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

PLANNED                      ACCOMPLISHED

Kit Procurement	3Q/96-2Q/99	3Q/96-2Q99
Kit installation	1Q/97-1Q/00	3Q/97-4Q99

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>																				
<b>Inputs</b>	5	1		1																
<b>Outputs</b>	4	1	1	1																

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4		
<b>Inputs</b>																		7
<b>Outputs</b>																		7

**METHOD OF IMPLEMENTATION:**                      **ADMINISTRATIVE LEADTIME:** 2 Months                      **PRODUCTION LEADTIME:** 8 Months

Contract Dates:                      FY 1999                      Jan 99                      FY 2000                      FY 2001

Delivery Date:                      FY 1999                      Sep 99                      FY 2000                      FY 2001

INDIVIDUAL MODIFICATION

Date

February 2000

MODIFICATION TITLE (Cont): Lighter Amphibious Resupply Cargo 60 2-TACOM

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity	9	6.7	2	1.3															11	8.0	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data		0.4		0.3																	0.7
Training Equipment				0.1																	0.1
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Mgt		0.1		0.1																	0.2
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits	6	2.7	1	0.2																7	2.9
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- kits																					
FY 2003 Eqpt -- kits																					
FY 2004 Eqpt -- kits																					
FY 2005 Eqpt -- kits																					
TC Equip-Kits																					
Total Installment	6	2.7	1	0.2																7	2.9
Total Procurement Cost		9.9		2.0																	11.9

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Marine CEN Upgrade 4-TACOM

**MODELS OF SYSTEMS AFFECTED:** Landing Craft Utility (LCU) 2000, Logistics Support Vessel (LSV), 128' Tug, High Speed Patrol Boat

**DESCRIPTION / JUSTIFICATION:**

This upgrade will allow these vessels to continue to meet federal maritime and safety standards. Equipment will upgrade communications, electronics and navigational (CEN) capability matching other services and most importantly bringing craft into compliance with updates to Maritime CEN regulations. The project has two phases. The primary phase covers the main ocean going vessels (A2 vessels - 47) LSV, LT 128, LCU 2000 kits. The primary phase is just a partial installation of required CEN. The second phase completes the A2 vessels (47 additional kits), the A1 vessels (LCU 1600; LT 100, ST 65 - 13 kits) and the B vessels (LCM 8, LARC, Pusher Tug, FMS, BD 89, BD 115 & CF - 113 kits). Note - Different equipment goes on each of the kits for each of the 3 classes of vessels.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

PLANNED                      ACCOMPLISHED

1st Kit Procurement	2Q/97	3Q/97
1st Kit Application	1Q/98	2Q/98

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003				
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
<b>Totals</b>																					
<b>Inputs</b>	20	5	5	5	5	5	2				10	11	10	10	10	9					
<b>Outputs</b>	15	5	5	5	5	5	5	2				10	11	10	10	10	9				

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
<b>Inputs</b>	7	11	11	10	10	10	10	11	10	10	10	3									220
<b>Outputs</b>		7	11	11	10	10	10	10	11	10	10	10	3								220

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:**

3 Months

**PRODUCTION LEADTIME:**

8 Months

Contract Dates:

FY 1999 Feb 99

FY 2000 Apr 00

FY 2001 Mar 01

Delivery Date:

FY 1999 Oct 99

FY 2000 Dec 00

FY 2001 Nov 01

INDIVIDUAL MODIFICATION

Date

February 2000

MODIFICATION TITLE (Cont): Marine CEN Upgrade 4-TACOM

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity	47	0.3			26	3.8	34	4.7			39	3.5	51	4.8	11	1.0	12		220	18.1	
Installation Kits																					
Installation Kits, Nonrecurring Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data						0.2														0.2	
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support						0.1		0.1		0.2		0.1		0.2		0.1					
Program Management																				0.8	
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits	44	1.1	3	0.4																47	
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits							26	1.7												26	
FY 2001 Eqpt -- Kits							5	0.3	29	1.8										34	
FY 2002 Eqpt -- kits																					
FY 2003 Eqpt -- kits											7	0.3	32	1.1						39	
FY 2004 Eqpt -- kits													10	0.4	41	1.7				51	
FY 2005 Eqpt -- kits																				11	
TC Equip-Kits																				12	
Total Installment	44	1.1	3	0.4			31	2.0	29	1.8	7	0.3	42	1.5	41	1.7	23		220	8.8	
Total Procurement Cost		1.4		0.4		4.1		6.8		2.0		3.9		6.5		2.8				27.9	

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** M9 Armored Combat Earthmover (ACE), System Improvement Plan (SIP) Phases 3 and 4

**9-TACOM**

**MODELS OF SYSTEMS AFFECTED:** M9 Armored Combat Earthmover (M9 ACE)

**DESCRIPTION / JUSTIFICATION:**

The M9 Armored Combat Earthmover (ACE) is an Army Selected SORTS system that has consistently failed to meet the Army readiness goal of 90%. This impacts units' ability to deploy and fight effectively. The system improvements shown herein constitute Phase 4 of the ongoing M9 ACE System Improvement Plan (SIP). They are designed to improve vehicle performance, enhance maintainability and increase reliability all with the end goal of improving operational readiness. Specific projects are: powerpack removal improvements, steel apron with blade folder, actuator rings at all stations, non-Halon fire extinguisher, improved hydraulic cooling, hydraulic diagnostic center, Force XXI electronics prep, new hatch and vision ring, new crew cooling system, dozing auto-steer disable, backing auto-spring, thicker hull bottom, steel dozer blades, new final drive flanges, hydraulic fan.

Quantities below reflect a total of 499 sets of SIP 4 hardware for application on vehicles plus 11 sets of SIP 4 hardware to cover damage and loss during application. Figures shown under "FY98 & Prior", "FY99", "FY00 Outputs" and "FY00 Installation" are for SIP 3.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

MILESTONES	PLANNED	ACTUAL
Complete Define SIP4	4Q99	4Q99
Begin Engineering	2Q00	
Begin Testing	4Q00	
Begin Production	4Q00	
Begin Installation	2Q01	

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Inputs</b>	894	447						90				110			185				125	
<b>Outputs</b>	894		250		197					90				110		50	135			114

  

	FY 2004				FY 2005				FY 2006				FY 2007				To	Totals
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	Complete	
<b>Inputs</b>																		1851
<b>Outputs</b>																		1840

**METHOD OF IMPLEMENTATION:** ADMINISTRATIVE LEADTIME: 6 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 1999 Various FY 2000 Various FY 2001 Various  
 Delivery Date: FY 1999 Various FY 2000 Various FY 2001 Various

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): M-9 ACE, System Improvement Plan (SIP) Phases 3 and 4 9-TACOM

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity	2682	9.5	280	3.0	90	2.9	110	3.3	185	5.9	125	3.8								3472	28.4
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Project Management Support				0.7		0.8		0.8		0.8		0.8									3.9
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits	894	6.5	250																	1144	6.5
FY 1999 Eqpt -- Kits					197	0.3														197	0.3
FY 2000 Eqpt -- Kits							90	0.1												90	0.1
FY 2001 Eqpt -- Kits									110	0.2										110	0.2
FY 2002 Eqpt -- kits									50	0.1	135	0.2								185	0.3
FY 2003 Eqpt -- kits											114	0.2								114	0.2
FY 2004 Eqpt -- kits																					
FY 2005 Eqpt -- kits																					
TC Equip-Kits																					
Total Installment	894	6.5	250		197	0.3	90	0.1	160	0.3	249	0.4								1840	7.6
Total Procurement Cost		16.0		3.7		4.0		4.2		7.0		5.0									39.9

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Landing Craft Utility 1-96-08-3109

**MODELS OF SYSTEMS AFFECTED:** Landing Craft Utility (LCU 2000)

**DESCRIPTION / JUSTIFICATION:**

This upgrade will correct safety and operational shortcomings identified by the user community and combat developer. It will also include changes that eliminate environmental hazards to the vessel or crew and also changes that correct technical or operational deficiencies. Some examples are: replacement of existing watertight doors with Navy Standard doors, installation of an efficient, low maintenance drinking water purifier, installation of a reliable oil water separator that meets current pollution standards, new lube oil filtration system, replacement of old four blade propellers with five blade propellers.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

PLANNED      ACCOMPLISHED

Kit Procurement                      FY99-06

Kit Application                        FY00-07

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>																				
<b>Inputs</b>				1		1		1		1	1	1	1	1	1	1	1	1	1	1
<b>Outputs</b>					1		1		1		1	1	1	1	1	1	1	1	1	1

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4					
<b>Inputs</b>	1	1	2	1	1	2	2	2	1	1	2	2	1								34
<b>Outputs</b>	2	1	1	2	1	1	2	2	2	1	1	2	2	1							34

**METHOD OF IMPLEMENTATION:** ADMINISTRATIVE LEADTIME: 6 Months      PRODUCTION LEADTIME: 3 Months

Contract Dates:                      FY 1999      May 99                      FY 2000      Mar 00                      FY 2001      Nov 00

Delivery Date:                        FY 1999      Aug 99                      FY 2000      Jun 00                      FY 2001      Feb 01

INDIVIDUAL MODIFICATION

Date

February 2000

MODIFICATION TITLE (Cont): Landing Craft Utility 1-96-08-3109

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity			1	0.4	2	0.8	4	1.6	4	1.6	5	2.0	5	2.1	7	2.7	6		34	11.2	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders				0.1																	0.1
Data				0.1																	0.1
Training Equipment				0.1																	0.1
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Management				0.2		0.2		0.3		0.3		0.2		0.2		0.2					1.6
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits			1	0.9																	1 0.9
FY 2000 Eqpt -- Kits					2	1.8															2 1.8
FY 2001 Eqpt -- Kits							4	3.5													4 3.5
FY 2002 Eqpt -- kits									4	3.5											4 3.5
FY 2003 Eqpt -- kits											5	4.5									5 4.5
FY 2004 Eqpt -- kits													5	4.4							5 4.4
FY 2005 Eqpt -- kits															7	6.3					7 6.3
TC Equip-Kits																	6				6
Total Installment			1	0.9	2	1.8	4	3.5	4	3.5	5	4.5	5	4.4	7	6.3	6		34	24.9	
Total Procurement Cost				1.8		2.8		5.4		5.4		6.7		6.7		9.2					38.0

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Logistics Support Vessel 1-90-08-3130

**MODELS OF SYSTEMS AFFECTED:** Logistics Support Vessel (LSV)

**DESCRIPTION / JUSTIFICATION:**

This upgrade will correct safety and operational shortcomings identified by the user community and combat developer. It will also include changes that eliminate environmental hazards to the vessel or crew and also change that correct technical or operational deficiencies. Some examples are; replacement of existing watertight doors with Navy Standard doors, installation of an efficient, low maintenance drinking water purifier, installation of a reliable oil water separator that meets current pollution standards, new lube oil filtration system, replacement of old four blade propellers with five blade propellers.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

PLANNED                      ACCOMPLISHED

Kit Procurement                      FY99-02  
 Kit Application                      FY99-02

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>																				
<b>Inputs</b>				1		1		1		1		1								
<b>Outputs</b>					1		1		1		1		1							

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
<b>Inputs</b>																				5
<b>Outputs</b>																				5

**METHOD OF IMPLEMENTATION:**                      **ADMINISTRATIVE LEADTIME:** 6 Months                      **PRODUCTION LEADTIME:** 8 Months

Contract Dates:                      FY 1999                      May 99                      FY 2000                      Mar 00                      FY 2001                      Mar 01

Delivery Date:                      FY 1999                      Jan 00                      FY 2000                      Nov 00                      FY 2001                      Nov 01

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Logistics Support Vessel 1-90-08-3130

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity			1	0.4	2	1.0	2	1.0											5	2.4	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Management				0.1		0.2		0.2		0.1											0.6
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits			1	2.3																1	2.3
FY 2000 Eqpt -- Kits					2	4.9														2	4.9
FY 2001 Eqpt -- Kits							2	4.8												2	4.8
FY 2002 Eqpt -- kits																					
FY 2003 Eqpt -- kits																					
FY 2004 Eqpt -- kits																					
FY 2005 Eqpt -- kits																					
TC Equip-Kits																					
Total Installment			1	2.3	2	4.9	2	4.8												5	12.0
Total Procurement Cost				2.8		6.1		6.0		0.1											15.0

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Laser Leveling Device 1-98-06-45-40

**MODELS OF SYSTEMS AFFECTED:** Laser Leveling Device

**DESCRIPTION / JUSTIFICATION:**

The Laser Leveling Device/Equipment is used to determine slopes, cut and fill points and grade. It is to be installed on the Army's current fleet of bulldozers, graders and scrapers. Increased grading, bulldozing, and scraping productivity is achieved by cutting/filling to grade in fewer passes, with consistent accuracy at higher operating speeds, day or night. Surveying operations are also improved.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

MILESTONES	PLANNED	ACCOMPLISHED
Kit Procurement	FY00	FY01
Kit Application	FY00	FY01

**Installation Schedule:**

Pr Yr	FY 1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Inputs</b>						48	25	25	25											
<b>Outputs</b>								36	37	25	25									

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
<b>Inputs</b>																				123
<b>Outputs</b>																				123

**METHOD OF IMPLEMENTATION:** ADMINISTRATIVE LEADTIME: 3 Months PRODUCTION LEADTIME: 6 Months

Contract Dates: FY 1999 Mar 00 FY 2000 Mar 00 FY 2001  
 Delivery Date: FY 1999 Aug 00 FY 2000 Aug 00 FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Laser Leveling Device 1-98-06-45-40

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity			100	4.0	23	1.1														123	5.1
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Management Spt				0.2		0.2															0.4
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits			100	0.8																100	0.8
FY 1999 Eqpt -- Kits							23	0.2												23	0.2
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Installment			100	0.8	23	0.2														123	1.0
Total Procurement Cost				5.0		1.5															6.5

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** D7 Bulldozer SLEP

**MODELS OF SYSTEMS AFFECTED:** D7 Bulldozer

**DESCRIPTION / JUSTIFICATION:**

The planned service life of 15 years for the D7 Bulldozer covered under this effort has been exceeded in the FY86-04 time frame. The service life of these vehicles will be extended another 10-15 years by rebuilding the entire vehicle to include major components such as the engine, transmission, hydraulics, etc. During SLEP, technology insertions may be added to the vehicle. The cost to extend the service life of each of these systems is approximately 25-33% the cost of a new vehicle. The finished product will have approximately the same amount of service life as a new vehicle, thus enabling the Army to save money.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

	Planned	Accomplished
Equipment Procurement	FY00	

**Installation Schedule:**

Pr Yr	FY1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>						15	15	15	15	15	15	4								
<b>Inputs</b>						5	15	15	15	15	15	14								
<b>Outputs</b>																				

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
<b>Inputs</b>																				94
<b>Outputs</b>																				94

**METHOD OF IMPLEMENTATION:**

**ADMINISTRATIVE LEADTIME:** NA

**PRODUCTION LEADTIME:** NA

Contract Dates:	FY 1999	FY 2000	Jan 00	FY 2001
Delivery Date:	FY 1999	FY 2000	Mar 00	FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): D7 Bulldozer SLEP, 6-TACOM

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity					94	9.8													94	9.8	
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring																					
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Management Spt							0.2														0.2
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Installment							94													94	
Total Procurement Cost							10.0														10.0

**INDIVIDUAL MODIFICATION**

Date February 2000

**MODIFICATION TITLE:** Construction Equipment SLEP, 3-TACOM

**MODELS OF SYSTEMS AFFECTED:**

**DESCRIPTION / JUSTIFICATION:**

The service life of the current Army fleet of Scrapers, Bulldozers, Loaders, and Water Distributors covered under Construction Equipment Service Life Extension Program (SLEP), have been, or will be exceeded in the FY86-94 time frame. The service life of these vehicles will be extended another 10-15 years by rebuilding the entire vehicle to include major components such as the engine, transmission, hydraulics, etc. During SLEP, technology insertions may be added to the vehicle. The cost to extend the service life of each of these systems is approximately 25-33% the cost of a new vehicle. The finished product will have approximately the same amount of service life as a new vehicle.

**DEVELOPMENT STATUS / MAJOR DEVELOPMENT MILESTONES:**

**PLANNED                      ACCOMPLISHED**  
 Equipment Procurement      FY00

**Installation Schedule:**

Pr Yr	FY1999				FY 2000				FY 2001				FY 2002				FY 2003			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
<b>Totals</b>									15	16										
<b>Inputs</b>																				
<b>Outputs</b>									5	15	11									

  

	FY 2004				FY 2005				FY 2006				FY 2007				To Complete	Totals		
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
<b>Inputs</b>																				
<b>Outputs</b>																				
																				31
																				31

**METHOD OF IMPLEMENTATION:** ADMINISTRATIVE LEADTIME: 6 Months      PRODUCTION LEADTIME: 4 Months  
 Contract Dates:                      FY 1999                                      FY 2000      Jun 00                                      FY 2001  
 Delivery Date:                        FY 1999                                      FY 2000      Sep 00                                      FY 2001

INDIVIDUAL MODIFICATION

Date February 2000

MODIFICATION TITLE (Cont): Construction Equipment SLEP, 3-TACOM

FINANCIAL PLAN: (\$ in Millions)

	FY 1998 and Prior		FY 1999		FY 2000		FY 2001		FY 2002		FY 2003		FY 2004		FY 2005		TC		TOTAL		
	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	Qty	\$	
RDT&E																					
PROCUREMENT																					
Kit Quantity																					
Installation Kits																					
Installation Kits, Nonrecurring																					
Equipment																					
Equipment, Nonrecurring					31	3.9														31	3.9
Engineering Change Orders																					
Data																					
Training Equipment																					
Support Equipment																					
Other																					
Interim Contractor Support																					
Program Management Spt							0.1														0.1
Installation of Hardware																					
FY 1998 & Prior Eqpt -- Kits																					
FY 1999 Eqpt -- Kits																					
FY 2000 Eqpt -- Kits																					
FY 2001 Eqpt -- Kits																					
FY 2002 Eqpt -- Kits																					
FY 2003 Eqpt -- Kits																					
FY 2004 Eqpt -- Kits																					
FY 2005 Eqpt -- Kits																					
TC Equip-Kits																					
Total Installment							31														31
Total Procurement Cost							4.0														4.0

**Exhibit P-40, Budget Item Justification Sheet**

Date:

September 1999

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature:

PRODUCTION BASE SUPPORT (MA0450)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	290.0	1.9	2.2	2.2	2.4	2.4	2.5	2.5	2.6	2.7	0.0	311.4
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	290.0	1.9	2.2	2.2	2.4	2.4	2.5	2.5	2.6	2.7	0.0	311.4
Initial Spares												
Total Proc Cost	290.0	1.9	2.2	2.2	2.4	2.4	2.5	2.5	2.6	2.7	0.0	311.4
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** The Production Base Support program sustains and improves our current capabilities through the purchase of equipment, instrumentation, and facilities. Enhancement of the current capabilities improves productivity of data acquisition and analysis. The rehabilitation of a variety of industrial plant equipment is required to ensure the continuing capability to perform assigned tasks of production acceptance testing and product improvement testing of Army materiel.

**JUSTIFICATION:** Funding in FY01 will be used for replacement or upgrade of equipment and instrumentation used in production testing at Yuma, Aberdeen Proving Grounds, and the Cold Region Test Center, Ft. Greely, Alaska.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: BUILDING, PRE-FAB, RELOCATABLE (MA9160)

Program Elements for Code B Items: Code: A Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	9.1	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	9.1	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1
Initial Spares												
Total Proc Cost	9.1	0.0	0.0	15.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Relocatable building are required to house incoming trainees as a result of an increase in accessions, increase in Basic Combat Training (BCT) during from 8 to 9 weeks and a decrease in One Station Unit Training (OSUT) demand. The temporary barracks will be fully equipped, pre-engineered buildings erected on the appropriate foundations. These buildings can be erected relatively quickly and disassembled and relocated as needed. A trainee barracks modernization program is being initiated which will replace existing deteriorated barracks to meet an estimated 21 company set capacity shortfall. The modernization program, however, will not result in usable facilities until 2003 at the earliest, and will not cover the capacity shortfall until 2005 or later.

Exhibit P-5, Weapon TOTAL		Appropriation/ Budget Activity/Serial No:			P-1 Line Item Nomenclature:			Weapon System Type:			Date: February 2000		
Cost Elements	ID	FY 98			FY 99			FY 00			FY 01		
	CD	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
Temporary Barracks	A				15000	8	1875						
<b>TOTAL</b>					<b>15000</b>								

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment		Weapon System Type:			P-1 Line Item Nomenclature: BUILDING, PRE-FAB, RELOCATABLE (MA9160)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date
Temporary Barracks FY 99	TBS	FFP	TRADOC	Mar-00	May-00	8	1875	Y		

**REMARKS:** These buildings are commercial off the shelf items.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: SPECIAL EQUIPMENT FOR USER TESTING (MA6700)

Program Elements for Code B Items: 664759  
 Code: A/B  
 Other Related Program Elements: OMA - 122011

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	257.7	13.5	14.6	14.6	16.8	24.3	16.3	15.6	13.8	13.8	0.0	401.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	257.7	13.5	14.6	14.6	16.8	24.3	16.3	15.6	13.8	13.8	0.0	401.1
Initial Spares												
Total Proc Cost	257.7	13.5	14.6	14.6	16.8	24.3	16.3	15.6	13.8	13.8	0.0	401.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** This program provides funding for Major User Test Instrumentation, finances procurement of major field instrumentation of Operational Testing, (OT), Force Development Testing and Experimentation (FDTE) and Army Warfighting Experiments (AWE). Each initiative set forth in this program element is directly tied to tactical systems that support each of the five Modernization Objectives; Protect & Sustain; Protect the Force; Win Information War; Conduct Precision Strikes; and Dominate the Maneuver Battle. Cornerstone is the Mobile Automated Instrumentation Suite (MAIS) that provides the Operational Test community a high fidelity, realistic, encrypted, Real Time Casualty Assessment (RTCA) capability to measure the performance of hardware and personnel under tactical conditions for small and large-scale operations "up to 1830 players." MAIS is the US Army's only encrypted high-fidelity RTCA capability and is used to test all current and future US Army weapons and weapon systems in a force-on-force operational environment. The MAIS program includes three major thrust areas: MAIS Pre-Planned Product Improvement (P3I), Instrumentation XXI, and Protocol Data Unit (PDU) Gateway. Without these capabilities, the Operational Test community will encounter shortcomings in its ability to adequately assess Army Transformation developments.

**Exhibit P-40C Budget Item Justification Sheet**

Date

February 2000

Appropriation / Budget Activity/Serial No.

OTHER PROCUREMENT / 3 / Other Support Equipment

P-1 Item Nomenclature

SPECIAL EQUIPMENT FOR USER TESTING (MA6700)

Program Elements for Code B Items

664759

Code

A/B

Other Related Program Elements

**JUSTIFICATION:**

The MAIS FY01 procurement buys 400 Micro Programmable Electronic Units and 400 Interface Kits for the MAIS Ground Vehicle Player Units, 16 Crew Served Weapons player units, 4 fixed wing player units and 1 command, control & communications center. The existing C3I center requires retrofit due to obsolescence and supportability issues of its current hardware and software. A second C3 Center is required to support a demanding operational test schedule, which includes simultaneous, geographically dispersed weapons system test events. The MAIS will provide the capability to meet the test and evaluation needs for future hardware, tactics, and organizations in an operational environment. The player units will be mounted on ground vehicles, fixed wing aircraft, helicopters, crew served weapons and individual soldiers to test emerging technologies and upgrades to weapon systems in a combat realistic field environment. FY01 funding also supports acquisition of the following procurement items under the OPTEC Test Instrumentation Program (OTIP): Threat Radio Net Upgrade will be used to supply a realistic threat force in support of operational testing, Heavy-Load Equipment Transporter will be used to transport threat systems and other oversize/overweight support equipment, Fiber Optics Range Network, unlike copper wire cables, will support the high rate video and digital data signals generated by TMD systems, Communications Assets, representing current worldwide communications technology, will serve as target communications to support operational testing of new jamming systems.

<b>Exhibit P-5, Weapon OPA Cost Analysis</b>		Appropriation/ Budget Activity/Serial No: OTHER PROCUREMENT /3/Other Support Equipment			P-1 Line Item Nomenclature: SPECIAL EQUIPMENT FOR USER TESTING (MA6700)			Weapon System Type:			Date: February 2000		
<b>Cost Elements</b>	ID CD	<b>FY 98</b>			<b>FY 99</b>			<b>FY 00</b>			<b>FY 01</b>		
		TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost	TotalCost	Qty	UnitCost
		\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000	\$000	Each	\$000
MAJOR USER TEST INSTRUMENTATION													
A. MAIS Ground Vehicle Player Unit (PU) - Transceiver Control Module (TCM) - Weapons Performance Module (WPM) - Micro Programmable Electronics (MPE)					903	95	10	3600	225	16	2500	400	6
B Player Unit Interface Kits								900	225	4	1600	400	4
C. Dismounted Troop Player Unit					7677	300	26						
D. Air Frame Player Units - Rotary Wing Player Units - Fixed Wing Player Units											1236	4	309
E. Crew Served Weapons Surrogate											816	16	51
F. Interim Contractor Logistics Support					2133			2032					
G. Engineering Support					187			200			200		
H. Level-of-Effort Non Recurring Engineering (LOE/NRE) Production					2000			1225			848		
I. Command, Control, and Commo Center								1700			10000	1	10000
J. Audio Visual Cue Devices - Launchers - Cartridges											750	150	5
											250	250	1
K. OPTEC Sustaining					1207			1480			2103		
L. Threat Simulators					504			5638			4041		
<b>TOTAL</b>					<b>14611</b>			<b>16775</b>			<b>24344</b>		

### Exhibit P-5a, Budget Procurement History and Planning

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT /Other Support Equipment / 53901572				Weapon System Type:		P-1 Line Item Nomenclature: SPECIAL EQUIPMENT FOR USER TESTING (MA6700)					
WBS Cost Elements: Fiscal Years	Contractor and Location	Contract Method and Type	Location of PCO	Award Date	Date of First Delivery	QTY Each	Unit Cost \$000	Specs Avail Now?	Date Revsn Avail	RFP Issue Date	
A. MAIS Ground Vehicle Player Units (PU) - Transceiver Control Module (TCM): FY99 - Weapons Performance Module (WPM): FY00 - Micro Programmable Electronics (MPE): FY01	Lockheed Martin, Akron, OH	Option	NAWC, Orlando, FL	Mar-98	Sep-00	95	10	YES			
	TBD	FPI	TBD	Jul-00	Jul-01	225	16	YES			
	TBD	FFP	TBD	Nov-00	Oct-01	400	6	YES			
B. Player Unit Interface Kits FY00 FY01	Various	FPI	Various	Jul-00	Jul-01	225	4	YES			
				Nov-00	Oct-01	400	4	YES			
C. Dismounted Troop Player Units: FY99	Lockheed Martin, Akron, OH	Option	NAWC, Orlando, FL	Mar-98	May-00	300	26	YES			
D. Air Frame Player Units - Fixed Wing Player Units: FY01	TBD	FFP	TBD	Nov-00	Oct-01	4	309	YES			
				Nov-00	Oct-01	16	51	YES			
E. Crew Served Player Units: FY01	TBD	FFP	TBD	Nov-00	Oct-01	16	51	YES			
I. Command, Control, & Commo Center: FY01	Various	FPI	Various	Nov-00	Oct-01	1	10000	YES			
J. Audio Visual Cues - Launchers: FY01 - Cartridges: FY01	Cubic, San Diego, CA	Option	NAWC, Orlando, FL	Nov-00	Sep-01	150	5	YES			
				Nov-00	Sep-01	250	1				

REMARKS:





**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 3 / Other Support Equipment  
 P-1 Item Nomenclature: MA8975 (MA8975)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	2.2	2.2	4.1	5.9	4.4	2.3	6.3	4.6	4.7	4.9	0.0	41.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	2.2	2.2	4.1	5.9	4.4	2.3	6.3	4.6	4.7	4.9	0.0	41.6
Initial Spares												
Total Proc Cost	2.2	2.2	4.1	5.9	4.4	2.3	6.3	4.6	4.7	4.9	0.0	41.6
Flyaway U/C												
Wpn Sys Proc U/C												

**JUSTIFICATION:** FY 01 funds will provide for the replacement of critical components that are approaching end of shelf-life and new equipment required to maintain mission capability for a classified program. Current industry practice of minimizing inventory and manufacturing only to order has caused revisions in operational plans that formerly depended on rapid procurements. Reduced demand for heavy industrial process components and the subsequent shrinkage of the U.S. manufacturing base in casting, forging, and fabrication have caused lead times to exceed the acceptable mobilization period. Procurement of these components will ensure successful mission responses to emergency situations.

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 4 / Initial Spares  
 P-1 Item Nomenclature: INITIAL SPARES - TSV (DS1000)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.1	0.1	0.1	4.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.1	0.1	0.1	4.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Initial Spares												
Total Proc Cost	0.1	0.1	0.1	4.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.8
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides for procurement of spares to support initial fielding of new or modified end items.

**JUSTIFICATION:** The funds in this account procure depot level reparable (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. Initial spares breakout.

	<u>FY98</u>	<u>FY99</u>	<u>FY00</u>	<u>FY01</u>
PEO Other	.1	.1		
FMTV	.1			
<b>Total</b>	<b>.2</b>	<b>.1</b>		

**Exhibit P-40, Budget Item Justification Sheet**

Date:

February 2000

Appropriation / Budget Activity/Serial No:

OTHER PROCUREMENT / 4 / Initial Spares

P-1 Item Nomenclature:

INITIAL SPARES - C&E (BS9100)

Program Elements for Code B Items:

Code:

Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	63.1	56.5	41.1	58.5	43.3	40.2	47.6	44.0	43.4	53.3	0.0	491.1
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	63.1	56.5	41.1	58.5	43.3	40.2	47.6	44.0	43.4	53.3	0.0	491.1
Initial Spares												
Total Proc Cost	63.1	56.5	41.1	58.5	43.3	40.2	47.6	44.0	43.4	53.3	0.0	491.1
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides for procurement of spares to support initial fielding of new or modified end items.

**JUSTIFICATION:** The funds in this account procure depot level reparable (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. Initial spares breakout.

	FY98	FY99	FY00	FY01
ADDS	2.5	5.3	0.8	0.7
SCAMP	2.1	4.6		
JTARS	6.1	5.9	6.1	6.2
Non-PEO	5.4	2.9	4.6	2.5
FAAD GBS	5.3	5.1	4.3	1.9
PEO CCS-Other	0.9	0.6		
SMART-T	1.1	1.7		5.2
ASAS	1		0.7	0.7

**Exhibit P-40C Budget Item Justification Sheet**

Date  
February 2000

Appropriation / Budget Activity/Serial No.  
OTHER PROCUREMENT / 4 / Initial Spares

P-1 Item Nomenclature  
INITIAL SPARES - C&E (BS9100)

Program Elements for Code B Items

Code

Other Related Program Elements

DESCRIPTION: Provides for procurement of spares to support initial fielding of new or modified end items.

JUSTIFICATION: The funds in this account procure depot level reparable (DLR) secondary items from the Supply Management, Army activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. Initial spares breakout.

	FY98	FY99	FY00	FY01
PEO COMM-Other	1	6.4	6.9	6.4
Defense SATCOM	5.7	14.8	11.8	11.2
FAADC2	1.2	0.8	0.4	0.6
CSSCS	0.3	0.2	0.2	
AFATDS	1.6	2.1	2.7	2.6
PEO IEW-Other	2.5	4.1	2.9	2.9
SINCGARS	1.6	0.7		
PEO STAMIS	2.8	2.9	1.7	0.6
FBCB2				0.9
<b>Total</b>	<b>41.1</b>	<b>58.1</b>	<b>43.1</b>	<b>42.4</b>

**Exhibit P-40, Budget Item Justification Sheet**

Date: February 2000

Appropriation / Budget Activity/Serial No: OTHER PROCUREMENT / 4 / Initial Spares  
 P-1 Item Nomenclature: INITIAL SPARES - OTHER SUPPORT EQUIP (MS3500)

Program Elements for Code B Items: Code: Other Related Program Elements:

	Prior Years	FY 1997	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	To Complete	Total Prog
Proc Qty												
Gross Cost	0.6	0.2	0.5	0.7	0.9	0.6	1.0	0.7	0.6	0.9	0.0	6.6
Less PY Adv Proc												
Plus CY Adv Proc												
Net Proc (P-1)	0.6	0.2	0.5	0.7	0.9	0.6	1.0	0.7	0.6	0.9	0.0	6.6
Initial Spares												
Total Proc Cost	0.6	0.2	0.5	0.7	0.9	0.6	1.0	0.7	0.6	0.9	0.0	6.6
Flyaway U/C												
Wpn Sys Proc U/C												

**DESCRIPTION:** Provides for procurement of spares to support initial fielding of new or modified end items.

**JUSTIFICATION:** The funds in this account procure depot level reparable (DLR) secondary items from the Supply Management, army activity of the Army Working Capital Fund. To provide initial support, funds are normally required in the same year that end items are fielded. Initial spares breakout.

	FY98	FY99	FY00	FY01
INITIAL SPARES	0.5	0.7	0.9	0.6