## Department of Defense Fiscal Year (FY) 2018 Budget Estimates

May 2017



## **Army**

Justification Book of

Other Procurement, Army
Other Support Equipment, Budget Activity 3

### PROCUREMENT OF OTHER PROCUREMENT, ARMY

### **APPROPRIATION LANGUAGE**

For construction, procurement, production, and modification of Other Procurement, Army, equipment, including ordnance, spare parts, and accessories therefore; specialized equipment and training devices; expansion of public and private plants, including the land necessary therefore, for the foregoing purposes, and such lands and interests therein, may be acquired, and construction prosecuted thereon prior to approval of title; and procurement and installation of equipment, appliances, and machine tools in public and private plants; reserve plant and government and contractor-owned equipment layaway; and other expenses necessary for the foregoing purposes, \$7,657,744.00 to remain available for obligation until September 30, 2019.

### **COST STATEMENT**

The following Justification Books were prepared at a cost of \$250,916: Aircraft (ACFT), Missile (MSLS), Weapons & Tracked Combat Vehicles (WTCV), Ammunition (AMMO), Other Procurement Army (OPA) 1 - Tactical & Support Vehicles, Other Procurement Army (OPA) 2 - Communications & Electronics, Other Procurement Army (OPA) 3 & 4 - Other Support Equipment & Spares, Research, Development, Test and Evaluation (RDTE) for: Budget Activity 1, Budget Activity 2, Budget Activity 3, Budget Activity 4, Budget Activity 5A, Budget Activity 5B, Budget Activity 6, and Budget Activity 7.

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### **Line Item Table of Contents (by Appropriation then Line Number)**

Appropriation 2035A: Other Procurement, Army

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119	03	10	W01103	Protective Systems	
120	03	10	M11205	Family Of Non-Lethal Equipment (FNLE)	3
121	03	10	M90101	Base Defense Systems (BDS)	5
122	03	10	M01001	CBRN Defense	
123	03	15	MX0100	Tactical Bridging	10
124	03	15	MA8890	Tactical Bridge, Float-Ribbon	
125	03	15	G06520	BRIDGE SUPPLEMENTAL SET	
126	03	15	G07000	Common Bridge Transporter (CBT) Recap	21
127	03	20	R68200	Handheld Standoff Minefield Detection Sys-HSTAMIDS	
128	03	20	R68400	Grnd Standoff Mine Detectn Sysm (GSTAMIDS)	32
129	03	20	R68260	AREA MINE DETECTION SYSTEM (AMDS)	39
130	03	20	R64001	HUSKY MOUNTED DETECTION SYSTEM (HMDS)	41
131	03	20	M80400	Robotic Combat Support System (RCSS)	48
132	03	20	W12001	EOD Robotics Systems Recapitalization	49
133	03	20	W12002	Robotics and Applique Systems	51
134	03	20	MA9200	Explosive Ordnance Disposal Eqpmt (EOD EQPMT)	53

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### Appropriation 2035A: Other Procurement, Army

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135 03 20 M60001 Remote Demolition Systems	55
136 03 20 MA7700 < \$5M, Countermine Equipment	57
137 03 20 R12001 Family of Boats and Motors	59
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139 03 25 MA6800 Soldier Enhancement	63
140 03 25 G01101 Personnel Recovery Support System (PRSS)	64
141 03 25 R80501 Ground Soldier System	65
142 03 25 R80800 Mobile Soldier Power	69
143 03 25 M80200 Force Provider	71
144 03 25 M65800 Field Feeding Equipment	
145 03 25 MA7804 Cargo Aerial Del & Personnel Parachute Systems	75
146 03 25 R70001 Family Of Engr Combat and Construction Sets	84
147 03 25 ML5301 Items Less Than \$5M (Eng Spt)	88
148 03 30 MB6400 QUALITY SURVEILLANCE EQUIPMENT	91
149 03 30 MA6000 Distribution Systems, Petroleum & Water	93
150 03 40 MN1000 Combat Support Medical	118
151 03 45 G05301 Mobile Maintenance Equipment Systems	
152 03 45 ML5345 Items Less Than \$5.0M (Maint Eq)	148

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### Appropriation 2035A: Other Procurement, Army

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
153	03	50	R03800	Grader, Road Mtzd, Hvy, 6X4 (CCE)	150
154	03	50	RA0100	Scrapers, Earthmoving	152
155	03	50	X01500	Hydraulic Excavator	
156	03	50	M05800	Tractor, Full Tracked	156
157	03	50	R06701	All Terrain Cranes	158
158	03	50	M08100	Plant, Asphalt Mixing	160
159	03	50	R05901	High Mobility Engineer Excavator (HMEE)	161
160	03	50	R07001	Enhanced Rapid Airfield Construction Capap	170
161	03	50	R07005	Family of Diver Support Equipment	172
162	03	50	M05500	Const Equip ESP	174
163	03	50	ML5350	Items Less Than \$5.0M (Const Equip)	. 176
164	03	55	M11101	Army Watercraft Esp	178
165	03	55	ML5355	Items Less Than \$5.0M (Float/Rail)	188
166	03	60	MA9800	Generators And Associated Equip	. 190
167	03	60	R42501	Tactical Electric Power Recapitalization	217
168	03	65	G41001	Family Of Forklifts	219
169	03	70	MA6600	Combat Training Centers Support	221
170	03	70	NA0100	Training Devices, Nonsystem	230

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### Appropriation 2035A: Other Procurement, Army

Line #	ВА	BSA	Line Item Number	Line Item Title	Page
171	03	70	NA0170	Close Combat Tactical Trainer	267
172	03	70	NA0173	Aviation Combined Arms Tactical Trainer	275
173	03	70	NA0176	Gaming Technology In Support of Army Training	283
174	03	80	N10000	Calibration Sets Equipment	285
175	03	80	MB4000	Integrated Family Of Test Equipment (IFTE)	287
176	03	80	N11000	Test Equipment Modernization (TEMOD)	
177	03	90	M62550	M25 STABILIZED BINOCULAR	303
178	03	90	M80101	Rapid Equipping Soldier Support Equipment	304
179	03	90	MA0780	Physical Security Systems (OPA3)	306
180	03	90	MB7000	Base Level Common Equipment	323
181	03	90	MA4500	Modification Of In-Svc Equipment (OPA-3)	325
182	03	90	MA0450	Production Base Support (OTH)	
183	03	90	MA6700	Special Equipment For User Testing	345
184	03	90	MA8975	TRACTOR YARD	347

## Army • Budget Estimates FY 2018 • Procurement

### Line Item Table of Contents (Alphabetically by Line Item Title)

Line Item Title	Line Item Number	Line #	ВА	BSA Page
< \$5M, Countermine Equipment	MA7700	136	03	20 57
AREA MINE DETECTION SYSTEM (AMDS)	R68260	129	03	20 39
All Terrain Cranes	R06701	157	03	50 158
Army Watercraft Esp	M11101	164	03	55 178
Aviation Combined Arms Tactical Trainer	NA0173	172	03	70 275
BRIDGE SUPPLEMENTAL SET	G06520	125	03	15 20
Base Defense Systems (BDS)	M90101	121	03	10 5
Base Level Common Equipment	MB7000	180	03	90 323
CBRN Defense	M01001	122	03	10 8
Calibration Sets Equipment	N10000	174	03	80 285
Cargo Aerial Del & Personnel Parachute Systems	MA7804	145	03	25 75
Close Combat Tactical Trainer	NA0170	171	03	70 267
Combat Support Medical	MN1000	150	03	40 118
Combat Training Centers Support	MA6600	169	03	70 221
Common Bridge Transporter (CBT) Recap	G07000	126	03	15 21
Const Equip ESP	M05500	162	03	50 174
Distribution Systems, Petroleum & Water	MA6000	149	03	30 93

**UNCLASSIFIED**Army • Budget Estimates FY 2018 • Procurement

Line Item Title	Line Item Number	Line #	ВА	BSA	Page
EOD Robotics Systems Recapitalization	W12001	132	03	20	49
Enhanced Rapid Airfield Construction Capap	R07001	160	03	50	170
Explosive Ordnance Disposal Eqpmt (EOD EQPMT)	MA9200	134	03	20	53
Family Of Engr Combat and Construction Sets	R70001	146	03	25	84
Family Of Forklifts	G41001	168	03	65	219
Family Of Non-Lethal Equipment (FNLE)	M11205	120	03	10	3
Family of Boats and Motors	R12001	137	03	20	59
Family of Diver Support Equipment	R07005	161	03	50	172
Field Feeding Equipment	M65800	144	03	25	73
Force Provider	M80200	143	03	25	71
Gaming Technology In Support of Army Training	NA0176	173	03	70	283
Generators And Associated Equip	MA9800	166	03	60	190
Grader, Road Mtzd, Hvy, 6X4 (CCE)	R03800	153	03	50	150
Grnd Standoff Mine Detectn Sysm (GSTAMIDS)	R68400	128	03	20	32
Ground Soldier System	R80501	141	03	25	65
HUSKY MOUNTED DETECTION SYSTEM (HMDS)	R64001	130	03	20	41
Handheld Standoff Minefield Detection Sys-HSTAMIDS	R68200	127	03	20	30
Heaters and ECU's	MF9000	138	03	25	61
High Mobility Engineer Excavator (HMEE)	R05901	159	03	50	161
Hydraulic Excavator	X01500	155	03	50	154

**UNCLASSIFIED**Army • Budget Estimates FY 2018 • Procurement

Line Item Title	Line Item Number	Line #	ВА	BSA	Page
Integrated Family Of Test Equipment (IFTE)	MB4000	175	03	80	287
Items Less Than \$5.0M (Const Equip)	ML5350	163	03	50	176
Items Less Than \$5.0M (Float/Rail)	ML5355	165	03	55	188
Items Less Than \$5.0M (Maint Eq)	ML5345	152	03	45	148
Items Less Than \$5M (Eng Spt)	ML5301	147	03	25	88
M25 STABILIZED BINOCULAR	M62550	177	03	90	303
Mobile Maintenance Equipment Systems	G05301	151	03	45	127
Mobile Soldier Power	R80800	142	03	25	69
Modification Of In-Svc Equipment (OPA-3)	MA4500	181	03	90	325
Personnel Recovery Support System (PRSS)	G01101	140	03	25	64
Physical Security Systems (OPA3)	MA0780	179	03	90	306
Plant, Asphalt Mixing	M08100	158	03	50	160
Production Base Support (OTH)	MA0450	182	03	90	344
Protective Systems	W01103	119	03	10	1
QUALITY SURVEILLANCE EQUIPMENT	MB6400	148	03	30	91
Rapid Equipping Soldier Support Equipment	M80101	178	03	90	304
Remote Demolition Systems	M60001	135	03	20	55
Robotic Combat Support System (RCSS)	M80400	131	03	20	48
Robotics and Applique Systems	W12002	133	03	20	51
Scrapers, Earthmoving	RA0100	154	03	50	152

## **UNCLASSIFIED**Army • Budget Estimates FY 2018 • Procurement

Line Item Title	Line Item Number	Line #	ВА	BSA	Page
Soldier Enhancement	MA6800	139	03	25	63
Special Equipment For User Testing	MA6700	183	03	90	345
TRACTOR YARD	MA8975	184	03	90	347
Tactical Bridge, Float-Ribbon	MA8890	124	03	15	12
Tactical Bridging	MX0100	123	03	15	10
Tactical Electric Power Recapitalization	R42501	167	03	60	217
Test Equipment Modernization (TEMOD)	N11000	176	03	80	301
Tractor, Full Tracked	M05800	156	03	50	156
Training Devices, Nonsystem	NA0100	170	03	70	230

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

				FY 2017
			FY 2017	Total
			PB Request	PB Requests*
		FY 2016	with CR Adj	with CR Adj
Appropriation		Base + OCO	Base	Base
	**			
Other Procurement, Army	47	6,818,676	5,707,940	6,157,285
Total Department of the Army	4	6,818,676	5,707,940	6,157,285

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
Other Procurement, Army	1,175,596	1,572,459	-72,000	1,500,459
Total Department of the Army	1,175,596	1,572,459	-72,000	1,500,459

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

	FY 2017	FY 2017	FY 2017	
	Total	Total	Less Enacted	FY 2017
	PB Requests**	PB Requests*	Div B	Remaining Req
	with CR Adj	with CR Adj	P.L.114-254**	with CR Adj
Appropriation	Base+OCO+SAA	Base + OCO	oco	Base + OCO
				****
Other Procurement, Army	6,955,536	7,729,744	-72,000	7,657,744
Total Department of the Army	6,955,536	7,729,744	-72,000	7,657,744

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

.01 May 2017

Appropriation	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Other Procurement, Army	6,469,331	405,575	6,874,906
Total Department of the Army	6,469,331	405,575	6,874,906

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: Other Procurement, Army

Budget Activity	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base
01. Tactical and Support Vehicles	1,811,284	842,481	842,481
02. Communications and Electronics Equipment	3,441,818	3,632,369	4,029,365
03. Other Support Equipment	1,519,423	1,371,856	1,424,205
04. Spare and Repair Parts	46,151	27,243	27,243
20. Undistributed		-166,009	-166,009
Total Other Procurement, Army	6,818,676	5,707,940	6,157,285

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: Other Procurement, Army

Budget Activity		FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO
01. Tactical and Support Vehicles		876,512	876,512		876,512
02. Communications and Electronics Equipment		254,988	622,299	-72,000	550,299
03. Other Support Equipment	10	241,510	271,062		271,062
04. Spare and Repair Parts		×			
20. Undistributed		-197,414	-197,414		-197,414
Total Other Procurement, Army		1,175,596	1,572,459	-72,000	1,500,459

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: Other Procurement, Army

	FY 2017 Total PB Requests** with CR Adj	FY 2017 Total PB Requests* with CR Adj	FY 2017 Less Enacted Div B P.L.114-254**	FY 2017 Remaining Req with CR Adj
Budget Activity	Base+OCO+SAA	Base + OCO	000	Base + OCO
01. Tactical and Support Vehicles	1,718,993	1,718,993		1,718,993
02. Communications and Electronics Equipment	3,959,357	4,651,664	-72,000	4,579,664
03. Other Support Equipment	1,613,366	1,695,267		1,695,267
04. Spare and Repair Parts	27,243	27,243		27,243
20. Undistributed	-363,423	-363,423		-363,423
Total Other Procurement, Army	6,955,536	7,729,744	-72,000	7,657,744

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: Other Procurement, Army

Budget Activity	FY 2018 Base	FY 2018 OCO	FY 2018 Total
01. Tactical and Support Vehicles	1,245,581	146,657	1,392,238
02. Communications and Electronics Equipment	3,826,384	200,932	4,027,316
03. Other Support Equipment	1,359,097	57,986	1,417,083
04. Spare and Repair Parts	38,269		38,269
20. Undistributed			
Total Other Procurement, Army	6,469,331	405,575	6,874,906

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident		2016 + OCO	PB F with	2017 Request CR Adj Base	To PB Re with	2017 tal quests* CR Adj ase	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity		Quantity	Cost	С
Budget Activity 01: Tactical and Support Vehicles Tactical Vehicles			2					-
1 Tactical Trailers/Dolly Sets	A		6,018		3,733		3,733	Ŭ
2 Semitrailers, Flatbed:	А		53		3,716		3,716	U
3 Ambulance, 4 LITTER, 5/4 TON, 4x4			60,000			×		U
4 Ground Mobility Vehicles (GMV)	A				4,907		4,907	U
5 ARNG HMMWV Modernization Program	A		100,000					U
6 Joint Light Tactical Vehicle	A	686	249,911	1828	587,514	1828	587,514	U
7 Truck, Dump, 20t (CCE)					3,927		3,927	U
8 Family of Medium Tactical Veh (FMTV)		1155	334,038	8	53,293	8	53,293	Ŭ
9 Firetrucks & Associated Firefighting Equip			8,444		7,460		7,460	U
10 Family of Heavy Tactical Vehicles (FHTV)			30,849	430	39,564	430	39,564	U
11 Pls Esp	A		127,102		11,856		11,856	U
12 Hvy Expanded Mobile Tactical Truck Ext Serv			223,276					U
13 Tactical Wheeled Vehicle Protection Kits	A		44,292		49,751		49,751	U
14 Modification of In Svc Equip			204,193		64,000		64,000	U
15 Mine-Resistant Ambush-Protected (MRAP) Mods	A		412,246		10,611		10,611	U
Non-Tactical Vehicles								
16 Heavy Armored Sedan					394		394	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	PB F with	2017 Request CR Adj DCO	To PB Ro with	2017 otal equests* CR Adj OCO	FY 20 Less En Div P.L.114-	acted B 254**	Remair with	2017 ning Req CR Adj	S e
No Item Nomenclature	Code	Quantity		Quantit	-	Quantity	Cost	Quantity		С
Budget Activity 01: Tactical and Support Vehicles						711111111111111111111111111111111111111		A 7.0.574 0.78.		-
Tactical Vehicles										
1 Tactical Trailers/Dolly Sets	A									U
2 Semitrailers, Flatbed:	A		4,180		4,180				4,180	U
3 Ambulance, 4 LITTER, 5/4 TON, 4x4		III.		12						U
4 Ground Mobility Vehicles (GMV)	A									U
5 ARNG HMMWV Modernization Program	A									U
6 Joint Light Tactical Vehicle	A									U
7 Truck, Dump, 20t (CCE)										U
8 Family of Medium Tactical Veh (FMTV)		1092	299,476	1092	299,476			1092	299,476	U
9 Firetrucks & Associated Firefighting Equip										U
10 Family of Heavy Tactical Vehicles (FHTV)		51	6,122	51	6,122			51	6,122	U
11 Pls Esp	A		106,358		106,358				106,358	U
12 Hvy Expanded Mobile Tactical Truck Ext Serv			203,766		203,766				203,766	U
13 Tactical Wheeled Vehicle Protection Kits	A		101,154		101,154				101,154	U
14 Modification of In Svc Equip			155,456		155,456				155,456	U
15 Mine-Resistant Ambush-Protected (MRAP) Mods	A									U
Non-Tactical Vehicles										
16 Heavy Armored Sedan										U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

Total Obligational Authority 01 May 2017 (Dollars in Thousands)

Appropriation: 2035A Other Procurement, Army

Line	Ident	To PB Req with	2017 tal uests** CR Adj OCO+SAA	To PB Re with	2017 otal equests* CR Adj	FY 20 Less Er Div P.L.114- OCO	nacted B -254**	Remai with	2017 ning Req CR Adj e + OCO	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantit	y Cost	С
					343034	*******				-
Budget Activity 01: Tactical and Support Vehicles										
Tactical Vehicles										
1 Tactical Trailers/Dolly Sets	A		3,733		3,733				3,733	U
2 Semitrailers, Flatbed:	A		7,896		7,896				7,896	U
3 Ambulance, 4 LITTER, 5/4 TON, 4x4										U
4 Ground Mobility Vehicles (GMV)	А		4,907		4,907				4,907	U
-			.,		.,				-,	U
5 ARNG HMMWV Modernization Program	A									
6 Joint Light Tactical Vehicle	A	1828	587,514	1828	587,514			1828	587,514	U
7 Truck, Dump, 20t (CCE)			3,927		3,927				3,927	U
8 Family of Medium Tactical Veh (FMTV)		1100	352,769	1100	352,769			1100	352,769	U
9 Firetrucks & Associated Firefighting Equip			7,460		7,460				7,460	U
10 Family of Heavy Tactical Vehicles (FHTV)		481	45,686	481	45,686			481	45,686	II
	_	101	,	101				101		
11 Pls Esp	A		118,214		118,214				118,214	U
12 Hvy Expanded Mobile Tactical Truck Ext Serv			203,766		203,766				203,766	U
13 Tactical Wheeled Vehicle Protection Kits	A		150,905		150,905				150,905	U
14 Modification of In Svc Equip			219,456		219,456				219,456	U
15 Mine-Resistant Ambush-Protected (MRAP) Mods .	A		10,611		10,611				10,611	U
Non-Tactical Vehicles					·					
16 Heavy Armored Sedan			394		394				394	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature		FY 2018  at Base  Quantity Cost		FY 2018 OCO Quantity Cost		FY 2018 Total Quantity Cost		S e c
			***	******			/	200
Budget Activity 01: Tactical and Support Vehicles		E:						
Tactical Vehicles								
1 Tactical Trailers/Dolly Sets	A		9,716				9,716	U
2 Semitrailers, Flatbed:	A		14,151				14,151	U
3 Ambulance, 4 LITTER, 5/4 TON, 4x4			53,000				53,000	U
4 Ground Mobility Vehicles (GMV)	A		40,935				40,935	U
5 ARNG HMMWV Modernization Program	A							U
6 Joint Light Tactical Vehicle	A	2110 .	804,440			2110	804,440	U
7 Truck, Dump, 20t (CCE)			967				967	U
8 Family of Medium Tactical Veh (FMTV)			78,650				78,650	U
9 Firetrucks & Associated Firefighting Equip			19,404				19,404	U
10 Family of Heavy Tactical Vehicles (FHTV)			81,656		25,874		107,530	U
11 Pls Esp	A		7,129				7,129	U
12 Hvy Expanded Mobile Tactical Truck Ext Serv					38,628		38,628	U
13 Tactical Wheeled Vehicle Protection Kits	A		43,040				43,040	U
14 Modification of In Svc Equip			83,940		64,647		148,587	U
15 Mine-Resistant Ambush-Protected (MRAP) Mods	A				17,508		17,508	Ū
Non-Tactical Vehicles								
16 Heavy Armored Sedan			269				269	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2016  Base + OCO  Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj S Base Quantity Cost
17 Passenger Carrying Vehicles		1,248		į
18 Nontactical Vehicles, Other	A	9,614	1,755	1,755 (
Total Tactical and Support Vehicles		1,811,284	842,481	842,481
Budget Activity 02: Communications and Electronics	Equipment			
Comm - Joint Communications				
19 Win-T - Ground Forces Tactical Network	A	695,116	427,598	427,598
20 Signal Modernization Program	A	47,024	58,250	58,250
21 Tactical Network Technology Mod In Svc	A	Et		τ
22 Joint Incident Site Communications Capability	A	4,062	5,749	5,749 t
23 JCSE Equipment (USREDCOM)		6,455	5,068	5,068 (
Comm - Satellite Communications				
24 Defense Enterprise Wideband Satcom Systems		172,306	143,805	143,805
25 Transportable Tactical Command Communications	A	47,305	36,580	36,580
26 SHF Term		7,629	1,985	1,985
27 Navstar Global Positioning System (SPACE)	В	14,027		τ
28 Smart-T (SPACE)		13,453	9,165	9,165 (
29 Global Brdcst Svc - GBS		6,265		τ
30 Mod of In-Svc Equip (TAC SAT)		1,042		τ
31 Enroute Mission Command (EMC)	A	7,116		τ

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2017 PB Request with CR Adj OCO Quantity Cost	FY 2017 Total PB Requests* with CR Adj OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017 Remaining Req with CR Adj S OCO e Quantity Cost c
17 Passenger Carrying Vehicles		12		3.5	Ū
18 Nontactical Vehicles, Other	A	200000000			U
Total Tactical and Support Vehicles		876,512	876,512		876,512
Budget Activity 02: Communications and Electronics	Equipment				
Comm - Joint Communications					
19 Win-T - Ground Forces Tactical Network	A	9,572	9,572		9,572 U
20 Signal Modernization Program	A				U
21 Tactical Network Technology Mod In Svc	A				U
22 Joint Incident Site Communications Capability	A				U
23 JCSE Equipment (USREDCOM)			8		υ
Comm - Satellite Communications					
24 Defense Enterprise Wideband Satcom Systems					, and the contract of the cont
25 Transportable Tactical Command Communications	A				U
26 SHF Term		24,000	24,000		24,000 U
27 Navstar Global Positioning System (SPACE)	В				U
28 Smart-T (SPACE)					U
29 Global Brdcst Svc - GBS					U
30 Mod of In-Svc Equip (TAC SAT)					Ŭ
31 Enroute Mission Command (EMC)	A				ט
or mind the state of the state	**				ŭ

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017 Remaining Req with CR Adj S Base + OCO e Quantity Cost o	е
17 Passenger Carrying Vehicles					U	IJ
18 Nontactical Vehicles, Other	A	1,755	1,755		1,755 U	J
Total Tactical and Support Vehicles		1,718,993	1,718,993		1,718,993	
Budget Activity 02: Communications and Electronics	Equipment					
Comm - Joint Communications						
19 Win-T - Ground Forces Tactical Network	A	437,170	437,170		437,170 U	IJ
20 Signal Modernization Program	A	58,250	58,250		58,250 U	IJ
21 Tactical Network Technology Mod In Svc	A				U	J
22 Joint Incident Site Communications Capability	A	5,749	5,749		5,749 U	J
23 JCSE Equipment (USREDCOM)		5,068	5,068		5,068 U	J
Comm - Satellite Communications						
24 Defense Enterprise Wideband Satcom Systems		143,805	143,805		143,805 U	J
25 Transportable Tactical Command Communications	A	36,580	36,580		36,580 U	J
26 SHF Term		25,985	25,985		25,985 U	J
27 Navstar Global Positioning System (SPACE)	В				U	IJ
28 Smart-T (SPACE)		9,165	9,165		9,165 U	J
29 Global Brdcst Svc - GBS					ט	IJ
30 Mod of In-Svc Equip (TAC SAT)					U	J
31 Enroute Mission Command (EMC)	А				U	J

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## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2018 Base			FY 2018 OCO		2018 otal	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantit	y Cost	С
17 Passenger Carrying Vehicles			1,320				1,320	Ū
	7							
18 Nontactical Vehicles, Other	A		6,964				6,964 	ė.
Total Tactical and Support Vehicles		1,2	45,581		146,657		1,392,238	
Budget Activity 02: Communications and Electronics	Equipment							
Comm - Joint Communications								
19 Win-T - Ground Forces Tactical Network	A	4	20,492				420,492	U
20 Signal Modernization Program	A		92,718		4,900		97,618	U
21 Tactical Network Technology Mod In Svc	A	1	50,497				150,497	U
22 Joint Incident Site Communications Capability	A		6,065				6,065	U
23 JCSE Equipment (USREDCOM)			5,051				5,051	U
Comm - Satellite Communications								
24 Defense Enterprise Wideband Satcom Systems		1	.61,383				161,383	U
25 Transportable Tactical Command Communications	A		62,600				62,600	U
26 SHF Term			11,622				11,622	U
27 Navstar Global Positioning System (SPACE)	В							U
28 Smart-T (SPACE)			6,799				6,799	U
29 Global Brdcst Svc - GBS			7,065			-54	7,065	Ü
30 Mod of In-Svc Equip (TAC SAT)								U
31 Enroute Mission Command (EMC)	A		21,667			8	21,667	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
32 Spectrum Microwave		14,679			Ū
Comm - Combat Support Comm		14,679			U
	70				U
33 Mod-In-Service Profiler	A				U
Comm - C3 System					
34 Army Global Cmd & Control Sys (AGCCS)	A	8,291	2,530	2,530	Ū
Comm - Combat Communications					
35 Joint Tactical Radio System	A	54,640			U
36 Handheld Manpack Small Form Fit (HMS)	A		5656 273,645	273,645	U
37 Mid-Tier Networking Vehicular Radio (MNVR)	A	22,762	25,017	25,017	U
38 Radio Terminal Set, Mids Lvt(2)	A	9,422	12,326	12,326	U
39 AMC Critical Items - OPA2	A	11,643			U
40 Tractor Desk		4,073	2,034	2,034	U
41 Tractor Ride			2,334	2,334	U
42 Spider Apla Remote Control Unit	A	1,683	1,985	1,985	U
43 Spider Family of Networked Munitions Incr	A	9,199	10,796	10,796	U
44 Soldier Enhancement Program Comm/Electronics		349			U
45 Tactical Communications and Protective System	A	25,597	3,607	3,607	U
46 Unified Command Suite	A	21,854	14,295	14,295	U
47 Family of Med Comm for Combat Casualty Care	A	24,388	19,893	19,893	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 20 PB Rec with CF OCC	quest R Adj	FY 20 Tota PB Requ with CF OCC	ıl ıests* R Adj	FY 20 Less Er Div P.L.114- OCO	nacted B -254**	FY 20 Remainin With CR OCO	g Req . Adj	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
		********					0.07.00			
32 Spectrum Microwave										U
Comm - Combat Support Comm										
33 Mod-In-Service Profiler	A									U
Comm - C3 System										
34 Army Global Cmd & Control Sys (AGCCS)	A									U
Comm - Combat Communications										
35 Joint Tactical Radio System	A									U
36 Handheld Manpack Small Form Fit (HMS)	А									U
37 Mid-Tier Networking Vehicular Radio (MNVR)	A									U
38 Radio Terminal Set, Mids Lvt(2)	A			8						U
39 AMC Critical Items - OPA2	A									U
40 Tractor Desk										U
41 Tractor Ride										U
42 Spider Apla Remote Control Unit	А									U
43 Spider Family of Networked Munitions Incr	A									U
44 Soldier Enhancement Program Comm/Electronics										U
45 Tactical Communications and Protective System	A									U
46 Unified Command Suite	A									U
47 Family of Med Comm for Combat Casualty Care	A									U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	To PB Req with	2017 otal quests** CR Adj	FY 20 Tota PB Requ with CR Base +	l lests* k Adj	FY 20 Less En Div P.L.114- OCC	acted B 254**	FY 20 Remainin with CR Base +	ng Req R Adj	s e
No Item Nomenclature	Code	Quantity		Quantity	Cost	Quantity	Cost	Quantity	Cost	C -
32 Spectrum Microwave										U
Comm - Combat Support Comm										
33 Mod-In-Service Profiler	A									Ü
Comm - C3 System	A									Ü
•	7		2 520		2 520				2,530	TT.
34 Army Global Cmd & Control Sys (AGCCS)	A		2,530		2,530				2,550	U
Comm - Combat Communications										
35 Joint Tactical Radio System	A		54							U
36 Handheld Manpack Small Form Fit (HMS)	A	5656	273,645	2	73,645			2	273,645	Ü
37 Mid-Tier Networking Vehicular Radio (MNVR)	A		25,017		25,017				25,017	Ü
38 Radio Terminal Set, Mids Lvt(2)	А		12,326		12,326				12,326	U
39 AMC Critical Items - OPA2	А									U
40 Tractor Desk			2,034		2,034				2,034	Ü
41 Tractor Ride			2,334		2,334	4			2,334	U
42 Spider Apla Remote Control Unit	A		1,985		1,985				1,985	U
43 Spider Family of Networked Munitions Incr	A		10,796		10,796	¥			10,796	Ū
44 Soldier Enhancement Program Comm/Electronics										U
45 Tactical Communications and Protective System	A		3,607	19	3,607				3,607	U
46 Unified Command Suite	A		14,295		14,295				14,295	U
47 Family of Med Comm for Combat Casualty Care	A		19,893		19,893				19,893	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2018 Base Quantity Cost	FY 2018 OCO Quantity Cost	FY 2018 Total Quantity Cost	s e c
				5,557	-
32 Spectrum Microwave	5.8				U
Comm - Combat Support Comm					
33 Mod-In-Service Profiler	A	70		70	U
Comm - C3 System					
34 Army Global Cmd & Control Sys (AGCCS)	A	2,658		2,658	U
Comm - Combat Communications					
35 Joint Tactical Radio System	A				U
36 Handheld Manpack Small Form Fit (HMS)	A	355,351		355,351	U
37 Mid-Tier Networking Vehicular Radio (MNVR)	A	25,100		25,100	U
38 Radio Terminal Set, Mids Lvt(2)	A	11,160		11,160	U
39 AMC Critical Items - OPA2	A				U
40 Tractor Desk		2,041		2,041	U
41 Tractor Ride		5,534	1,000	6,534	U
42 Spider Apla Remote Control Unit	A	996		996	U
43 Spider Family of Networked Munitions Incr	A	4,500		4,500	U
44 Soldier Enhancement Program Comm/Electronics					Ŭ
45 Tactical Communications and Protective System	A	4,411		4,411	U
46 Unified Command Suite	A	15,275		15,275	U
47 Family of Med Comm for Combat Casualty Care	A	15,964		15,964	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	C
			222222 222		~
Comm - Intelligence Comm					
49 CI Automation Architecture	A	1,349	1,388	1,388	U
50 Defense Military Deception Initiative	A				U
51 Army CA/MISO GPF Equipment	А	993	5,494	5,494	U
Information Security					
52 Family of Biometrics	A		2,978	2,978	U
53 Information System Security Program-ISSP	А	19,920			U
54 Communications Security (COMSEC)	А	72,257	131,356	131,356	U
55 Defensive CYBER Operations	А		15,132	27,132	U
56 Insider Threat Program - Unit Activity Monito	A				U
57 Persistent Cyber Training Environment	А				U
Comm - Long Haul Communications					
58 Base Support Communications		16,082	27,452	27,452	U
Comm - Base Communications		Sr.			
59 Information Systems		73,037	122,055	122,055	U
60 Emergency Management Modernization Program	A	8,550	1 4,286	4,286	U
61 Home Station Mission Command Centers (HSMCC)	A				U
62 Installation Info Infrastructure Mod Program	A	111,807	131,794	326,994	U
Elect Equip - Tact Int Rel Act (TIARA)					
65 JTT/CIBS-M	В	881	5,337	5,337	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2 PB Re with C	quest R Adj	FY 2 Tot PB Req with C	al uests* R Adj	FY 20 Less En Div P.L.114- OCC	acted B ·254**	FY 20: Remaining with CR OCO	g Req Adj	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	С
					2002					-
Comm - Intelligence Comm										
49 CI Automation Architecture	А		1,550		10,050			:	10,050	U
50 Defense Military Deception Initiative	A									U
51 Army CA/MISO GPF Equipment	A									Ū
Information Security										
52 Family of Biometrics	A									Ü
53 Information System Security Program-ISSP	A									U
54 Communications Security (COMSEC)	A		1,928		1,928				1,928	U
55 Defensive CYBER Operations	A				26,500			:	26,500	U
56 Insider Threat Program - Unit Activity Monito	А									U
57 Persistent Cyber Training Environment	A									U
Comm - Long Haul Communications										
58 Base Support Communications										U
Comm - Base Communications							12			
59 Information Systems										U
60 Emergency Management Modernization Program	A									Ū
61 Home Station Mission Command Centers (HSMCC)	А									U
62 Installation Info Infrastructure Mod Program	A		20,510		20,510				20,510	U
Elect Equip - Tact Int Rel Act (TIARA)										
65 JTT/CIBS-M	В									U

### Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2035A Other Procurement, Army

		Ident	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj S Base + OCO e	
	Line No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c	
							•
	Comm - Intelligence Comm			.80			
	49 CI Automation Architecture	A	2,938	11,438		11,438 U	I
	50 Defense Military Deception Initiative	A				U	ſ
	51 Army CA/MISO GPF Equipment	A	5,494	5,494		5,494 U	J
	Information Security						
	52 Family of Biometrics	A	2,978	2,978		2,978 U	J
	53 Information System Security Program-ISSP	A				U	J
	54 Communications Security (COMSEC)	A	133,284	133,284		133,284 U	J
	55 Defensive CYBER Operations	A	15,132	53,632		53,632 U	J
	56 Insider Threat Program - Unit Activity Monito	A				ט	J
	57 Persistent Cyber Training Environment	A				U	J
	Comm - Long Haul Communications						
	58 Base Support Communications		27,452	27,452		27,452 U	J
	Comm - Base Communications						
	59 Information Systems		122,055	122,055		122,055 U	J
	60 Emergency Management Modernization Program	A	1 4,286	4,286		4,286 U	J
	61 Home Station Mission Command Centers (HSMCC)	А				U	J
	62 Installation Info Infrastructure Mod Program	А	152,304	347,504		347,504 U	J
	Elect Equip - Tact Int Rel Act (TIARA)						
	65 JTT/CIBS-M	В	5,337	5,337		5,337 U	J

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## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2018 Base Quantity Cost	FY 2018 OCO Quantity Cost	FY 2018 Total Quantity Cost	s e c
Comm - Intelligence Comm					
49 CI Automation Architecture	А	9,560		9,560	U
50 Defense Military Deception Initiative	A	4,030		4,030	U
51 Army CA/MISO GPF Equipment	A				U
Information Security					
52 Family of Biometrics	A				U
53 Information System Security Program-ISSP	А				U
54 Communications Security (COMSEC)	A	107,804		107,804	U
55 Defensive CYBER Operations	А	53,436		53,436	U
56 Insider Threat Program - Unit Activity Monito	A	690		690	U
57 Persistent Cyber Training Environment	A	4,000		4,000	U
Comm - Long Haul Communications					
58 Base Support Communications		43,751		43,751	U
Comm - Base Communications					
59 Information Systems		118,101		118,101	U
60 Emergency Management Modernization Program	A	4,490		4,490	U
61 Home Station Mission Command Centers (HSMCC)	A	20,050		20,050	U
62 Installation Info Infrastructure Mod Program	A	186,251	2,500	188,751	U
Elect Equip - Tact Int Rel Act (TIARA)					
65 JTT/CIBS-M	В	12,154		12,154	U

## Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	
					_
66 Prophet Ground		53,650			U
67 Drug Interdiction Program (Dip) (TIARA)		34,174			U
68 DCGS-A (MIP)		318,844	242,514	242,514	U
69 Joint Tactical Ground Station (JTAGS)	A	9,325	4,417	4,417	U
70 Trojan (MIP)	В	23,046	17,455	18,575	U
71 Mod of In-Svc Equip (Intel Spt) (MIP)		3,978	44,965	44,965	U
72 CI HUMINT Auto Reprting and Coll(CHARCS)		11,402	7,658	7,658	U
73 Close Access Target Reconnaissance (CATR)	=	5,012	7,970	7,970	U
74 Machine Foreign Language Translation System-M	A	8,125	545	545	U
75 Biometric Tactical Collection Devices (MIP)	A				U
Elect Equip - Electronic Warfare (EW)					
76 Lightweight Counter Mortar Radar	A	63,472	74,038	74,038	Ū
77 EW Planning & Management Tools (EWPMT)	A	6,652	3,235	3,235	U
78 Air Vigilance (AV)	A	8,224	733	733	U
79 Crew		2,960			U
80 Family Of Persistent Surveillance Capabilitie	A	16,569	1,740	1,740	U
81 Counterintelligence/Security Countermeasures		20,632	455	455	U
82 CI Modernization	А	228	176	176	U
Elect Equip - Tactical Surv. (Tac Surv)					
83 Sentinel Mods		43,285	40,171	40,171	U

### Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost	С
						120
66 Prophet Ground					v	U
67 Drug Interdiction Program (Dip) (TIARA)						U
68 DCGS-A (MIP)		33,032	43,032		43,032	U
69 Joint Tactical Ground Station (JTAGS)	A	×				U
70 Trojan (MIP)	В	3,305	7,105		7,105	U
71 Mod of In-Svc Equip (Intel Spt) (MIP)			540		540	U
72 CI HUMINT Auto Reprting and Coll(CHARCS)		7,233	7,233		7,233	U
73 Close Access Target Reconnaissance (CATR)				<u>*</u> )		U
74 Machine Foreign Language Translation System-M	A					U
75 Biometric Tactical Collection Devices (MIP)	A	5,670	14,420		14,420	U
Elect Equip - Electronic Warfare (EW)						
76 Lightweight Counter Mortar Radar	A	25,892	56,692		56,692	U
77 EW Planning & Management Tools (EWPMT)	A	ā				Ū
78 Air Vigilance (AV)	A					U
79 Crew						U
80 Family Of Persistent Surveillance Capabilitie	A	11,610	32,801		32,801	U
81 Counterintelligence/Security Countermeasures		23,890	23,890		23,890	U
82 CI Modernization	A			41		U
Elect Equip - Tactical Surv. (Tac Surv)						
83 Sentinel Mods						U

### Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority

(Dollars in Thousands)

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost	
66 Prophet Ground						U
67 Drug Interdiction Program (Dip) (TIARA)						Ū
68 DCGS-A (MIP)		275,546	285,546		285,546	Ū
69 Joint Tactical Ground Station (JTAGS)	А	4,417	4,417		4,417	Ū
70 Trojan (MIP)	В	20,760	25,680		25,680	U
71 Mod of In-Svc Equip (Intel Spt) (MIP)		44,965	45,505		45,505	U
72 CI HUMINT Auto Reprting and Coll(CHARCS)		14,891	14,891		14,891	U
73 Close Access Target Reconnaissance (CATR)		7,970	7,970		7,970	U
74 Machine Foreign Language Translation System-M	A	545	545		545	υ
75 Biometric Tactical Collection Devices (MIP)	A	5,670	14,420		14,420	U
Elect Equip - Electronic Warfare (EW)						
76 Lightweight Counter Mortar Radar	A	99,930	130,730		130,730	U
77 EW Planning & Management Tools (EWPMT)	A	3,235	3,235		3,235	U
78 Air Vigilance (AV)	А	733	733		733	U
79 Crew						U
80 Family Of Persistent Surveillance Capabilitie	А	13,350	34,541		34,541	U
81 Counterintelligence/Security Countermeasures		24,345	24,345		24,345	U
82 CI Modernization	A	176	176		176	U
Elect Equip - Tactical Surv. (Tac Surv)						
83 Sentinel Mods		40,171	40,171		40,171	U

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# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

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Appropriation: 2035A Other Procurement, Army

Line		Ident	FY 2018 Base		FY 2018 OCO		FY 2018 Total		S e
	No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C -
	66 Prophet Ground								U
	67 Drug Interdiction Program (Dip) (TIARA)								U
	68 DCGS-A (MIP)		2	74,782		39,515	3	14,297	U
	69 Joint Tactical Ground Station (JTAGS)	A							U
	70 Trojan (MIP)	В		16,052		21,310	ĺ	37,362	U
	71 Mod of In-Svc Equip (Intel Spt) (MIP)			51,034		2,300		53,334	U
	72 CI HUMINT Auto Reprting and Coll(CHARCS)			7,815		14,460		22,275	Ü
	73 Close Access Target Reconnaissance (CATR)			8,050		2		8,050	U
	74 Machine Foreign Language Translation System-M	A		567				567	U
	75 Biometric Tactical Collection Devices (MIP)	A				5,180		5,180	U
	Elect Equip - Electronic Warfare (EW)								
	76 Lightweight Counter Mortar Radar	A		20,459				20,459	Ü
	77 EW Planning & Management Tools (EWPMT)	А		5,805				5,805	U
	78 Air Vigilance (AV)	A		5,348				5,348	U
	79 Crew								U
	80 Family Of Persistent Surveillance Capabilitie	A				16,935		16,935	U
	81 Counterintelligence/Security Countermeasures			469		18,874		19,343	U
	82 CI Modernization	A		285				285	U
	Elect Equip - Tactical Surv. (Tac Surv)								
	83 Sentinel Mods		5	28,491				28,491	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj Base	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	С
84 Night Vision Devices	Α	123,974	163,029	189,170	U
85 Small Tactical Optical Rifle Mounted MLRF		19,677	15,885	18,843	U
86 Base Expeditiary Targeting and Surv Sys	A	4,839			U
87 Indirect Fire Protection Family of Systems	A	60,679	48,427	88,097	U
88 Family of Weapon Sights (FWS)	A	30,194	55,536	55,536	U
89 Artillery Accuracy Equip		3,338	4,187	4,187	U
90 Profiler		4,057			U
91 Joint Battle Command - Platform (JBC-P)	A	137,457	137,501	227,573	U
92 Joint Effects Targeting System (JETS)		47,212	50,726	50,726	U
93 Mod of In-Svc Equip (LLDR)	A	22,314	28,058	28,058	U
94 Computer Ballistics: LHMBC XM32	A	14,732	5,924	5,924	U
95 Mortar Fire Control System	3	10,075	22,331	22,331	U
96 Counterfire Radars		198,379	314,509	314,509	U
Elect Equip - Tactical C2 Systems					
97 Fire Support C2 Family	A	1,238	8,660	8,660	U
98 AIR & MSL Defense Planning & Control Sys		28,176	54,376	56,581	U
99 IAMD Battle Command System	A	20,917	204,969	204,969	U
100 Life Cycle Software Support (LCSS)		5,850	4,718	4,718	U
101 Network Management Initialization and Service	ce A	13,880	11,063	11,063	U
102 Maneuver Control System (MCS)	А	125,443	151,318	151,318	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj OCO	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost	С
		TOTAL TOTAL				-
84 Night Vision Devices	A		20	50		U
85 Small Tactical Optical Rifle Mounted MLRF						U
86 Base Expeditiary Targeting and Surv Sys	A		82,590		82,590	Ū
87 Indirect Fire Protection Family of Systems	A	4,270	178,910	-72,000	106,910	U
88 Family of Weapon Sights (FWS)	A					U
89 Artillery Accuracy Equip				s		U
90 Profiler						U
91 Joint Battle Command - Platform (JBC-P)	A					U
92 Joint Effects Targeting System (JETS)						U
93 Mod of In-Svc Equip (LLDR)	A					U
94 Computer Ballistics: LHMBC XM32	A					Ū
95 Mortar Fire Control System		2,572	2,572		2,572	U
96 Counterfire Radars		55				U
Elect Equip - Tactical C2 Systems						
97 Fire Support C2 Family	A					U
98 AIR & MSL Defense Planning & Control Sys		31 69,958	31 69,958		31 69,958	U
99 IAMD Battle Command System	A					U
100 Life Cycle Software Support (LCSS)						U
101 Network Management Initialization and Service	A					U
102 Maneuver Control System (MCS)	A					Ū
- 101 0010		4 0045				

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017 Remaining Req with CR Adj S Base + OCO e Quantity Cost c
84 Night Vision Devices	A	163,029	189,170		189,170 U
85 Small Tactical Optical Rifle Mounted MLRF		15,885	18,843		18,843 U
86 Base Expeditiary Targeting and Surv Sys	A		82,590		82,590 U
87 Indirect Fire Protection Family of Systems	A	124,697	267,007	-72,000	195,007 U
88 Family of Weapon Sights (FWS)	A	55,536	55,536		55,536 U
89 Artillery Accuracy Equip		4,187	4,187		4,187 U
90 Profiler					U
91 Joint Battle Command - Platform (JBC-P)	A	137,501	227,573		227,573 U
92 Joint Effects Targeting System (JETS)		50,726	50,726		50,726 U
93 Mod of In-Svc Equip (LLDR)	A	28,058	28,058		28,058 U
94 Computer Ballistics: LHMBC XM32	A	5,924	5,924		5,924 U
95 Mortar Fire Control System		24,903	24,903		24,903 U
96 Counterfire Radars		314,509	314,509		314,509 U
Elect Equip - Tactical C2 Systems			- 1		
97 Fire Support C2 Family	A	8,660	8,660		8,660 U
98 AIR & MSL Defense Planning & Control Sys		31 124,334	31 126,539		31 126,539 U
99 IAMD Battle Command System	A	204,969	204,969		204,969 U
100 Life Cycle Software Support (LCSS)		4,718	4,718		4,718 U
101 Network Management Initialization and Service	A	11,063	11,063		11,063 U
102 Maneuver Control System (MCS)	A	151,318	151,318		151,318 U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2018  Base  Quantity Cost	FY 2018 OCO Quantity Cost	FY 2018 Total Quantity Cost	s e c
84 Night Vision Devices	А	166,493	377	166,870	U
85 Small Tactical Optical Rifle Mounted MLRF		13,947	60	14,007	U
86 Base Expeditiary Targeting and Surv Sys	А				U
87 Indirect Fire Protection Family of Systems	A	21,380	57,500	78,880	U
88 Family of Weapon Sights (FWS)	A	59,105		59,105	U
89 Artillery Accuracy Equip		2,129		2,129	U
90 Profiler					U
91 Joint Battle Command - Platform (JBC-P)	A	282,549		282,549	U
92 Joint Effects Targeting System (JETS)		48,664		48,664	U
93 Mod of In-Svc Equip (LLDR)	A	5,198	3,974	9,172	U
94 Computer Ballistics: LHMBC XM32	A	8,117		8,117	U
95 Mortar Fire Control System		31,813	2,947	34,760	U
96 Counterfire Radars		329,057		329,057	U
Elect Equip - Tactical C2 Systems					
97 Fire Support C2 Family	A	8,700		8,700	U
98 AIR & MSL Defense Planning & Control Sys		26,635	9,100	35,735	U
99 IAMD Battle Command System	Α				U
100 Life Cycle Software Support (LCSS)		1,992		1,992	U
101 Network Management Initialization and Service	A	15,179		15,179	U
102 Maneuver Control System (MCS)	A	132,572		132,572	U

### Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2016 Base + OCO Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj S Base e Quantity Cost c
103 Global Combat Support System-Army (GCSS-A)	A	146,654	155,660	155,660 U
104 Integrated Personnel and Pay System-Army (IPP	А	4,446	4,214	4,214 U
105 Reconnaissance and Surveying Instrument Set	A	16,218	16,185	16,185 U
106 Mod of In-Svc Equipment (ENFIRE)	А	1,138	1,565	1,565 U
Elect Equip - Automation				
107 Army Training Modernization		12,089	17,693	17,693 U
108 Automated Data Processing Equip	Δ.	110,835	107,960	135,590 U
109 General Fund Enterprise Business Systems Fam	А	13,540	6,416	6,416 U
110 High Perf Computing Mod Pgm (HPCMP)	А	62,319	58,614	58,614 U
111 Contract Writing System	А		986	986 U
112 Reserve Component Automation Sys (RCAS)		17,894	23,828	23,828 U
Elect Equip - Audio Visual Sys (A/V)				
113 Tactical Digital Media	A		1,191	1,191 U
114 Items Less Than \$5M (Surveying Equipment)		5,090	1,995	1,995 U
Elect Equip - Support				
115 Production Base Support (C-E)		425	403	403 U
116 BCT Emerging Technologies	А	7,438		U
999 Classified Programs		6,467	4,436	4,436 U
Total Communications and Electronics Equipment		3,441,818	3,632,369	4,029,365

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 20 PB Rec with CF OCC	quest R Adj	FY 20 Tota PB Requ with CF OCC	l lests* k Adj	FY 20 Less Er Div P.L.114- OCO	nacted B -254**	FY 20 Remainin with CR OCO	g Req Adj	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	С
										-
103 Global Combat Support System-Army (GCSS-A)	A									U
104 Integrated Personnel and Pay System-Army (IPP	A									U
105 Reconnaissance and Surveying Instrument Set	Α									U
106 Mod of In-Svc Equipment (ENFIRE)	A									U
Elect Equip - Automation										
107 Army Training Modernization										U
108 Automated Data Processing Equip			9,900		9,900			1	9,900	U
109 General Fund Enterprise Business Systems Fam	А									Ŭ
110 High Perf Computing Mod Pgm (HPCMP)	А									U
111 Contract Writing System	А									U
112 Reserve Component Automation Sys (RCAS)										U
Elect Equip - Audio Visual Sys (A/V)										
113 Tactical Digital Media	А									U
114 Items Less Than \$5M (Surveying Equipment)			96		96				96	U
Elect Equip - Support										
115 Production Base Support (C-E)										U
116 BCT Emerging Technologies	A									Ū
999 Classified Programs		11.004				1000				Ū
Total Communications and Electronics Equipment		2	254,988	6	522,299		-72,000	5	50,299	

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj S Base + OCO e	
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c	
103 Global Combat Support System-Army (GCSS-A)	A	155,660	155,660		155,660 U	
104 Integrated Personnel and Pay System-Army (IPP	А	4,214	4,214		4,214 U	
105 Reconnaissance and Surveying Instrument Set	А	16,185	16,185		16,185 U	
106 Mod of In-Svc Equipment (ENFIRE)	А	1,565	1,565		1,565 U	
Elect Equip - Automation		3				
107 Army Training Modernization		17,693	17,693		17,693 U	
108 Automated Data Processing Equip		117,860	145,490		145,490 U	
109 General Fund Enterprise Business Systems Fam	A	6,416	6,416		6,416 U	
110 High Perf Computing Mod Pgm (HPCMP)	A	58,614	58,614		58,614 U	
111 Contract Writing System	А	986	986		986 U	
112 Reserve Component Automation Sys (RCAS)		23,828	23,828		23,828 U	
Elect Equip - Audio Visual Sys (A/V)						
113 Tactical Digital Media	А	1,191	1,191		1,191 U	
114 Items Less Than \$5M (Surveying Equipment)		2,091	2,091		2,091 U	
Elect Equip - Support						
115 Production Base Support (C-E)		403	403		403 U	
116 BCT Emerging Technologies	A				U	
999 Classified Programs		4,436	4,436		4,436 U	
Total Communications and Electronics Equipment		3,959,357	4,651,664	-72,000	4,579,664	

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2018 Base		FY 2018 OCO		FY 2018 Total		S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
103 Global Combat Support System-Army (GCSS-A)	A		37,201				37,201	U
104 Integrated Personnel and Pay System-Army (IPP	А		16,140				16,140	U
105 Reconnaissance and Surveying Instrument Set	A		6,093				6,093	U
106 Mod of In-Svc Equipment (ENFIRE)	A		1,134				1,134	U
Elect Equip - Automation						)X		
107 Army Training Modernization			11,575				11,575	U
108 Automated Data Processing Equip			91,983				91,983	U
109 General Fund Enterprise Business Systems Fam	A		4,465				4,465	U
110 High Perf Computing Mod Pgm (HPCMP)	A		66,363				66,363	U
111 Contract Writing System	A		1,001				1,001	U
112 Reserve Component Automation Sys (RCAS)			26,183				26,183	U
Elect Equip - Audio Visual Sys (A/V)								
113 Tactical Digital Media	A		4,441				4,441	U
114 Items Less Than \$5M (Surveying Equipment)			3,414				3,414	U
Elect Equip - Support		P)						
115 Production Base Support (C-E)			499				499	U
116 BCT Emerging Technologies	A		25,050				25,050	U
999 Classified Programs			4,819				4,819	U
Total Communications and Electronics Equipment			326,384		00,932	4,	027,316	-

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj S Base e	
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost c	
Budget Activity 03: Other Support Equipment					
Chemical Defensive Equipment					
117 Protective Systems	A	248	2,966	13,466 U	J
118 Family of Non-Lethal Equipment (FNLE)	A	1,487	9,795	9,795 U	J
119 Base Defense Systems (BDS)	A	4,035		υ	J
120 CBRN Defense	A	26,302	17,922	42,922 U	J
Bridging Equipment					
121 Tactical Bridging		9,822	13,553	13,553 U	J
122 Tactical Bridge, Float-Ribbon		21,516	25,244	25,244 U	J
123 Bridge Supplemental Set	А	3,967	983	983 ປ	J
124 Common Bridge Transporter (CBT) Recap	А	53,538	25,176	25,176 U	J
Engineer (Non-Construction) Equipment					
125 Handheld Standoff Minefield Detection Sys-Hst	В			U	J
126 Grnd Standoff Mine Detectn Sysm (GSTAMIDS)		58,682	39,350	39,350 U	J
127 Area Mine Detection System (AMDS)	A		10,500	10,500 U	J
128 Husky Mounted Detection System (HMDS)	А	13,565	274	274 U	F
129 Robotic Combat Support System (RCSS)		2,136	2,951	2,951 U	J
130 EOD Robotics Systems Recapitalization	A	6,960	1,949	1,949 U	J
131 Robotics and Applique Systems			5,203	5,203 U	J

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 PB Reques with CR Ad	t PB	FY 2017 Total Requests* th CR Adj OCO	FY 20 Less En Div P.L.114- OCO	acted B 254**	FY 20 Remaining with CR OCO	g Req Adj	S e
No Item Nomenclature	Code		ost Quanti	ity Cost	Quantity	Cost	Quantity	Cost	С
	T12200								-
Budget Activity 03: Other Support Equipment									
Chemical Defensive Equipment			*						
117 Protective Systems	A								U
118 Family of Non-Lethal Equipment (FNLE)	A								U
119 Base Defense Systems (BDS)	A			26,572			1;	26,572	U
120 CBRN Defense	А	1,	841	4,821				4,821	U
Bridging Equipment								3:	
121 Tactical Bridging		26,	000	26,000				26,000	U
122 Tactical Bridge, Float-Ribbon									U
123 Bridge Supplemental Set	A				,				U
124 Common Bridge Transporter (CBT) Recap	A				R				U
Engineer (Non-Construction) Equipment									
125 Handheld Standoff Minefield Detection Sys-Hst	В								U
126 Grnd Standoff Mine Detectn Sysm (GSTAMIDS)									U
127 Area Mine Detection System (AMDS)	A								υ
128 Husky Mounted Detection System (HMDS)	А								U
129 Robotic Combat Support System (RCSS)									U
130 EOD Robotics Systems Recapitalization	A								U
131 Robotics and Applique Systems			268	268				268	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	_	S e c -
Budget Activity 03: Other Support Equipment						
Chemical Defensive Equipment			-			
117 Protective Systems	A	2,966	13,466		13,466	U
118 Family of Non-Lethal Equipment (FNLE)	A	9,795	9,795		9,795	U
119 Base Defense Systems (BDS)	A		26,572		26,572	Ū
120 CBRN Defense	A	19,763	47,743		47,743	U
Bridging Equipment			17.			
121 Tactical Bridging		39,553	39,553		39,553	U
122 Tactical Bridge, Float-Ribbon		25,244	25,244		25,244	U
123 Bridge Supplemental Set	A	983	983		983	U
124 Common Bridge Transporter (CBT) Recap	A	25,176	25,176		25,176	U
Engineer (Non-Construction) Equipment						
125 Handheld Standoff Minefield Detection Sys-Hst	В					U
126 Grnd Standoff Mine Detectn Sysm (GSTAMIDS)		39,350	39,350		39,350	U
127 Area Mine Detection System (AMDS)	A	10,500	10,500		10,500	U
128 Husky Mounted Detection System (HMDS)	A	274	274		274	Ū
129 Robotic Combat Support System (RCSS)		2,951	2,951		2,951	U
130 EOD Robotics Systems Recapitalization	А	1,949	1,949		1,949	U
131 Robotics and Applique Systems		5,471	5,471		5,471	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 20 Bas		FY 20		FY 20 Tota		S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
Budget Activity 03: Other Support Equipment								
Chemical Defensive Equipment								
117 Protective Systems	A		1,613				1,613	U
118 Family of Non-Lethal Equipment (FNLE)	A		9,696				9,696	U
119 Base Defense Systems (BDS)	А				3,726		3,726	U
120 CBRN Defense	A		11,110				11,110	U
Bridging Equipment								
121 Tactical Bridging			16,610				16,610	U
122 Tactical Bridge, Float-Ribbon			21,761				21,761	Ü
123 Bridge Supplemental Set	А							U
124 Common Bridge Transporter (CBT) Recap	А		21,046				21,046	U
Engineer (Non-Construction) Equipment								
125 Handheld Standoff Minefield Detection Sys-Hst	В		5,000				5,000	U
126 Grnd Standoff Mine Detectn Sysm (GSTAMIDS)			32,442				32,442	U
127 Area Mine Detection System (AMDS)	A		10,571				10,571	U
128 Husky Mounted Detection System (HMDS)	A		21,695				21,695	U
129 Robotic Combat Support System (RCSS)			4,516				4,516	Ū
130 EOD Robotics Systems Recapitalization	A		10,073				10,073	U
131 Robotics and Applique Systems			3,000				3,000	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code			with C	quest	FY 20 Tota PB Requ with CF Bas Quantity	al uests* R Adj	S e C
ADDA CARAGRAGAARAARAA	/54555						( <del>=====</del>	_
132 Explosive Ordnance Disposal Eqpmt (EOD EQPMT)		17	,143		5,570		5,570	U
133 Remote Demolition Systems	A	8	,284		6,238		6,238	U
134 < \$5m, Countermine Equipment	A	5	,459		836		836	U
135 Family of Boats and Motors	A	8	,429		3,171		3,171	U
Combat Service Support Equipment								
136 Heaters and ECU'S	A	1	,360		18,707		18,707	U
137 Soldier Enhancement		2	,287		2,112		2,112	U
138 Personnel Recovery Support System (PRSS)	A	7	,733		10,856		10,856	U
139 Ground Soldier System	A	49	,798		32,419		32,419	U
140 Mobile Soldier Power	A	25	,306		30,014		30,014	U
141 Force Provider	A	21	,300					Ū
142 Field Feeding Equipment		14	,318		12,544		12,544	U
143 Cargo Aerial Del & Personnel Parachute System		34	,153		18,509		18,509	U
144 Family of Engr Combat and Construction Sets	A	34	,544		29,384		29,384	U
145 Items Less Than \$5M (Eng Spt)	A		595					U
Petroleum Equipment								
146 Quality Surveillance Equipment	A	5	,368		4,487		4,487	U
147 Distribution Systems, Petroleum & Water		35	,381		42,656		42,656	U
Medical Equipment								
148 Combat Support Medical		73	,828		59,761		59,761	U
D 101E - TV 0010 D - 11 - 1 - D 1								

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

		Ident	FY 2 PB Re with C	equest CR Adj	FY 20 Tota PB Requ with CF	al uests* R Adj	FY 20 Less En Div P.L.114- OCC	acted B 254**	FY 2 Remaini with C	ing Req CR Adj	S e
	Line No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
						7.77					-
	132 Explosive Ordnance Disposal Eqpmt (EOD EQPMT)										U
	133 Remote Demolition Systems	A									מ
	134 < \$5m, Countermine Equipment	A									U
	135 Family of Boats and Motors	A		280		280				280	U
	Combat Service Support Equipment										
	136 Heaters and ECU'S	A		894		894				894	U
	137 Soldier Enhancement										Ū
	138 Personnel Recovery Support System (PRSS)	A						67			U
	139 Ground Soldier System	A			F:						U
	140 Mobile Soldier Power	A									U
	141 Force Provider	A		53,800	9	53,800				53,800	U
	142 Field Feeding Equipment			2,665		2,665				2,665	U
	143 Cargo Aerial Del & Personnel Parachute System			2,400		2,400				2,400	U
	144 Family of Engr Combat and Construction Sets	A		9,789		9,789				9,789	U
	145 Items Less Than \$5M (Eng Spt)	A	.0.	300		300		4		300	U
	Petroleum Equipment										
	146 Quality Surveillance Equipment	A		4,800		4,800				4,800	U
	147 Distribution Systems, Petroleum & Water		174	78,240	174	78,240			174	78,240	U
i	Medical Equipment										
	148 Combat Support Medical			5,763		5,763				5,763	U
	D-1ClF: EV 2019 Procidentle Budget Peguset (Dublishe	d Warrian	as of Mar	, 1 2017	at 14.26.26						

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line		Ident	To PB Req with Base+	2017 tal uests** CR Adj OCO+SAA	Tot PB Rec with ( Base	2017 tal quests* CR Adj + OCO	FY 20 Less Er Div P.L.114- OCC	acted B ·254**	Remain: with G Base	2017 ing Req CR Adj + OCO	S e
No	Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C -
132 E	Explosive Ordnance Disposal Eqpmt (EOD EQPMT)	is =		5,570		5,570				5,570	U
133 E	Remote Demolition Systems	A		6,238		6,238				6,238	U
134 <	< \$5m, Countermine Equipment	A		836		836				836	U
135 H	Family of Boats and Motors	A		3,451		3,451				3,451	U
Comb	pat Service Support Equipment										
136 F	Heaters and ECU'S	A		19,601		19,601	ä			19,601	Ū
137 \$	Soldier Enhancement			2,112		2,112				2,112	U
138 I	Personnel Recovery Support System (PRSS)	A		10,856		10,856				10,856	U
139 (	Ground Soldier System	A		32,419		32,419				32,419	U
140 M	Mobile Soldier Power	A		30,014		30,014				30,014	U
141 H	Force Provider	A		53,800		53,800				53,800	U
142 H	Field Feeding Equipment			15,209		15,209			1. 2	15,209	U
143 (	Cargo Aerial Del & Personnel Parachute System			20,909		20,909			22	20,909	U
144 H	Family of Engr Combat and Construction Sets	A		39,173	.,	39,173				39,173	U
145	Items Less Than \$5M (Eng Spt)	A		300		300				300	U
Peti	roleum Equipment										
146 (	Quality Surveillance Equipment	A		9,287		9,287			2	9,287	U
147 I	Distribution Systems, Petroleum & Water		174	120,896	174	120,896			174	120,896	U
Medi	ical Equipment										
148 (	Combat Support Medical			65,524		65,524				65,524	U
D 10	IE. EV 2010 Propriedont la Product Democrat (Publisher	a **		1 0017	14 26 06						

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 20 Bas		FY 20		FY 2 Tot		S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	С
								-55-
132 Explosive Ordnance Disposal Eqpmt (EOD EQPMT)								Ū
133 Remote Demolition Systems	A		5,847				5,847	U
134 < \$5m, Countermine Equipment	A		1,530				1,530	U
135 Family of Boats and Motors	A		4,302				4,302	U
Combat Service Support Equipment								
136 Heaters and ECU'S	A		7,405	120	270		7,675	U
137 Soldier Enhancement			1,095				1,095	U
138 Personnel Recovery Support System (PRSS)	A		5,390				5,390	U
139 Ground Soldier System	A		38,219				38,219	U
140 Mobile Soldier Power	A		10,456				10,456	U
141 Force Provider	A							U
142 Field Feeding Equipment			15,340		145		15,485	U
143 Cargo Aerial Del & Personnel Parachute System			30,607		1,980		32,587	U
144 Family of Engr Combat and Construction Sets	A		10,426				10,426	U
145 Items Less Than \$5M (Eng Spt)	A							U
Petroleum Equipment						25		
146 Quality Surveillance Equipment	A		6,903				6,903	U
147 Distribution Systems, Petroleum & Water			47,597				47,597	Ŭ
Medical Equipment								
148 Combat Support Medical			43,343		25,690		69,033	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2016  Base + OCO  Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base Quantity Cost	S e c
Maintenance Equipment					
149 Mobile Maintenance Equipment Systems	A	25,270	35,694	35,694	U
150 Items Less Than \$5.0M (Maint Eq)	A	2,760	2,716	2,716	Ü
Construction Equipment					
151 Grader, Road Mtzd, Hvy, 6x4 (CCE)	A	5,903	1,742	1,742	U
152 Scrapers, Earthmoving	A	29,460	26,233	26,233	U
153 Hydraulic Excavator	В		1,123	1,123	U
154 Tractor, Full Tracked	A	27,156			U
155 All Terrain Cranes	A	13,415	65,285	65,285	U
156 Plant, Asphalt Mixing		984			U
157 High Mobility Engineer Excavator (HMEE)	A	2,656	1,743	1,743	U
158 Enhanced Rapid Airfield Construction Capap	В	2,531	-2,779	2,779	U
159 Family of Diver Support Equipment	A	446			U
160 Const Equip Esp		19,240	26,712	26,712	U
161 Items Less Than \$5.0M (Const Equip)	A	5,087	6,649	6,649	Ŭ
Rail Float Containerization Equipment					
162 Army Watercraft Esp	A	39,772	21,860	21,860	U
163 Items Less Than \$5.0M (Float/Rail)	A	5,835	1,967	1,967	U
Generators					
164 Generators and Associated Equip	A	97,154	113,266	113,266	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

	74	FY 2017 PB Reque	est	FY 20 Tota PB Requ with CR OCC	l ests* Adj	FY 20 Less En Div P.L.114-	acted B 254**	FY 20 Remainin with CI OCO	ng Req R Adj	S e
Line No Item Nomenclature	Ident Code	OCO Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
			4577							_
Maintenance Equipment										
149 Mobile Maintenance Equipment Systems	A	1	1,609		1,609				1,609	U
150 Items Less Than \$5.0M (Maint Eq)	A		145		145				145	Ü
Construction Equipment										
151 Grader, Road Mtzd, Hvy, 6x4 (CCE)	A	3	3,047		3,047				3,047	U
152 Scrapers, Earthmoving	А									U
153 Hydraulic Excavator	В									U
154 Tractor, Full Tracked	A	4	4,426		4,426				4,426	Ŭ
155 All Terrain Cranes	A									U
156 Plant, Asphalt Mixing										Ū
157 High Mobility Engineer Excavator (HMEE)	A	2	2,900		2,900				2,900	Ŭ
158 Enhanced Rapid Airfield Construction Capap	В									U
159 Family of Diver Support Equipment	A									U
160 Const Equip Esp										Ū
161 Items Less Than \$5.0M (Const Equip)	A		96		96				96	Ū
Rail Float Containerization Equipment										
162 Army Watercraft Esp	A									U
163 Items Less Than \$5.0M (Float/Rail)	A									Ū
Generators										
164 Generators and Associated Equip	А	3:	1,761		31,761				31,761	U
	, ,		0017	14 26 26				à)		

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

	-	FY 2017 Total PB Requests** with CR Adj	FY 2017 Total PB Requests* with CR Adj	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj S Base + OCO e
Line No Item Nomenclature	Ident Code	Base+OCO+SAA Quantity Cost	Base + OCO Quantity Cost	Quantity Cost	Quantity Cost c
Maintenance Equipment					
149 Mobile Maintenance Equipment Systems	A	37,303	37,303		37,303 U
150 Items Less Than \$5.0M (Maint Eq)	A	2,861	2,861		2,861 U
Construction Equipment					
151 Grader, Road Mtzd, Hvy, 6x4 (CCE)	A	4,789	4,789		4,789 U
152 Scrapers, Earthmoving	A	26,233	26,233		26,233 U
153 Hydraulic Excavator	В	1,123	1,123		1,123 U
154 Tractor, Full Tracked	A	4,426	4,426		4,426 U
155 All Terrain Cranes	A	65,285	65,285		65,285 U
156 Plant, Asphalt Mixing					U
157 High Mobility Engineer Excavator (HMEE)	A	4,643	4,643		4,643 U
158 Enhanced Rapid Airfield Construction Capap	В	2,779	2,779		2,779 U
159 Family of Diver Support Equipment	А				U
160 Const Equip Esp		26,712	26,712		26,712 U
161 Items Less Than \$5.0M (Const Equip)	А	6,745	6,745		6,745 U
Rail Float Containerization Equipment					0
162 Army Watercraft Esp	A	21,860	21,860		21,860 U
163 Items Less Than \$5.0M (Float/Rail)	A	1,967	1,967		1,967 U
Generators					
164 Generators and Associated Equip	A	145,027	145,027		145,027 U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

		FY 2018	FY 2018	FY 2018	S
Line	Ident	Base	OCO Coat	Total	е
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	C
Maintenance Equipment					
149 Mobile Maintenance Equipment Systems	A	33,774	1,124	34,898	U
150 Items Less Than \$5.0M (Maint Eq)	A	2,728		2,728	Ū
Construction Equipment					
151 Grader, Road Mtzd, Hvy, 6x4 (CCE)	A	989		989	U
152 Scrapers, Earthmoving	A	11,180		11,180	U
153 Hydraulic Excavator	В		3,850	3,850	Ŭ
154 Tractor, Full Tracked	A				U
155 All Terrain Cranes	A	8,935		8,935	Ü
156 Plant, Asphalt Mixing					U
157 High Mobility Engineer Excavator (HMEE)	Α	64,339	1,932	66,271	U
158 Enhanced Rapid Airfield Construction Capap	В	2,563		2,563	U
159 Family of Diver Support Equipment	A				U
160 Const Equip Esp		19,032		19,032	U
161 Items Less Than \$5.0M (Const Equip)	A	6,899		6,899	U
Rail Float Containerization Equipment					
162 Army Watercraft Esp	A	20,110		20,110	U
163 Items Less Than \$5.0M (Float/Rail)	A	2,877		2,877	U
Generators					
164 Generators and Associated Equip	A	115,635	569	116,204	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2016 Base + OCO	FY 2017 PB Request with CR Adj Base	FY 2017 Total PB Requests* with CR Adj S Base e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost c
165 Tactical Electric Power Recapitalization	A	13,806	7,867	7,867 U
Material Handling Equipment				
166 Family of Forklifts	A	27,982	2,307	2,307 U
Training Equipment				
167 Combat Training Centers Support		74,916	75,359	80,708 U
168 Training Devices, Nonsystem		278,141	253,050	253,050 U
169 Close Combat Tactical Trainer	A	45,210	48,271	59,771 U
170 Aviation Combined Arms Tactical Trainer		30,068	40,000	40,000 U
171 Gaming Technology In Support of Army Training		9,793	11,543	11,543 U
Test Measure and Dig Equipment (TMD)				
172 Calibration Sets Equipment		4,650	4,963	4,963 U
173 Integrated Family of Test Equipment (IFTE)		36,187	29,781	29,781 U
174 Test Equipment Modernization (TEMOD)		9,383	6,342	6,342 U
Other Support Equipment				<u> </u>
175 M25 Stabilized Binocular	A		3,149	3,149 U
176 Rapid Equipping Soldier Support Equipment	A	30,403	18,003	18,003 U
177 Physical Security Systems (OPA3)	A	52,100	44,082	44,082 U
178 Base Level Common Equipment		1,870	2,168	2,168 U
179 Modification of In-Svc Equipment (OPA-3)		64,219	67,367	67,367 U
180 Production Base Support (OTH)		1,525	1,528	1,528 U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 PB Reque with CR F OCO	est	FY 20 Tota PB Requ with CR OCO	l ests* Adj	FY 20 Less En Div P.L.114- OCC	acted B 254**	FY 20 Remainin with CR	g Req L Adj	S e
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	C
165 Tactical Electric Power Recapitalization	A		Y							U
Material Handling Equipment										
166 Family of Forklifts	A		846		846				846	U
Training Equipment		31 - 320								
167 Combat Training Centers Support										U
168 Training Devices, Nonsystem	5									U
169 Close Combat Tactical Trainer	A									U
170 Aviation Combined Arms Tactical Trainer										U
171 Gaming Technology In Support of Army Training										U
Test Measure and Dig Equipment (TMD)										
172 Calibration Sets Equipment										U
173 Integrated Family of Test Equipment (IFTE)										U
174 Test Equipment Modernization (TEMOD)		3	1,140		1,140	i			1,140	U
Other Support Equipment										
175 M25 Stabilized Binocular	A			4						Ū
176 Rapid Equipping Soldier Support Equipment	A	8	8,500		8,500				8,500	U
177 Physical Security Systems (OPA3)	A									U
178 Base Level Common Equipment										U
179 Modification of In-Svc Equipment (OPA-3)										U
180 Production Base Support (OTH)										U
P-1C1F: FY 2018 President's Budget Request (Publishe	d Version)	, as of May 1,	, 2017 ā	at 14:36:26						

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA Quantity Cost	FY 2017 Total PB Requests* with CR Adj Base + OCO Quantity Cost	FY 2017 Less Enacted Div B P.L.114-254** OCO Quantity Cost	FY 2017  Remaining Req with CR Adj Base + OCO Quantity Cost	S e c
165 Tactical Electric Power Recapitalization	Α	7,867	7,867		7,867	_
	A	7,007	1,001		7,007	U
Material Handling Equipment		FI				
166 Family of Forklifts	A	3,153	3,153		3,153	U
Training Equipment						
167 Combat Training Centers Support		75,359	80,708		80,708	U
168 Training Devices, Nonsystem		253,050	253,050		253,050	U
169 Close Combat Tactical Trainer	A	48,271	59,771		59,771	Ū
170 Aviation Combined Arms Tactical Trainer		40,000	40,000		40,000	Ū
171 Gaming Technology In Support of Army Training		11,543	11,543		11,543	Ū
Test Measure and Dig Equipment (TMD)						
172 Calibration Sets Equipment		4,963	4,963		4,963	U
173 Integrated Family of Test Equipment (IFTE)		29,781	29,781		29,781	U
174 Test Equipment Modernization (TEMOD)		7,482	7,482		7,482	U
Other Support Equipment						
175 M25 Stabilized Binocular	A	3,149	3,149		3,149	U
176 Rapid Equipping Soldier Support Equipment	A	26,503	26,503		26,503	U
177 Physical Security Systems (OPA3)	A	44,082	44,082		44,082	U
178 Base Level Common Equipment		2,168	2,168		2,168	U
179 Modification of In-Svc Equipment (OPA-3)		67,367	67,367		67,367	U
180 Production Base Support (OTH)		1,528	1,528		1,528	Ū

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 20 Bas		FY 20 OCO		FY 2018 Total		
No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	c -
165 Tactical Electric Power Recapitalization	А		7,436				7,436	U
Material Handling Equipment								
166 Family of Forklifts	A		9,000				9,000	U
Training Equipment								
167 Combat Training Centers Support			88,888				88,888	U
168 Training Devices, Nonsystem		2	285,989		2,700		288,689	U
169 Close Combat Tactical Trainer	A		45,718				45,718	Ū
170 Aviation Combined Arms Tactical Trainer		-	30,568				30,568	U
171 Gaming Technology In Support of Army Training			5,406				5,406	U
Test Measure and Dig Equipment (TMD)								
172 Calibration Sets Equipment			5,564			(F)	5,564	U
173 Integrated Family of Test Equipment (IFTE)			30,144		7,500		37,644	U
174 Test Equipment Modernization (TEMOD)			7,771				7,771	U
Other Support Equipment		9						
175 M25 Stabilized Binocular	A		3,956				3,956	U
176 Rapid Equipping Soldier Support Equipment	A		5,000		8,500		13,500	U
177 Physical Security Systems (OPA3)	A		60,047				60,047	U
178 Base Level Common Equipment			13,239				13,239	U
179 Modification of In-Svc Equipment (OPA-3)			60,192				60,192	U
180 Production Base Support (OTH)			2,271				2,271	U

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line No Item Nomenclature	Ident Code	FY 2016  Base + OCO  Quantity Cost	FY 2017 PB Request with CR Adj Base Quantity Cost	FY 2017 Total PB Requests* with CR Adj S Base e Quantity Cost c
181 Special Equipment for User Testing		6,268	8,289	8,289 U
182 Tractor Yard		7,191	6,888	6,888 U
183 Closed Account Adjustments		498		<b>U</b>
Total Other Support Equipment		1,519,423	1,371,856	1,424,205
Budget Activity 04: Spare and Repair Parts				
OPA2				
184 Initial Spares - C&E		46,151	27,243	27,243 U
Total Spare and Repair Parts		46,151	27,243	27,243
Budget Activity 20: Undistributed				
Undistributed				
185 Adj to Match Continuing Resolution	A		-166,009	-166,009 U
Total Undistributed			-166,009	-166,009
Total Other Procurement, Army	Y	6,818,676	5,707,940	6,157,285

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 PB Request with CR Adj OCO	FY 2017 Total PB Requests* with CR Adj OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj S OCO e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost c
20 TH 10 TH					
181 Special Equipment for User Testing					U
· 182 Tractor Yard			9)		Ū
183 Closed Account Adjustments					U
Total Other Support Equipment		241,510	271,062	212222	271,062
Budget Activity 04: Spare and Repair Parts					
OPA2					
184 Initial Spares - C&E		722222V4F2			U
Total Spare and Repair Parts					
Budget Activity 20: Undistributed					
Undistributed					
ondiscribated					
185 Adj to Match Continuing Resolution	A	-197,414	-197,414 		-197,414 U
Total Undistributed		-197,414	-197,414		-197,414
Total Other Procurement, Army		1,175,596	1,572,459	-72,000	1,500,459

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

Line	Ident	FY 2017 Total PB Requests** with CR Adj Base+OCO+SAA	FY 2017 Total PB Requests* with CR Adj Base + OCO	FY 2017 Less Enacted Div B P.L.114-254** OCO	FY 2017 Remaining Req with CR Adj Base + OCO	S e
No Item Nomenclature	Code	Quantity Cost	Quantity Cost	Quantity Cost	Quantity Cost	С
			*********			-
181 Special Equipment for User Testing		8,289	8,289		8,289	U
182 Tractor Yard		6,888	6,888		6,888	U
183 Closed Account Adjustments		*****			/2	Ü
Total Other Support Equipment		1,613,366	1,695,267		1,695,267	
Budget Activity 04: Spare and Repair Parts						
OPA2						
184 Initial Spares - C&E		27,243	27,243		27,243	U
Total Spare and Repair Parts		27,243	27,243		27,243	
Budget Activity 20: Undistributed						í
Undistributed						
185 Adj to Match Continuing Resolution	A	-363,423	-363,423		-363,423	U
Total Undistributed		-363,423	-363,423 		-363,423	
Total Other Procurement, Army		6,955,536	7,729,744	-72,000	7,657,744	

# Department of the Army FY 2018 President's Budget Request Exhibit P-1 FY 2018 President's Budget Request Total Obligational Authority (Dollars in Thousands)

01 May 2017

Appropriation: 2035A Other Procurement, Army

	Ident	FY 20 Ba:		FY 20	-	FY 20 Tota		S e
Line No Item Nomenclature	Code	Quantity	Cost	Quantity	Cost	Quantity	Cost	_
181 Special Equipment for User Testing			5,319				5,319	U
182 Tractor Yard			5,935				5,935	U
183 Closed Account Adjustments								U
Total Other Support Equipment			359,097		57,986		117,083	
Budget Activity 04: Spare and Repair Parts								
OPA2								
184 Initial Spares - C&E			38,269				38,269	
Total Spare and Repair Parts		( <del>= 0,00</del>	38,269				38,269	
Budget Activity 20: Undistributed								
Undistributed								
185 Adj to Match Continuing Resolution	A			22				Ü
Total Undistributed		Carrate Contract						
Total Other Procurement, Army			469,331		105,575		374,906	

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

W01103 / Protective Systems

Chemical Defensive Equipment

ID Code (A=Service Ready), B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	1,524	4	17,973	1,452	-	1,452	7,253	3,809	3,809	3,809	-	39,633
Gross/Weapon System Cost (\$ in Millions)	69.629	0.248	13.466	1.613	-	1.613	2.225	2.400	2.400	2.400	-	94.381
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	69.629	0.248	13.466	1.613	-	1.613	2.225	2.400	2.400	2.400	-	94.381
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	69.629	0.248	13.466	1.613	-	1.613	2.225	2.400	2.400	2.400	-	94.381
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	d elsewhere.)			ĺ	•
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	45.688	62.000	0.749	1.111	-	1.111	0.307	0.630	0.630	0.630	-	2.381

### **Description:**

Protective systems includes Kits for evidence Collection and Detainee Processing (KECDP). The KECDP consists of four (4) kits that support Military Police (MP) and Criminal Investigative Division (CID) elements, providing equipment to restrain detainees, compile accurate documentation at a crime scene, and collect evidence. This standardized collection of evidence and information will lead to successful prosecution of high value targets that are guilty or the release of those deemed innocent. The Prisoner of War (POW) Kit does not contain any of the equipment used in modern detainee operations at the point of capture. The KECDP will aid in eliminating improperly attained or mishandled processing of evidence found at the point of capture and eliminate the release of persons who would continue to engage in insurgent activities leading to injury and death of U.S. and Coalition Forces. KECDP Estimated Army Acquisition Objective (AAO): Individual Point of Capture Kit IPOCK) 15,170; Leader Point of Capture Kit (LPOCK) 4,995; Team Evidence Collection Kit (TECK) 1,665; Platoon Evidence Collection Kit (PECK) 1,815.

Law Enforcement Ensemble Kit (LEEK) - consists of the following: Duty Belt, Belt Keeper, Pouch Handcuff, Surgical Glove Pouch and Flashlight Holder to be used by Military Law Enforcement personnel. LEEK funding will be moved to APE 115020000.

FY13-17 BAIS funding has been moved to Base Defense Systems (M90202).

	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	4	4,805	1,452	-	1,452	7,253	3,809	3,809	3,809
	Total Obligation Authority	0.248	7.724	1.613	-	1.613	2.225	2.400	2.400	2.400
ANG	Quantity	-	9,306	-	-	-	-	-	-	-
	Total Obligation Authority	-	4.115	-	-	-	-	-	-	-
AR	Quantity	-	3,862	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.627	-	-	-	-	-	-	-
Total:	Quantity	4	17,973	1,452	-	1,452	7,253	3,809	3,809	3,809

**UNCLASSIFIED** 

LI W01103 - Protective Systems Army

.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

W01103 / Protective Systems

Chemical Defensive Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Secondary Distribution				FY 2018	FY 2018	FY 2018				
Secondary	y Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distribution	Total Obligation Authority	0.248	13.466	1.613	-	1.613	2.225	2.400	2.400	2.400

### Justification:

FY18 Base procurement funding in the amount of \$1.613 million procures 984 IPOCK, 324 LPOCK, 108 TECK, and 36 PECK. KECDP kits will give our forces modernized and standardized evidence collection capability supporting the Military Police disciplines (Security and Mobility Support, Police Operations, & Detention Operations) and intelligence collection processes.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these items are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

M11205 / Family Of Non-Lethal Equipment (FNLE)

Chemical Defensive Equipment

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То		
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total	
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost (\$ in Millions)	3.909	1.487	9.795	9.696	-	9.696	17.268	12.928	12.133	11.478	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	3.909	1.487	9.795	9.696	-	9.696	17.268	12.928	12.133	11.478	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	3.909	1.487	9.795	9.696	-	9.696	17.268	12.928	12.133	11.478	Continuing	Continuing	
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)			ĺ		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	

### **Description:**

This line contains Non-Lethal Equipment, All Types.

M11309 The Acoustic Hailing Device (AHD) is a non-kinetic, long range hailing and warning device capable of producing highly directional sound beams to project warning tones and intelligible voice commands to distances of 300 meters with background noise present at the target's location. AHDs will support Military Police (MP), Transportation units and Psychological Operations (PSYOP), to engage non-combatants during support and stability operations. Less than lethal force is desired and necessary to prevent and minimize civilian casualties. Equipment will allow Soldiers to effectively determine the intent of a person, crowd, vessel or vehicle at a safe distance and potentially deter them prior to escalating to lethal force. This item is Code A, approved for service use.

M11206 The Remote Deployment Device (RDD) - Single Net solution (SNS) system is wheeled vehicle stopping system. The RDD is capable of deploying a SNS in 2 seconds. The SNS is a a single use net with spikes designed to stop wheeled vehicles up to 22,000 lbs. traveling up to 30 mph within 200 ft. The SNS can be hand emplaced or remotely deployed with an RDD from a standoff distance of up to 100 meters. A complete RDD-SNS system includes (1) RDD and (2) SNS. This item is Code B, not approved for service use.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	14	344	95	-	95	219	1,150	122	128
	Total Obligation Authority	1.487	6.141	2.804	-	2.804	4.855	3.635	3.411	3.227
ANG	Quantity	-	55	79	-	79	214	121	108	121
	Total Obligation Authority	-	2.413	4.538	-	4.538	7.921	5.930	5.565	5.265
AR	Quantity	-	28	59	-	59	131	75	75	77
	Total Obligation Authority	-	1.241	2.354	-	2.354	4.492	3.363	3.157	2.986
Total:	Quantity	14	427	233	-	233	564	1,346	305	326
Secondary Distribution	Total Obligation Authority	1.487	9.795	9.696	-	9.696	17.268	12.928	12.133	11.478

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	UNCL	.ASSIFIED					
Exhibit P-40, Budget Line Item Justification	n: FY 2018 Army	P-1 Line Item Number / Title: M11205 / Family Of Non-Lethal Equipment (FNLE)					
Appropriation / Budget Activity / Budget St 2035A: Other Procurement, Army / BA 03: Oth Chemical Defensive Equipment							
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code E	3 Items: N/A	Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A							
Justification: FY 2018 Base procurement dollars in the amount of \$9.6 Fielding and New Equipment Training (NET).	696 million supports procurement of 200 AHDs	s and supports the procu	urement of 11 RDD-SNS Systems (11 RDDs and 22 SNSs). Funding als	so supports			
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and	al Defense Authorization Act (P.L. 110-181), the providing military support to civil authorities.	is item is necessary for	use by the active and reserve components of the Armed Forces for hom	eland			

LI M11205 - Family Of Non-Lethal Equipment (FNLE) Army

**Exhibit P-40, Budget Line Item Justification:** FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

M90101 / Base Defense Systems (BDS)

Chemical Defensive Equipment

ID Code (A=Service Ready), B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	9	-	1	1	12	26	24	31	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	115.237	4.035	26.572	-	3.726	3.726	10.726	17.704	17.482	20.688	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	115.237	4.035	26.572	-	3.726	3.726	10.726	17.704	17.482	20.688	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	115.237	4.035	26.572	-	3.726	3.726	10.726	17.704	17.482	20.688	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				Year of the second seco
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	2,952.444	-	3,726.000	3,726.000	893.833	680.923	728.417	667.355	Continuing	Continuing

### **Description:**

Base Defense Systems (BDS) includes Non-Intrusive Inspection Systems (NIIS) (M90108), Battlefield Anti-Intrusion System (BAIS) (M90202), Lighting Kit Motion Detection (LKMD) (M90204), Integrated Ground Security, Surveillance and Response Capability (IGSSR-C)(M90106) Ground-Based Operational Surveillance System (Expeditionary) (GBOSS-E) (M90212), Tactical Security System (TSS) (M90220) and Integrated Base Defense (IBD) Kitting (M90115)

NIIS is a family of systems that inspects for the presence of explosives, weapons and other contraband in vehicles, cargo containers and personnel from a distance providing stand-off ballistic and blast protection. The current family of systems includes the Z-backscatter Van (ZBV), Military Mobile Vehicle and Cargo Inspection System (MMVACIS) and personnel scanners such as the Secure-1000. All systems are either mobile or fully re-locatable. It is a force multiplier that maximizes protection of personnel, equipment and installations while minimizing manpower requirements. NIIS provides the capability to non-intrusively inspect vehicles, cargo containers and personnel for the presence of explosives, weapons or other contraband which can kill or injure Soldiers and destroy critical warfighting materiel. NIIS supports the urgent need for Counter-Improvised Explosive Device equipment to support military operations.

BAIS is a compact, modular, light-weight, unattended tactical ground seismic/acoustic sensor that provides tactical units and Forward Operating Bases with an enhanced force protection capability. BAIS enhances force protection and provides early detection and warning of personnel and wheeled or tracked vehicles, increasing situational awareness during defensive and ambush-type operations. BAIS can be integrated into a layered system of systems force protection plan for small tactical units. BAIS is also one of the sub-systems included in the Force Protection Suite that is part of the Base Expeditionary Targeting and Surveillance System, Combined, employed in Forward Operating Bases (FOB) and Combat Outpost (COP) defense and force protection. BAIS provides combat Soldiers a force multiplier force protection system that significantly increases the combat potential and Soldier survivability, enhancing the probability of successful mission accomplishment. BAIS replaces the Platoon Early Warning System (PEWS), which is no longer in production. The Army Acquisition Objective (AAO) is 8,933 systems.

LKMD is a lightweight, man-portable, easily emplaced and recoverable motion activated warning device. LKMD provides an early detection and warning capability enhancing force protection and situational awareness during all types of combat operations. LKMD is a motion activated (Infrared (IR) and Microwave) warning and illumination (visible light, IR and strobe) system. LKMD can be employed in a standalone configuration or as part of an integrated protection plan. LKMD provides small-unit Commanders with close-in warning of imminent intrusion and illuminates the intrusion where it occurs, permitting easier identification and facilitating appropriate responses. LKMD systems will be organic to appropriate tactical units. LKMD provides support systems to Army units either operating in or deploying to combat theaters, thereby increasing force protection posture. The Army fielding plan, based on the approved Basis of Issue Plan, requires systems be provided to the following types of units: Military Police, Infantry, Armor and Combat Engineers. LKMD replaces the M49 Trip Flare, Electronic which is no longer in production. The Army Acquisition Objective (AAO) is 23,545 systems.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

M90101 / Base Defense Systems (BDS)

Chemical Defensive Equipment

ID Code (A=Service Ready). B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

The IGSSR-C is a Joint Requirement that provides a layered approach to integrate sensors, sensor systems and unmanned systems with automated fusion capabilities to create an in-depth security, surveillance and response Force Protection (FP) COP capability for CONUS fixed, OCONUS semi-fixed or expeditionary elements in all Operating Environments (OE). This capability will enable rapid decision analysis, speed the response process as well as increase information dissemination horizontally and vertically along the chain of command and with outside supporting organizations. IGSSR-C is a software centric fusion engine that connects legacy and emerging FP systems, legacy Chemical, Biological, Radiological, Nuclear, and Explosive (CBRNE), unmanned systems, biometric identification and forensic data systems. The desired end state is to achieve interoperability with current and emerging FP systems used by Joint Forces, Department of Defense (DoD) agencies and multi-national forces.

Ground-Based Operational Surveillance System (Expeditionary) (GBOSS-E) will replace the interim Persistent Surveillance System-Ground (PSS-G) Increment 1 towers with improved persistent surveillance capabilities and will provide network integration and better mobility utilizing modular configurations. GBOSS-E will replace obsolete, quick reaction capability (QRC) surveillance and force protections systems utilizing modular configurations: Light (man transportable/detachable) for extra small base camps or small outpost/company, Medium variant (mid sensor height) for small to medium size base, and Heavy variant (high level sensor height) for large contingency base camps. GBOSS-E will operate in a stand-alone mode or as part of an integrated network utilizing government owned software, be easily operated and maintained, and be rugged enough to support employment in expeditionary operations worldwide.

The Tactical Security System (TSS) provides a modular, scalable, lightweight, rapidly deployable, ground based security and surveillance Family of Systems designed for hasty emplacement to support short and long term security, surveillance and detection missions. The system will be tailorable to support various missions including internment/resettlement operations; perimeter security; internal security within base camps or installations; external security outside the perimeter and route clearance. TSS will be employed at fixed, semi-fixed or expeditionary sites providing all weather imaging during daylight/twilight and during periods of limited visibility regardless of environmental conditions to enhance the Commander's situational awareness and increase Soldier survivability. TSS is designed to be employed as a standalone, in a layered effort or integrated with additional force protection systems including motion, acoustic, seismic, surface and subterranean detection technologies. TSS will address four of the five base camp core protection/security capabilities identified in the IBD Concept of Operations including perimeter security, entry control, persistent surveillance and warning and alerting. TSS can be employed in support of contingency, short-notice, early-entry operations in a variety of weather and terrain from open desert to complex urban environments. TSS will assist in countering individuals and provide clandestine observation of detainees, individuals, either on foot or in vehicles from intruding into areas designated for security purposes. TSS will allow the Commander to detect and observe enemy or adversarial forces from a distance prior to entering the base area of operations. This advanced warning will allow the Commander to better deploy forces in a more effective manner to mitigate threat.

The purpose of IBD Kitting is to harvest and refurbish physical security and FP Non-Standard Equipment and package them into integrated and interoperable IBD capabilities. IBD packages support expeditionary ground operations and provide a bridge to the enduring IBD capability. IBD kits are integrated into a System of Systems (SoS) to provide an interim IBD capability to increase protective effectiveness, enhance situational awareness and reduce troop-to-task requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	9	-	1	1	8	8	10	14
	Total Obligation Authority	4.035	26.572	-	3.726	3.726	5.809	5.344	6.851	8.788
ANG	Quantity	-	-	-	-	-	2	9	8	10
	Total Obligation Authority	-	-	-	-	-	2.458	6.180	5.865	6.622
AR	Quantity	-	-	-	-	-	2	9	6	7
	Total Obligation Authority	-	-	-	-	-	2.459	6.180	4.766	5.278
Total:	Quantity	-	9	-	1	1	12	26	24	31
Secondary Distribution	Total Obligation Authority	4.035	26.572	-	3.726	3.726	10.726	17.704	17.482	20.688

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LI M90101 - Base Defense Systems (BDS) Army

P-1 Line #121

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Exhibit P-40, Budget Line Item Justification:	: FY 2018 Army		<b>Date</b> : May 2017	
Appropriation / Budget Activity / Budget Sul 2035A: Other Procurement, Army / BA 03: Othe Chemical Defensive Equipment		<b>P-1 Line Item N</b> M90101 / Base	Number / Title: Defense Systems (BDS)	
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
remote operating bases supporting Operation Inherent Resecurity, data fusion and warn and alert to increase force porne Improvised Explosive Device (VBIED) threat. In accomponents of the Armed Forces for homeland defense many FY18 Justification  FY18 Overseas Contingency Operations (OCO) Procurements	esolve above the PB 2017 Request. The IBE protection and situational awareness in base cordance with Section 1815 of the FY2008 N nissions, domestic emergency responses, an ent in the amount of \$3.726 million provides	P-Ks will provide integra camps. FY17 increase ational Defense Author d providing military sup hardware equipment fo	pCO) funds to procure components for Integrated Base Defense ated and interoperable capability for persistent surveillance, enter also includes \$1.295 million in support of JUONS 0540 to addrization Act (P.L> 110-181), this item is necessary for use by the oport to civil authorities. All quantities and funding are for Active or Integrated Base Defense - Kitting (IBD-K) in support of Capa Act (P.L> 110-181), this item is necessary for use by the active	ry control, perimeter ress the Vehicle e active and reserve Components.
. ,			port to civil authorities. All quantities and funding are for Active	

LI M90101 - Base Defense Systems (BDS) Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 10:

M01001 / CBRN Defense

Chemical Defensive Equipment

ID Code (A=Service Ready), B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	17,077	7,832	58,459	9,268	-	9,268	1,790	67,650	66,818	59,600	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	232.545	26.302	47.743	11.110	-	11.110	6.500	28.646	39.717	66.911	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	232.545	26.302	47.743	11.110	-	11.110	6.500	28.646	39.717	66.911	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	232.545	26.302	47.743	11.110	-	11.110	6.500	28.646	39.717	66.911	Continuing	Continuing
(The following	Resource Sumr	mary rows are fo	r informational p	urposes only. Th	ne corresponding	n budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	13.617	3.358	0.817	1.199	-	1.199	3.631	0.423	0.594	1.123	Continuing	Continuing

### **Description:**

Funds acquisition of critically required Chemical Biological equipment needed to support Army mission requirements in five primary categories: Collective Protection (M01006), Decontamination (M01007), Contamination Avoidance (M01008), Individual Protection (M99001), and Weapons of Mass Destruction (WMD) Elimination (M01011). Collective protection platforms include hard and soft wall shelters, vehicles, and structures. The Contamination Avoidance program includes systems that provide detection, identification, collection and reporting of Chemical, Biological, Radiological and Nuclear (CBRN) hazards. The Individual Protection program provides Protective Masks and test equipment. The WMD Elimination (M01011) procurement efforts support missions to systematically detect, locate, characterize, identify, secure, disable and/or destroy WMD weapons, materials and related capabilities within CONUS, OCONUS and Theater.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	7,832	56,676	9,268	-	9,268	1,790	67,650	66,818	59,600
	Total Obligation Authority	26.302	33.393	11.110	-	11.110	6.500	28.646	39.717	66.911
ANG	Quantity	-	1,022	-	-	-	-	-	-	-
	Total Obligation Authority	-	9.781	-	-	-	-	-	-	-
AR	Quantity	-	761	-	-	-	-	-	-	-
	Total Obligation Authority	-	4.569	-	-	-	-	-	-	-
Total:	Quantity	7,832	58,459	9,268	-	9,268	1,790	67,650	66,818	59,600
Secondary Distribution	Total Obligation Authority	26.302	47.743	11.110	-	11.110	6.500	28.646	39.717	66.911

#### Justification:

FY18 Base dollars in the amount of \$11.110 million supports the procurement of five Chemical Biological Protective Shelter (CBPS) Systems. The CBPS provides the Forward Surgical Team (FST) and the Area Support Medical Company (ASMC) with a CB protective shelter system that allows their mission to continue in a chemical/biological environment. The FST and ASMC, which by doctrine must function together, are critical assets to the Brigade Combat Team Commander. The CBPS also provides chemical protective shelter capabilities to the Role 1 Medical Treatment Facility (MTF)/Battalion Aide Station (BAS) mission.

LI M01001 - CBRN Defense
Army

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P-1 Line #122

	UNCL	ASSIFIED		
Exhibit P-40, Budget Line Item Justification: FY 2018	3 Army		Date: Ma	ay 2017
Appropriation / Budget Activity / Budget Sub Activity 2035A: Other Procurement, Army / BA 03: Other Suppo Chemical Defensive Equipment		P-1 Line Item Num M01001 / CBRN De		
D Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Ele	ements: N/A
Line Item MDAP/MAIS Code: N/A				
In addition, funding supports the procurement and fielding of National (ARNORTH) Defense CBRNE Response Force (DCRF) and Comma (OPROJ) P24 dated 03 Jun 11 for U. S. Army North (ARNORTH) Log	nd and Control CBRNE Response	Element (C2CRE) units. TI	nis effort supports Headquarters, Depart	n support of United States Army North ment of Army (DA) Operational Project
Note: FY17 OCO funding in the amount of \$1.841 will procure Joint C	hemical Agent Detector and Com	munication Adapter capabil	ties for use in theater.	

LI M01001 - CBRN Defense Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Program Elements for Code B Items: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

MX0100 / Tactical Bridging

**Bridging Equipment** 

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): B

Line tent indat /male Gode. 14/7													
	Prior			FY 2018	FY 2018	FY 2018					То		
Resource Summary	Years	FY 2016	FY 2017	Base	OCO	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total	
Procurement Quantity (Units in Each)	-	-	6	2	-	2	3	3	3	5	Continuing	Continuing	
Gross/Weapon System Cost (\$ in Millions)	44.412	9.822	39.553	16.610	-	16.610	18.710	18.634	19.447	30.000	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	44.412	9.822	39.553	16.610	-	16.610	18.710	18.634	19.447	30.000	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	44.412	9.822	39.553	16.610	-	16.610	18.710	18.634	19.447	30.000	Continuing	Continuing	
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)					
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	6,592.167	8,305.000	-	8,305.000	6,236.667	6,211.333	6,482.333	6,000.000	Continuing	Continuing	

### **Description:**

The Line of Communication Bridge (LOCB) system provides a 50 meter dry gap crossing capability and a 280 meter wet gap crossing capability to the Multi-Role Bridge Company (MRBC). The LOCB supports equipment up to Military Load Class (MLC) 100 tracked, 120 wheeled (normal crossing) and 120 tracked, 150 wheeled (caution crossing). The LOCB has a roadway width of 4.5 meters. Each 50 meter fixed LOCB system consists of girder beams, cross bracing, decking, guard rails, erection and anchorage sets, tools and all associated hardware, and will come with a ramp set, 5 meter pier, and ground beams. Additionally available will be pedestrian walkways. The 280 meter float LOCB system will consist of the same hardware as the 50 meter LOCB, and will come with floatation equipment. One 50 meter fixed LOCB will be located in Army Prepositioned Stock for rapid deployment to the theater of operations. Also U.S. Army Engineering School will have 6 50 meter fixed LOCBs and 2 130 meter float LOCBs for training.

The Dry Support Bridge (DSB) is a mobile, rapidly erected, modular military bridging system used by the MRBC. The 40 Meter DSB can span a 40-meter gap or two 20-meter gaps. The 46 Meter DSB can span a 46-meter gap or two 28-meter gaps (with the 46-meter upgrade). Both have a crossing capability of MLC 100 Wheeled/MLC 80 Tracked. The DSB has a road width of 4.3 meters and an emplacement time of 90 minutes or less, with little or no site preparation. The DSB will support the Joint Force Commander's ability to employ and sustain forces throughout the global battle space.

				FY 2018	FY 2018	FY 2018				
Seconda	y Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	5	2	-	2	3	3	-	-
	Total Obligation Authority	9.822	32.776	16.610	-	16.610	18.710	18.634	-	-
ANG	Quantity	-	1	-	-	-	-	-	3	3
	Total Obligation Authority	-	6.777	-	-	-	-	-	19.447	18.000
AR	Quantity	-	-	-	-	-	-	-	-	2
	Total Obligation Authority	-	-	-	-	-	-	-	-	12.000
Total:	Quantity	-	6	2	-	2	3	3	3	5
Secondary Distribution	<b>Total Obligation Authority</b>	9.822	39.553	16.610	-	16.610	18.710	18.634	19.447	30.000
	<u> </u>									

UNCLASSIFIED
Page 1 of 2

Other Related Program Elements: N/A

	ONOL	AGGII ILD		
Exhibit P-40, Budget Line Item Justification	ı: FY 2018 Army		<b>Date</b> : May 2017	
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Bridging Equipment		P-1 Line Item N MX0100 / Tactic		
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A	·		·	
following a successful Milestone (MS) C decision. The LC	OCB system provides the United States Army	with an enhanced support	(LRIP) LOCB systems. Production is anticipated at Rock Is ort bridging capability to replace the obsolete, 1940s era Barrananata and receive commonsts of the Armed Force	ailey Bridge (BB).
IAW Section 1815 of the FY 2008 National Defense Authorissions, domestic emergency responses, and providing		ssary for use by the activ	e components and reserve components of the Armed Force	es for homeland defense
missions, domestic emergency responses, and providing	military support to civil authorities.			

LI MX0100 - Tactical Bridging Army

11

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

MA8890 / Tactical Bridge, Float-Ribbon

**Bridging Equipment** 

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	35	23	34	20	-	20	15	35	55	49	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	152.837	21.516	25.244	21.761	-	21.761	13.340	31.323	48.501	44.424	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	152.837	21.516	25.244	21.761	-	21.761	13.340	31.323	48.501	44.424	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	152.837	21.516	25.244	21.761	-	21.761	13.340	31.323	48.501	44.424	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	n budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	4,366.771	935.478	742.471	1,088.050	-	1,088.050	889.333	894.943	881.836	906.612	Continuing	Continuing

### **Description:**

The Tactical Float Ribbon Bridge line supports the Multi-Role Bridge Company (MRBC). One Tactical Float Ribbon Bridge System consists of the Improved Ribbon Bridge (IRB) bays (30 Interior and 12 Ramp), 14 Propulsion Bridge Erection Boats (BEB) and 56 Common Bridge Transporters (CBT). These components are required to transport, launch, erect and retrieve up to 210 meters of floating bridge. The IRB has a Military Load Class (MLC) 96 wheeled (normal) and 110 (caution)/MLC 70 tracked (normal) and 85 (caution) and is used to transport weapon systems, Troops, and supplies over water when permanent bridges are not available. This capability will support the Joint Force Commander's ability to employ and sustain forces throughout the global battlespace. The Army plans to have 25 MRBCs.

AAO IRB Interior Bays: 1128 AAO IRB Ramp Bays: 454

AAO BEB: 379

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	23	-	20	-	20	15	35	55	49
	Total Obligation Authority	21.516	-	21.761	-	21.761	13.340	31.323	48.501	44.424
ANG	Quantity	-	17	-	-	-	-	-	-	-
	Total Obligation Authority	-	12.417	-	-	-	-	-	-	-
AR	Quantity	-	17	-	-	-	-	-	-	-
	Total Obligation Authority	-	12.827	-	-	-	-	-	-	-
Total:	Quantity	23	34	20	-	20	15	35	55	49
Secondary Distribution	Total Obligation Authority	21.516	25.244	21.761	-	21.761	13.340	31.323	48.501	44.424

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Other Related Program Elements: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

MA8890 / Tactical Bridge, Float-Ribbon

**Bridging Equipment** 

Program Elements for Code B Items: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Exhibits Schedule		,		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	M27200 / BRIDGE, FLOAT-RIBBON, PROPULSION	P-5a, P-21	Α		35 / 152.837	23 / 21.516	34 / 25.244	20 / 21.761	- / -	20 / 21.761
P-40	Total Gross/Weapon System Cost	-			35 / 152.837	23 / 21.516	34 / 25.244	20 / 21.761	- 1 -	20 / 21.761

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$21.761 million supports the procurement of 20 Propulsion Bridge Erection Boats (BEB) for Active Army requirements. The newly designed BEB will improve fleet readiness by improving the basic design to meet current survivability, transportability, and interoperability requirements. Funding supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

**UNCLASSIFIED** LI MA8890 - Tactical Bridge, Float-Ribbon

P-1 Line #124

							UI	NCLAS	SIFIED	)								
Exhibit P-5, Cost	Analysis	s: FY 2	018 Army										I	Date: M	lay 2017			
<b>Appropriation / B</b> 2035A / 03 / 15	udget A	ctivity	Budget	Sub Act	ivity:			<b>Numbe</b> ctical Brid			1		1		/ BRIDG	Title [DO GE, FLO		ON,
ID Code (A=Service Read	y, B=Not Servi	ce Ready)	Α						М	DAP/MAIS	S Code:							
F	Resource	Sumn	nary			Prior Ye	ars	FY 20	16	FY	2017	FY	2018 Bas	se F	FY 2018 OCO			Total
Procurement Quantity (Unit	ts in Each)						35		23		3	4		20		-		20
Gross/Weapon System Co		s)					152.837		21.516		25.24	4	21	1.761		-		21.761
Less PY Advance Procure	ment (\$ in Mil.	lions)					-		_		-			-		-		-
Net Procurement (P-1) (\$ ii	n Millions)						152.837		21.516		25.24	4	21	1.761		-		21.761
Plus CY Advance Procure	ment (\$ in Mill	ions)					-		-		-			-		-		_
Total Obligation Authorit	y (\$ in Millions	)					152.837		21.516		25.24	4	21	1.761		-		21.761
(Th	ne following F	Resource S	Summary row	s are for info	rmational p	urposes only	y. The corres	sponding budg	get request	s are docum	ented elsewl	ere.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Un	nit Cost (\$ in 7	housands)				4	,366.771		935.478		742.47	1	1,088	3.050		-		1,088.050
Note: Subtotals or Totals in	n this Exhibit	P-5 may r	not be exact o	r sum exactl	y due to rou	ınding.												
	Р	rior Yea	rs		FY 2016		FY 2017 FY 2018 Base					е	FY	/ 2018 O	018 OCO FY		FY 2018 Total	
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Flyaway Cost	(, )		(, )	(, )		, , ,	(, )	( , , , )		(, ,	( ,,,		1 (, ,		1 (- /	1 (, ,	, , , ,	, , , , , , , , , , , , , , , , , , ,
Recurring Cost																		
Hardware <sup>(†)</sup>	3,860.000	3	135.100	622.000	23	14.306	615.000	34	20.910	660.000	20	13.200	-	-	-	660.000	20	13.200
Crew Protection Kit	-	-	-	32.000	24	0.768	32.000	34	1.088	38.000	20	0.760	-	-	-	38.000	20	0.760
Bridge Adapter Pallet	42.000	3	5 1.470	42.000	23	0.966	42.000	34	1.428	50.000	20	1.000	-	-	-	50.000	20	1.000
Fielding	-	-	0.100	-	-	0.075	-	-	0.100	-	-	0.600	-	-	-	-	-	0.600
System Test & Evaluation, Production	-	-	6.653	-	-	2.200	-	-	-	-	-	2.250	-	-	-	-	-	2.250
System Engineering/ Program Management	-	-	6.414	-	-	2.200	-	-	1.718	-	-	1.820	-	-	-	-	-	1.820
Engineering Changes	-	-	3.100	-	-	1.001	-	-	-	-	-	2.131	-	-	-	-	-	2.131
Subtotal: Recurring Cost	-	-	152.837	-	-	21.516	-	-	25.244	-	-	21.761	-	-	-	-	-	21.761
Subtotal: Flyaway Cost  Gross/Weapon System	-	-	152.837	-	-	21.516		-	25.244	-	-	21.761	-	-	-	-	-	21.761
Cost	4,366.771	3:	152.837	935.478	23	21.516	742.471	34	25.244	1,088.050	20	21.761	-	-	-	1,088.050	20	21.761
	Seco	ondary D	istribution				FY	2016		FY 2017		FY 2 Ba			FY 2018 OCO		FY 201 Total	
Army		Qı	antity					2	23		-		20	)		-		20
Total Obligation Authority							21.516				-	21.761		1		-		21.761
ANG	•							-	_		17		-			-		-
		To	tal Obligation A	uthority				-		12.417					-			

LI MA8890 - Tactical Bridge, Float-Ribbon Army

UNCLASSIFIED

P-1 Line #124

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 15	<b>P-1 Line Item Number / Title:</b> MA8890 / Tactical Bridge, Float-Ribbon	Item Number / Title [DODIC]: M27200 / BRIDGE, FLOAT-RIBBON, PROPULSION

ID Code (A=Service Ready, B=Not Service Rea	dy): <b>A</b>		MDAP/MAIS Code	):		
Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
AR	Quantity	-	17	-	-	-
	Total Obligation Authority	-	12.827	-	-	-
Total:	Quantity	23	34	20	-	20
Secondary Distribution	Total Obligation Authority	21.516	25.244	21.761	-	21.761

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 15	P-1 Line Item Number / Title: MA8890 / Tactical Bridge, Float-Ribbon	Item Number / Title [DODIC]: M27200 / BRIDGE, FLOAT-RIBBON, PROPULSION

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
Hardware <sup>(†)</sup>		2016	Birdon America Inc / Denver	C / FFP	TACOM, Warren, MI	Apr 2016	Nov 2016	23	622.000	Y		
Hardware <sup>(†)</sup>		2017	Birdon America Inc / Denver	C / FFP	TACOM, Warren, MI	Sep 2017	Dec 2017	34	615.000	Y		
Hardware <sup>(†)</sup>		2018	Birdon America Inc / Denver	C / FFP	TACOM, Warren, MI	Jun 2018	Sep 2018	20	660.000	Y		

<sup>(†)</sup> indicates the presence of a P-21

Exhibit P-21, Production Schedule: FY 2018 Army  Appropriation / Budget Activity / Budget Sub Activity:  2035A / 03 / 15  Date: May 2017  Item Number / Title [DODIC]:  MA8890 / Tactical Bridge, Float-Ribbon  PROPULSION																														
		,	2017	May	Date																,	Army	2018	: FY	nedul	n Sch	luctio	21,  Pro	bit P	Exhi
			BRID	200 /	M272						on	-Ribb									ivity:	b Act	et Su	Budge	vity / I	Activ	udget		•	
				ar 2017	iscal Yea	F											16	Year 201	Fiscal Y									Cost Ele (Units in		
ACCEPT PRIOR BAL Calendar Year 2016 Calendar Year 2017 L																														
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																									20	0	20	RMY	2018	1
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P-1 Line #124

Exhibit P-21, Production Schedule: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 15

P-1 Line Item Number / Title:
MA8890 / Tactical Bridge, Float-Ribbon

Date: May 2017

Item Number / Title [DODIC]:
M27200 / BRIDGE, FLOAT-RIBBON, PROPULSION

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MFI	R					lni	tial			Reo	rder	
Re	f Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 Birdon America Inc - Denver	2	6	8	0	9	12	21	0	5	6	11

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

G06520 / BRIDGE SUPPLEMENTAL SET

**Bridging Equipment** 

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	3	3	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	-	3.967	0.983	-	-	-	-	-	4.374	4.386	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	3.967	0.983	-	-	-	-	-	4.374	4.386	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	3.967	0.983	-	-	-	-	-	4.374	4.386	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	1,458.000	1,462.000	Continuing	Continuing

### **Description:**

The Bridge Supplemental Set (BSS) is transported and composed of four subsystems (Anchorage, Bridge Protection Device, Site Stability, and Power Generator & Tools) that support the Multi-Role Bridge Company (MRBC). Anchorage is utilized to anchor float bridges within the MRBC, such as the Improved Ribbon Bridge (IRB) for an extended period beyond 72 hours. The Bridge Protection Device provides protection from debris upstream from any bridge site. Site Stability enhances access/egress to and from the bridge site in less than desirable geography. Power Generator & Tools support all subsystems during employment plus support repairs on or to existing MRBC bridges. All subsystems except the Bridge Protection Device will be transported on the equivalent of four or fewer M1077 flat racks by the Common Bridge Transporter under 22,000 Lbs. per load. The BSS unit of issue will be two per MRBC (56 total). The Bridge Protection Device will be issued only to Army Prepositioned Stock units and to the training base (11 total).

AAO: 56

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	-	-	-	-	-	3	3
	Total Obligation Authority	3.967	0.983	-	-	-	-	-	4.374	4.386
Total:	Quantity	-	-	-	-	-	-	-	3	3
Secondary Distribution	Total Obligation Authority	3.967	0.983	-	-	-	-	-	4.374	4.386

#### Justification:

BSS is not receiving FY18 Base Procurement dollars.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

G07000 / Common Bridge Transporter (CBT) Recap

**Bridging Equipment** 

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	22	134	54	75	-	75	42	44	72	72	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	15.769	53.538	25.176	21.046	-	21.046	15.871	17.453	29.737	30.000	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	15.769	53.538	25.176	21.046	-	21.046	15.871	17.453	29.737	30.000	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	15.769	53.538	25.176	21.046	-	21.046	15.871	17.453	29.737	30.000	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	716.773	399.537	466.222	280.613	-	280.613	377.881	396.659	413.014	416.667	Continuing	Continuing

### **Description:**

The M1977A4 Common Bridge Transporter (CBT) and M1064 Palletized Load System Trailer (PLST) are part of the Ribbon Bridge System. The CBT transports and launches the Bridge Erection Boat (BEB) and Improved Ribbon Bridge (IRB) Bays in the Multi-Role Bridge Company (MRBC) allowing Bridging formation assets to maintain pace with supported combat units. The CBT is also the transporter and launch vehicle for the Rapidly Emplaced Bridge System (REBS) supporting the 9 Stryker Brigade Combat Teams (SBCT) and 5 Airborne Companies. The Army plans to recapitalize 100% of the CBT fleet; 24 MRBCs (56 each), 9 SBCTs (4 each), 5 Airborne Companies (2 each), 1 European Activity Set (EAS), 1 Army pre-positioned set (APS) Korea (56) and 24 CBTs in the training base.

AAO: 1528

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	134	54	75	-	75	42	-	-	-
	Total Obligation Authority	53.538	25.176	21.046	=	21.046	15.871	-	-	-
ANG	Quantity	-	-	-	=	-	-	44	72	-
	Total Obligation Authority	-	-	-	-	-	-	17.453	29.737	-
AR	Quantity	-	-	-	=	-	-	-	-	72
	Total Obligation Authority	-	-	-	-	-	-	-	-	30.000
Total:	Quantity	134	54	75	-	75	42	44	72	72
Secondary Distribution	Total Obligation Authority	53.538	25.176	21.046	-	21.046	15.871	17.453	29.737	30.000

21

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 15:

G07000 / Common Bridge Transporter (CBT) Recap

**Bridging Equipment** 

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G07000 / Common Bridge Transporter (CBT) Recap	P-5a, P-21			22 / 15.769	134 / 53.538	54 / 25.176	75 / 21.046	- / -	75 / 21.046
P-40	Total Gross/Weapon System Cost				22 / 15.769	134 / 53.538	54 / 25.176	75 / 21.046	- 1 -	75 / 21.046

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$21.046 million supports the recapitalization of 75 Common Bridge Transporters. The currently fielded M1977A0 and M1977A2 CBTs have significant obsolescence issues due to armor, electrical, and powertrain improvements. The M1977A4 provides the Soldier with key survivability requirements to include a Long Term Armor Strategy (LTAS) compliant cab, new engine and transmission, air ride suspension, anti-lock brakes and traction control, and an updated electrical system to support current and future communications equipment and diagnostic/prognostics systems.

The current strategy for recapitalization will be executed by converting excess M977A4 Cargo Trucks at Red River Army Depot (RRAD). This provides the engineer force with the improved capabilities of the A4 version of the Heavy Expanded Mobility Tactical Truck (HEMTT) at minimal cost. Any production beyond RRAD's production capability will be done at Oshkosh Defense.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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							UN	NCLAS	SIFIED	)								
Exhibit P-5, Cost	Analysis	: FY 20	18 Army										1	Date: N	May 2017			
<b>Appropriation / B</b> 2035A / 03 / 15	udget Ad	ctivity / I	Budget \$	Sub Act	ivity:	1		<b>Numbe</b> nmon Bri			(CBT) F	Recap	(		<b>umber</b> / <sup>-</sup> 0 / Comm Recap			orter
ID Code (A=Service Read	ly, B=Not Servi	ce Ready):				l .			М	DAP/MAIS	Code:							
F	Resource	Summa	ary		F	Prior Yea	ars	FY 20	16	FY	2017	FY	2018 Bas	e l	FY 2018 (	осо	FY 2018	Total
Procurement Quantity (Uni	ts in Each)						22		134			54		75		-		7
Gross/Weapon System Co	ost (\$ in Million	s)					15.769		53.538		25.1	76	21	.046		-		21.04
Less PY Advance Procure	ment (\$ in Mill	ions)					-		_			-		-		-		-
Net Procurement (P-1) (\$ i	n Millions)	-					15.769		53.538		25.1	76	21	.046		-		21.04
Plus CY Advance Procure	ment (\$ in Mill	ions)					-		-			-		-		-		-
Total Obligation Authorit	y (\$ in Millions	)					15.769		53.538		25.	76	21	.046		-		21.04
(TI	ne following F	Resource Su	mmary rows	are for info	rmational pu	urposes only	. The corres	ponding bude	get reguest	s are docum	ented elsev	/here.)						
Initial Spares (\$ in Millions)			•				-		-			-		-		-		_
Gross/Weapon System Ur	nit Cost (\$ in T	housands)					716.773		399.537		466.2	22	280	0.613		-		280.61
		-																
Note: Subtotals or Totals i	n this Exhibit	P-5 may no	t be exact or	sum exactl	y due to rou	nding.		'							'			
	P	rior Years	;		FY 2016			FY 2017		FY	′ 2018 Ba	se	FY	′ 2018 O	СО	F	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(ψ19	(Eddin)	(\$ 111)	(079	(Eddin)	(\$ 111)	(\$79	(Lucii)	(\$ 111)	(\$75)	(Eddin)	(\$ 101)	(\$75)	(Eddin)	(\$ 11.7	(ψ1)	(Edoi)	(\$ 111)
Recurring Cost																		
M1977A4 CBT RECAP <sup>(†)</sup>	406.000	22	8.932	328.955	134	44.080	375.000	54	20.250	250.000	75	18.750	-	-	-	250.000	75	18.75
FRET	-	-	0.440	-	-	3.406	-	-	2.000	-	-	-	-	-	-	-	-	-
Engineering Changes	-	-	-	-	-	0.500	-	-	0.500	-	-	0.150	-	-	-	-	-	0.15
System Engineering/ Program Management	-	-	2.141	-	-	2.442	-	-	1.610	-	-	1.600	-	-	-	-	-	1.60
System Test & Evaluation, Production	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	-	-	-	-
Data	-	-	3.856	-	-	1.500	-	-	-	-	-	-	-	-	-	-	-	-
Fielding	-	-	0.300	-	-	1.200	-	-	0.316	-	-	0.306		-		-	-	0.30
Transportation	-	-	0.100	-	-	0.410	-	-		-	-	0.240		-		-	-	0.24
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	15.769 <b>15.769</b>	-	-	53.538 <b>53.538</b>	-	-	25.176 <b>25.176</b>	-	-	21.046 <b>21.046</b>		-		-	-	21.04 <b>21.04</b>
Gross/Weapon System Cost	716.773	22	15.769	399.537	134	53.538	466.222	54	25.176	280.613	75			-	-	280.613	75	21.04
		andon: Die	stribution				EV	2016		FY 2017		FY 2 Ba			FY 2018 OCO		FY 201 Total	
	Seco	muary Dis	stribution			I	F T A	2010	1	F 1 2017	1	Da	36		000			
Army	Seco	Quar					ГТ.	13	34	F1 2017	54	Ба	75	5		-		7

LI G07000 - Common Bridge Transporter (CBT) Recap Army

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P-1 Line #126

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Exhibit P-5, Cost Analysis: FY 2018 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 15	P-1 Line Item Number / Title: G07000 / Common Bridge Transporter (CBT) Recap	Item Number / Title [DODIC]: G07000 / Common Bridge Transporter (CBT) Recap

ID Code (A=Service Ready, B=Not Service Read	у):		MDAP/MAIS Code	<b>)</b> :		
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Quantity	134	54	75	•	75
Secondary Distribution	Total Obligation Authority	53.538	25.176	21.046	-	21.046

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 15	P-1 Line Item Number / Title: G07000 / Common Bridge Transporter (CBT) Recap	Item Number / Title [DODIC]: G07000 / Common Bridge Transporter (CBT) Recap

	00			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	<b>Contractor and Location</b>	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
M1977A4 CBT RECAP <sup>(†)</sup>		2015	Oshkosh Corp / Oshkosh	SS / FPIF	TACOM, Warren, MI	Jun 2015	May 2016	22	375.000	Y		
M1977A4 CBT RECAP <sup>(†)</sup>		2016	Oshkosh Corp / Oshkosh	SS / FPIF	TACOM, Warren, MI	Apr 2016	Sep 2016	134	328.960	Υ		
M1977A4 CBT RECAP <sup>(†)</sup>		2017	Oshkosh Corp / Oshkosh	SS / FPIF	TACOM, Warren, MI	Apr 2017	Sep 2017	54	375.000	Y		
M1977A4 CBT RECAP <sup>(†)</sup>		2018	Red River Army Depot  / Texarkana, Texas	WR	TACOM, Warren, MI	Feb 2018	Jun 2018	75	250.000	Y		

<sup>(†)</sup> indicates the presence of a P-21

P-1 Line #126

Exh	nibit	P-21, Pr	oduct	ion Sc	hedu	le: F	/ 201	3 Arm	y														Date	e: Ma	y 201	7				
		riation / 03 / 15	Budg	et Acti	ivity /	Budg	get Sı	ıb Ac	tivity	:	1			<b>Num</b> nmon				ter (C	BT) F	Recap	)		G07		Comi		<b>[DO</b> E Bridge	DIC]: e Trans	sporte	er
			lements in Each)								Fiscal Y	ear 2015											Fiscal Y	ear 2016	1					В
				ACCEPT										Calendar	Year 20	15								Caler	ndar Year	r <b>2016</b>				Ĺ
O F	 	SERVICE	PROC QTY	PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U L	A U G	S E P	A N C E
M197	77A4 C	BT RECAP																			'									
1	201	5 ARMY	22	0	22								-	Α -	-	-	-	-	-	-	-	-	-	-	5	5	3	5	4	0
1	2016	6 ARMY	134	0	134									,									,	Α -	-	-	-	-	10	124
1	201	7 ARMY	54	0	54																									54
2	2018	3 ARMY	75	0	75																									75
,						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U U	A U G	S E P	

Ext	nib	it P	P-21, Pro	oducti	on Sc	hedul	e: FY	201	8 Arm	y														Date	: May	y 2017	7				
			iation / 1 03 / 15	Budge	et Acti	vity /	Budg	et Sı	ıb Ac	tivity:		1 -					<b>Title:</b> je Trai	nsport	er (C	BT) F	Recap	)		G07					DIC]: Trans	sport	er
				ements n Each)							ı	Fiscal Y	ear 2017											Fiscal Ye	ear 2018						В
	_				ACCEPT									C	alendar	Year 20	17								Calen	dar Year	2018				] [
O F C R O #	•	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	N C E
M197	77A	4 CBT	RECAP								'						·					<u> </u>									
1	1 2	2015	ARMY	22	22	0																									
1	1 2	2016	ARMY	134	10	124	10	10	10	10	10	10	10	10	10	10	10	-	10	4											
1	1 2	2017	ARMY	54	0	54							Α -	-	-	-	-	4	4	4	4	4	4	5	5	5	5	5	5		
2	2 2	2018	ARMY	75	0	75																	A -	-	-	-	8	8	8	8	4
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n N	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	n 1	A U G	S E P	

Exhi	ibit I	P-21, Pro	oduct	ion Sc	hedu	le: FY	201	3 Arm	у														Date	e: Ma	y 201	7				
		r <b>iation</b> / 03 / 15	Budge	et Acti	vity /	Budg	et Sı	ıb Ac	tivity:			<b>Line</b> 7000					nsport	ter (C	BT) F	Recap	)		G07		Com		[ <b>DOI</b> Bridge	<b>DIC]:</b> e Tran	sport	er
			lements in Each)								Fiscal Y	ear 2019											Fiscal Y	ear 2020						В
				ACCEPT									(	Calendar	Year 20	19								Caler	ndar Yea	r 2020				Ļ
O F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	N C
M1977	7A4 CB	T RECAP						,		'											· · · · ·									
1	2015	ARMY	22	22	0																									1
1	2016	ARMY	134	134	0																									
1	2017	ARMY	54	54	0																									
2	2018	ARMY	75	32	43	8	8	8	7	6	6																			
	•					0	N O	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J J	A U G	S E P	0 C	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J J	n n	A U G	S E P	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 15	G07000 / Common Bridge Transporter (CBT) Recap	Item Number / Title [DODIC]: G07000 / Common Bridge Transporter (CBT) Recap

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
М	:R					lni	tial			Reo	rder	
R:		MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 Oshkosh Corp - Oshkosh	20	924	2,520	0	9	11	20	0	7	5	12
	2 Red River Army Depot - Texarkana, Texas	6	8	12	0	5	4	9	0	5	4	9

#### Remarks:

Government EOQ 1-8-5 production rate (924/month) accommodates mix of government and commercial production on contractor's integrated production line. Max rate (2520/month) reflects contractor capacity using second and third shifts dedicated to government production. Minimum production is one heavy truck per day.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R68200 / Handheld Standoff Minefield Detection Sys-HSTAMIDS

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	15,545	-	-	181	-	181	181	181	181	181	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	352.151	-	-	5.000	-	5.000	5.000	5.000	5.000	5.000	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	352.151	-	-	5.000	-	5.000	5.000	5.000	5.000	5.000	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	352.151	-	-	5.000	-	5.000	5.000	5.000	5.000	5.000	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	ourposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	22.654	-	-	27.624	-	27.624	27.624	27.624	27.624	27.624	Continuing	Continuing

### **Description:**

The AN/PSS-14 Mine Detecting Set is a lightweight self-contained handheld mine detector system that is operated by a single soldier. It consists of a Ground Penetrating Radar (GPR), improved Metal Detector (MD), and detection algorithms that combine to provide a greatly enhanced capability over the presently fielded metal detector. The AN/PSS-14 provides the Warfighter with the capability to detect improvised explosive devices and the full spectrum of land mines to include metallic and low-metallic mines. This item is Code A, approved for service use. Program is a new start.

Army Acquisition Objective (AAO) is 18,461 sets.

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	81	-	81	81	81	81	81
	Total Obligation Authority	-	-	2.238	-	2.238	2.238	2.238	2.238	2.238
ANG	Quantity	-	-	86	-	86	86	86	86	86
	Total Obligation Authority	-	-	2.376	-	2.376	2.376	2.376	2.376	2.376
AR	Quantity	-	-	14	-	14	14	14	14	14
	Total Obligation Authority	-	-	0.386	-	0.386	0.386	0.386	0.386	0.386
Total:	Quantity	-	-	181	-	181	181	181	181	181
Secondary Distribution	Total Obligation Authority	-	-	5.000	-	5.000	5.000	5.000	5.000	5.000

#### Justification:

FY18 Base procurement dollars in the amount of \$5.000 million procures 181 AN/PSS-14 systems and the support required to field it.

TYPE CLASSIFICATION DATE: November 2003

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	UNCL	ASSIFIED	
Exhibit P-40, Budget Line Item Justification: FY	′ 2018 Army		<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub A 2035A: Other Procurement, Army / BA 03: Other S Engineer (Non-Construction) Equipment		P-1 Line Item Nu R68200 / Handhe	umber / Title: eld Standoff Minefield Detection Sys-HSTAMIDS
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
In accordance with Section 1815 of the FY 2008 National Defe defense missions, domestic emergency responses, and provide the provided of the FY 2008 National Defe defense missions, domestic emergency responses, and provided the provided of the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions, domestic emergency responses, and provided the FY 2008 National Defe defense missions and		is item is necessary for us	se by the active and reserve components of the Armed Forces for homeland

LI R68200 - Handheld Standoff Minefield Detection Sy... Army

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P-1 Line #127

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	155	340	176	121	-	121	222	148	135	69	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442	56.052	42.858	39.164	34.004	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442	56.052	42.858	39.164	34.004	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442	56.052	42.858	39.164	34.004	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	12,284.310	172.594	223.580	268.116	_	268.116	252.486	289.581	290.104	492.812	Continuing	Continuing

### **Description:**

This is an All Types line covering ground vehicle mounted or towed landmine detection, marking and neutralization systems. This Program Element contributes to Area Access (A2) to support unified land operations and improve soldier survivability. This line is used to procure Improvise Explosive Devices (IED) and landmine detection, interrogation, neutralization, protection, Area Access, route clearance and area clearance capabilities. Procurement of improved detection, interrogation, neutralization and protection capabilities for mine, IED and Explosive Hazard threats are needed as technology becomes available. This exhibit contains the following programs:

#### Explosive Hazard Pre-Detonation (EHP)

EHP provides the capability of a Roller System (on the Medium Mine Protected Vehicles (MMPV) Type II), Debris Blower (on the Buffalo Mine Protected Clearance Vehicle), and Wire Neutralization (on the Husky based Vehicle Mounted Mine Detection system). EHP enhances route clearance capabilities while on the move to detect (by encounter), neutralize and survive against a full spectrum of explosive hazard landmines, IEDs, Explosively Formed Penetrator, unexploded ordnance, battlefield munitions and trigger their mechanisms while conducting route clearance operations. The Virtual Clearance Training Suite (VCTS) provides the soldiers with the capability to train on the route clearance vehicles and EHP. The Army Acquisition Objective (AAO) for the Roller System is 336, the Debris Blower is 178, and the Wire Neutralization System (WNS) is 336.

#### Mine Clearing Vehicle (MCV)

The M1271 Mine Clearing Vehicle is a medium, commercially available, blast protected, mechanical flail. The MCV is a manually controlled, self powered vehicle with an adjustable depth flail head designed to clear large areas of anti-tank and anti-personnel land mines. The AAO for MCV is 41.

#### Vehicle Optics Sensor System (VOSS)

VOSS provides a telescoping, gyro-stabilized, high resolution, triple sensor (day camera, Image Intensify Night Vision Sensor and an Infrared Sensor) surveillance system to optically detect from standoff distances, explosive hazards (Improvised Explosive Device (IEDs) and landmines), and their trigger sources. VOSS is mounted on MMPV located within Route Clearance Platoons and Explosive Ordinance Disposal (EOD) Companies. PM Ground Sensors is pursuing an acquisition approach which harvests Quick Reaction Capability (QRC) procured systems for refresh into the Program of Record (POR). The refresh effort will be conducted at Tobyhanna Army Depot.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	264	149	77	-	77	137	76	48	20
	Total Obligation Authority	47.842	35.156	15.938	-	15.938	34.451	28.894	16.860	15.450
ANG	Quantity	-	7	23	-	23	40	36	44	24
	Total Obligation Authority	-	3.000	9.579	-	9.579	12.655	7.517	10.847	9.277
AR	Quantity	76	20	21	-	21	45	36	43	25
	Total Obligation Authority	10.840	1.194	6.925	-	6.925	8.946	6.447	11.457	9.277
Total:	Quantity	340	176	121	-	121	222	148	135	69
Secondary Distribution	Total Obligation Authority	58.682	39.350	32.442	-	32.442	56.052	42.858	39.164	34.004

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	R68102 / GRND STANDOFF MINE DETECTN SYSM (GSTAMIDS)BLK 1	P-5a			155 / 1,904.068	340 / 58.682	176 / 39.350	121 / 32.442	- / -	121 / 32.442
P-40	Total Gross/Weapon System Cost				155 / 1,904.068	340 / 58.682	176 / 39.350	121 / 32.442	- 1 -	121 / 32.442

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

Total FY2018 Base procurement dollars in this funding line are \$32.442 million procures the following:

FY2018 Base procurement dollars in the amount of \$20.023 million will support the procurement, logistics development, and fielding of EHP capabilities onto the Route Clearance vehicles. EHP Debris Blower funding supports fielding, special tools and test equipment (STTE), and spares. The Wire Neutralization Systems (WNS) funding supports production and fielding of 35 systems, which includes development of desktop maintenance training, STTE, spares, and manual publication. EHP Roller funding supports production and fielding of 40 systems which includes STTE, spares, and manual publication.

FY2018 Base procurement dollars in the amount of \$12.419 million supports the VOSS refresh and upgrade effort at Tobyhanna Army Depot and continued Total Package Fielding to Explosive Ordinance Disposal (EOD) and Engineers and to integrate geo-location capability into previously fielded VOSS.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-5, Cost Analysis: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 20

P-1 Line Item Number / Title:

R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

Item Number / Title [DODIC]: R68102 / GRND STANDOFF MINE DETECTN SYSM (GSTAMIDS)BLK 1

ID Code (A=Service Ready, B=Not Service Ready):

	MD	AP/	MAI	S C	ode:
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1D Gode (A-Service Ready, B-Not Service Ready) .		1415	Al MiAlo Gode.			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	155	340	176	121	-	121
Gross/Weapon System Cost (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,904.068	58.682	39.350	32.442	-	32.442
(The following Resource Summary rows are for information	tional purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	12,284.310	172.594	223.580	268.116	-	268.116
Gross/Weapon System Unit Cost (\$ in Thousands)	12,284.310	172.594	223.580	268.116	-	

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	5		FY 2016			FY 2017		FY	2018 Bas	e	FY	/ 2018 OC	0	FY	2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Hardware Cost																		
Recurring Cost																		
EHP Program Mgt	-	-	-	-	-	-	-	-	2.000	-	-	2.000	-	-	-	-	-	2.000
EHP VCTS (ECPs)	-	-	-	-	-	1.888	-	-	1.397	-	-	-	-	-	-	-	-	-
EHP Manual Publication	-	-	-	-	-	0.736	-	-	-	-	-	1.188	-	-	-	-	-	1.188
EHP Log Development	-	-	-	-	-	9.056	-	-	2.000	-	-	-	-	-	-	- 1	-	-
Roller System Production <sup>(†)</sup>	-	-	-	-	-	-	220.000	47	10.340	232.500	40	9.300	-	-	-	232.500	40	9.300
Roller System STTE	-	-	-	-	-	-	-	-	0.035	-	-	0.025	-	-	-	-	-	0.025
Roller System Spares	-	-	-	-	-	-	-	-	0.950	-	-	1.810	-	-	-	-	-	1.810
Debris Blower Production <sup>(†)</sup>	-	-	-	17.615	156	2.748	53.000	60	3.180	-	-	-	-	-	-	-	-	-
Debris Blower Buffalo A-Kit	-	-	-	20.254	240	4.861	20.000	60	1.200	-	-	-	-	-	-	-	-	-
Debris Blower STTE	-	-	-	-	-	0.040	-	-	0.100	-	-	0.050	-	-	-	- 1	-	0.050
Debris Blower Spares	-	-	-	-	-	0.255	-	-	0.435	-	-	0.240	-	-	-	-	-	0.240
Wire Neutralization System Production <sup>(†)</sup>	-	-	-	118.000	40	4.720	118.000	48	5.664	133.571	35	4.675	-	-	-	133.571	35	4.675
Wire Neutralization System STTE	-	-	-	-	-	-	-	-	0.040	-	-	0.020	-	-	-	-	-	0.02
Wire Neutralization System Spares	-	-	-	-	-	-	-	-	0.741	-	-	0.499	-	-	-	-	-	0.499

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Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title:

Date: May 2017

**Appropriation / Budget Activity / Budget Sub Activity:** 2035A / 03 / 20

R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

Item Number / Title [DODIC]: R68102 / GRND STANDOFF MINE DETECTN SYSM (GSTAMIDS)BLK 1

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2016			FY 2017		F	/ 2018 Ba	se	F	<b>/ 2018 OC</b>	0	FY	Y 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
WiNS - Development of Sustainment Training (Phase II - Maint) IDesktop Trainer - IMI)	-	-	-	-	-	-	-	-	-	-	-	0.216	-	-	-	-	-	0.2
EHP_Fielding support	-	-	-	-	-	2.159	-	-	2.375	-	-	-	-	-	-	-	-	
MCV Training Simulator (VCTS) and Labor	-	-	-	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	-
VOSS HW Refresh Effort	-	-	-	105.505	184	19.413	134.952	21	2.834	85.500	36	3.078	-	-	-	85.500	36	3.0
Engineering Support	-	-	-	-	-	1.029	-	-	0.836	-	-	1.074	-	-	-	-	-	1.0
Project Management Office	-	-	-	-	-	1.913	-	-	0.671	-	-	1.129	-	-	-	-	-	1.1
Logistics Support	-	-	-	-	-	0.704	-	-	0.296	-	-	0.238	-	-	-	-	-	0.2
Tobyhanna Refresh Labor	-	-	-	-	-	1.691	-	-	1.068	-	-	1.088	-	-	-	-	-	1.0
Fielding	-	-	-	-	-	2.603	-	-	1.806	-	-	1.833	-	-	-	-	-	1.8
Initial Spares	-	-	-	-	-	2.389	-	-	0.589	-	-	0.600	-	-	-	-	-	0.6
TYAD Fabrication of Cables & Brushguard	-	-	-	-	-	1.977	-	-	0.793	-	-	0.129	-	-	-	-	-	0.1
Prior Year Funding	12,284.310	155	1,904.068	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Geo-location Integration	-	-	-	-	-	-	-	-	-	-	-	3.250	-	-	-	-	-	3.2
Subtotal: Recurring Cost	-	-	1,904.068	-	-	58.682	-	-	39.350	-	-	32.442	-	-	-	-	-	32.4
ubtotal: Hardware Cost	-	-	1,904.068	-	-	58.682	-	-	39.350	-		32.442	-		-	-	-	32.4
Gross/Weapon System Cost	12,284.310	155	1,904.068	172.594	340	58.682	223.580	176	39.350	268.116	121	32.442	-	-	-	268.116	121	32.44

	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	264	149	77	-	77
	Total Obligation Authority	47.842	35.156	15.938	-	15.938
ANG	Quantity	-	7	23	=	23
	Total Obligation Authority	-	3.000	9.579	-	9.579
AR	Quantity	76	20	21	-	21
	Total Obligation Authority	10.840	1.194	6.925	-	6.925

LI R68400 - Grnd Standoff Mine Detectn Sysm (GSTAMID... Army

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P-1 Line #128

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 20	P-1 Line Item Number / Title: R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)	Item Number / Title [DODIC]: R68102 / GRND STANDOFF MINE DETECTN SYSM (GSTAMIDS)BLK 1

ID Code (A=Service Ready, B=Not Service Rea	ty):		MDAP/MAIS Code	<b>)</b> :		
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Total:	Quantity	340	176	121	<u>-</u>	121
Secondary Distribution	Total Obligation Authority	58.682	39.350	32.442	-	32.442

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 20

P-1 Line Item Number / Title:
R68400 / Grnd Standoff Mine Detectn Sysm (GSTAMIDS)

R68102 / GRND STANDOFF MINE
DETECTN SYSM (GSTAMIDS)BLK 1

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Roller System Production		2017	TBS - Roller / TBS	TBD	TACOM, Warren, MI	Oct 2017	Jan 2018	47	220.000	Y		
Roller System Production		2018	TBS - Roller / TBS	TBD	TACOM, Warren, MI	Mar 2018	Apr 2018	40	232.500	Y		
Debris Blower Production		2016	Buffalo Turbine / Springville, NY	SS / FFP	TACOM, Warren, MI	Sep 2016	May 2017	156	17.620	Y		
Debris Blower Production		2017	Buffalo Turbine / Springville, NY	SS / FFP	TACOM, Warren, MI	Apr 2018	May 2018	60	53.000	Y		
Wire Neutralization System Production		2016	Anniston Army Depot / Anniston, AL	Reqn	TACOM, Warren, MI	May 2017	Aug 2017	40	118.000			
Wire Neutralization System Production		2017	TBS - WNS / TBS	TBD	TACOM, Warren, MI	Sep 2017	Dec 2017	25	106.500	Y		
Wire Neutralization System Production		2017	Anniston Army Depot / Anniston, AL	Reqn	TACOM, Warren, MI	May 2017	Aug 2017	23	106.500			
Wire Neutralization System Production		2018	TBS - WNS / TBS	TBD	TACOM, Warren, MI	Jul 2018	Aug 2018	35	133.570			

#### Remarks:

FY2018 Base procurement dollars in the amount of \$20.023 million will support the procurement, logistics development, and fielding of EHP capabilities onto the Route Clearance vehicles. EHP Debris Blower funding supports fielding, special tools and test equipment (STTE), and spares. The Wire Neutralization Systems (WNS) funding supports production and fielding of 35 systems, which includes development of desktop maintenance training, STTE, spares, and manual publication. EHP Roller funding supports production and fielding of 40 systems which includes STTE, spares, and manual publication.

FY2018 Base procurement dollars in the amount of \$12.419 million supports the VOSS refresh and upgrade effort at Tobyhanna Army Depot and continued Total Package Fielding to Explosive Ordinance Disposal (EOD) and Engineers.

VOSS - The VOSS program is conducting refresh and repair of Quick Reaction Capability (QRC) material and components at the Tobyhanna Army Depot, there is no contract award or delivery schedule.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R68260 / AREA MINE DETECTION SYSTEM (AMDS)

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: N/A

Other Related Program Elements: 0654808A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	16	16	-	16	51	72	18	-	-	173
Gross/Weapon System Cost (\$ in Millions)	-	-	10.500	10.571	-	10.571	20.137	25.259	10.984	-	-	77.451
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	10.500	10.571	-	10.571	20.137	25.259	10.984	-	-	77.451
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	10.500	10.571	-	10.571	20.137	25.259	10.984	-	-	77.451
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	656.250	660.688	-	660.688	394.843	350.819	610.222	-	-	447.694

### **Description:**

The Standoff Robotic Explosive Hazard Detection System (SREHD), formerly known as the Autonomous Mine Detection System (AMDS), provides increased survivability through mine and explosive hazards stand-off detection, marking and neutralization capability for the dismounted soldier. It provides area access and freedom of movement for the Commander. SREHD consists of payload modules to be mounted on man-portable unmanned ground vehicles. The payloads, consisting of detection, marking, and neutralization payloads, are for surface laid and buried threats to include mines and explosive hazards. This capability allows a soldier to remain in a protective posture while detecting and neutralizing a wide variety of hybrid and conventional explosive threats.

SREHD will transition from PE 0654808A, Project 415, Landmine Warfare/Barrier - Eng Dev, Engineering Manufacturing Development (EMD) phase to Low Rate Initial Production (LRIP) in FY 2017 as a new start. The Army Acquisition Objective (AAO) for SREHD is 173.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	16	8	-	8	34	30	10	-
	Total Obligation Authority	-	10.500	5.009	-	5.009	13.424	10.525	6.102	-
ANG	Quantity	-	-	4	-	4	9	22	4	-
	Total Obligation Authority	-	-	2.781	-	2.781	3.554	7.718	2.441	-
AR	Quantity	-	-	4	-	4	8	20	4	-
	Total Obligation Authority	-	-	2.781	-	2.781	3.159	7.016	2.441	-
Total: Secondary Distribution	Quantity	-	16	16	-	16	51	72	18	-
	Total Obligation Authority	-	10.500	10.571	-	10.571	20.137	25.259	10.984	-

Justification:

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Exhibit P-40, Budget Line Item Justification: F	Y 2018 Army		<b>Date</b> : May 2017					
Appropriation / Budget Activity / Budget Sub 2035A: Other Procurement, Army / BA 03: Other Engineer (Non-Construction) Equipment		P-1 Line Item Number / Title: R68260 / AREA MINE DETECTION SYSTEM (AMDS)						
D Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code E	Items: N/A	Other Related Program Elements: 0654808A					
ine Item MDAP/MAIS Code: N/A								
FY 2018 Base procurement dollars in the amount of \$10.571 Detection System (AMDS).	I million supports procurement of 16 Stand	loff Robotic Explosive Ha	zard Detection Systems (SREHDs), formerly known as the Autonomous Mine					
In accordance with Section 1815 of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions, domestic emergency responses, and provide the section of the FY 2008 National Dedefense missions and provide the section of the FY 2008 National Dedefense missions and provide the section of the FY 2008 National Dedefense missions and provide the section of the FY 2008 National Dedefense mission of the FY 2008 National Dedefense m	efense Authorization Act (P.L. 110-181), the viding military support to civil authorities.	is item is necessary for us	se by the active and reserve components of the Armed Forces for homeland					

LI R68260 - AREA MINE DETECTION SYSTEM (AMDS) Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R64001 / HUSKY MOUNTED DETECTION SYSTEM (HMDS)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	84	40	-	19	-	19	37	94	175	94	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	18.545	13.565	0.274	21.695	-	21.695	41.423	50.646	81.219	46.019	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	18.545	13.565	0.274	21.695	-	21.695	41.423	50.646	81.219	46.019	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	18.545	13.565	0.274	21.695	-	21.695	41.423	50.646	81.219	46.019	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request:	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	220.774	339.125	-	1,141.842	-	1,141.842	1,119.541	538.787	464.109	489.564	Continuing	Continuing

### **Description:**

This line is used to procure Improvised Explosive Devices (IED) and landmine detection, interrogation, neutralization, protection, route clearance and area clearance capabilities required for future battlefields. Procurements of improved detection, neutralization, and protection capabilities for mine and IED threats are expected as technology becomes available.

The Husky Mounted Detection System (HMDS) is a counter-explosive device capability that provides standoff detection and marking of metallic encased caches and metallic and low-metallic antitank landmines, unexploded ordnance, trigger mechanisms, and improvised explosive devices (IEDs) in support of route and area-clearance operations. HMDS is a mission equipment package, mounted on the Husky route clearance vehicle. The program was restructured in Sep 2016 to align with emerging shallow buried Wire Detection (WD) capabilities integrated onto the HMDS Increment A1 configuration (includes Ground Penetrating Radar (GPR)). These changes are necessary to adapt to changing IED threats. WD technology will be fully integrated through Engineering Change Proposals (ECPs) beginning in FY18. Future capabilities may include detection of deep buried IEDs and caches, and semi-autonomous control of the Husky vehicle and HMDS from inside a follow-on vehicle.

Second	lary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	20	-	19	-	19	37	72	59	32
	Total Obligation Authority	6.783	0.274	21.695	-	21.695	41.423	31.878	27.461	15.660
ANG	Quantity	10	-	-	-	-	-	11	59	31
	Total Obligation Authority	3.391	-	-	-	-	-	9.384	27.461	15.180
AR	Quantity	10	-	-	-	-	-	11	57	31
	Total Obligation Authority	3.391	-	-	-	-	-	9.384	26.298	15.180
Total: Secondary Distribution	Quantity	40	-	19	-	19	37	94	175	94
	Total Obligation Authority	13.565	0.274	21.695	-	21.695	41.423	50.646	81.220	46.020

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R64001 / HUSKY MOUNTED DETECTION SYSTEM (HMDS)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	R64002 / HMDS - GROUND PENETRATING RADAR	P-5a			84 / 18.545	- / -	- / 0.274	19 / 21.695	- / -	19 / 21.695
P-5	R64005 / HMDS - Common Operating Group (COG)				- / -	40 / 13.565	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				84 / 18.545	40 / 13.565	- / 0.274	19 / 21.695	- 1 -	19 / 21.695

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY2018 Base procurement dollars in the amount of \$21.695 million procures 19 Husky Mounted Detection System (HMDS) Ground Penetrating Radars (GPRs), New Equipment Training (NET), Contractor Logistic Support (CLS), and Program Support. In addition procures spares for the fielding of RESET systems.

In accordance with Section 1815 of the FY2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2035A / 03 / 20 R64001 / HUSKY MOUNTED DETECTION SYSTEM (HMDS) R64002 / HMDS - GROUND PENETRATING RADAR

ID Code (A=Service Ready, B=Not Service Ready):		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	84	-	-	19	-	19
Gross/Weapon System Cost (\$ in Millions)	18.545	-	0.274	21.695	-	21.695
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	18.545	-	0.274	21.695	-	21.695
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	18.545	-	0.274	21.695	-	21.695
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reque	sts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	220.774	-	-	1,141.842	-	1,141.842

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	5		FY 2016			FY 2017		FY	2018 Bas	se	FY	2018 OC	0	F۱	/ 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)												
Hardware Cost	'			'			<u>'</u>			'	'					'	'	
Recurring Cost																		
HMDS GPR <sup>(†)</sup>	-	-	18.545	-	-	-	-	-	-	213.316	19	4.053	-	-	-	213.316	19	4.05
Subtotal: Recurring Cost	-	-	18.545	-	-	-	-	-	-	-	-	4.053	-	-	-	-	-	4.05
Subtotal: Hardware Cost	-	-	18.545	-	-	-	-	-	-	-	-	4.053	-	-	-	-	-	4.05
Package Fielding Cost																		
Recurring Cost	-																	
Initial Spares/Repair Parts	-	-	-	-	-	-	-	-	-	-	-	2.828	-	-	-	-	-	2.82
New Equipment Training	-	-	-	-	-	-	-	-	-	-	-	3.029	-	-	-	-	-	3.02
Con/Integrated Logistics Support	-	-	-	-	-	-	-	-	-	-	-	5.301	-	-	-	-	-	5.30
Fielding initial support	-	-	-	-	-	-	-	-	-	-	-	4.543	-	-	-	-	-	4.54
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	15.701	-	-	-	-	-	15.70
Subtotal: Package Fielding Cost	-	-	-	-	-	-	-	-	-	-	-	15.701	-	-	-	-	-	15.70
Support - Program Managem	ent Cost			'		,	· ·			,	·							
Government Management	-	-	-	-	-	-	-	-	0.274	-	-	1.941	-	-	-	-	-	1.94
Subtotal: Support - Program Management Cost	-	-	-	-	-	-	-	-	0.274	-	-	1.941	-	-	-	-	-	1.94

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Exhibit P-5, Cost Analysis: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

2035A / 03 / 20

R64001 / HUSKY MOUNTED DETECTION SYSTEM (HMDS)

R64002 / HMDS - GROUND PENETRATING RADAR

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

INOIG. Subtotals of Totals II	II UIIS EXHIDIU	1 -5 may no	it be exact o	i Suili Exacti	y due to rou	nung.												
	F	Prior Years	3	FY 2016				FY 2017		F	1 2018 Bas	se	F	Y 2018 OC	0	FY	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Gross/Weapon System	, ,	` ′		, , ,	(Eacri)	(\$ IVI)	(\$ K)	(Eacii)	, , ,	, , ,	, ,	,,,,	, , ,	(Eacii)	(\$ 101)	, ,	, ,	, , ,
Cost	220.774	84	18.545	-	-	-	-	-	0.274	1,141.842	19	21.695	-	-	-	1,141.842	19	21.695

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	-	19	-	19
	Total Obligation Authority	-	0.274	21.695	-	21.695
Total:	Quantity	-	-	19	-	19
Secondary Distribution	Total Obligation Authority	-	0.274	21.695	-	21.695

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
		Item Number / Title [DODIC]: R64002 / HMDS - GROUND PENETRATING RADAR

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
HMDS GPR		2018	Chemring Sensors & Eletronic / Charlotte, NC	SS / IDIQ	Charlotte, NC	May 2018	Oct 2018	19	213.320			

Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: N	May 2017			
<b>Appropriation / B</b> 2035A / 03 / 20					vity:	1		n <b>Numbe</b> SKY MO		DETECT	ION SYS	STEM (I	HMDS)	Item N	umber / 1 5 / HMDS			ating
ID Code (A=Service Read	ly, B=Not Servi	ce Ready):							M	DAP/MAIS	Code:		l		· · ·			
	Resource		ary		F	Prior Yea	ars	FY 20	016	FY	2017	FY	2018 Bas	se	FY 2018 (	осо	FY 2018	3 Tota
Procurement Quantity (Uni							-		40		-			-		-		-
Gross/Weapon System Co		s)					-		13.565					-		-		
Less PY Advance Procure							-		-		-			-		-		
Net Procurement (P-1) (\$ i	<u> </u>						_		13.565					_		-		
Plus CY Advance Procure		ions)					_							_		_		
Total Obligation Authorit	•						-		13.565		-			-		-		
	ne following F	Resource St	ımmary row	s are for infor	rmational pu	urposes only	. The corres	ponding bud	get request	s are docume	ented elsew	here.)						
Initial Spares (\$ in Millions)							-	·	-		_			-		-		
Gross/Weapon System Ur	nit Cost (\$ in 7	housands)					-		339.125		_			-		-		
										I						<u> </u>		
Note: Subtotals or Totals i	n this Exhibit	P-5 may no	t be exact o	r sum exactly	due to rou	nding.				-								
	P	rior Years	3		FY 2016			FY 2017		FY	2018 Bas	e	F'	Y 2018 C	СО	F	Y 2018 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cost
Hardware Cost	(4.9	(2001)	(4)	(0.9	(200.1)	(4)	(0.9	(200.1)	(\$)	(4.9	(200.1)	(\$)	(4.9	(2001)	(\$)	(0.9	(200.1)	(\$)
Recurring Cost																		
HMDS Common Operating Group	-	-	-	135.975	40	5.439	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	-	-	-	5.439	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Hardware Cost	-	-	-	-	-	5.439	-	-	-	-	-	-	-	-	-	-	-	
Support Cost													,					
Program Support	-	-	-	-	-	2.176	-	-	-	-	-	-	-	-		-	-	
Production Support	-	-	-	-	-	2.140	-	-	-	-	-	-	-	-		-	-	
Technical Data Engineering Changes	-	-	-	-	-	1.210 0.140	-	-	-	-	-	-	-	-		-	-	
New Equipment Training	-	-		-	-	0.790	-	-	-	-	-		-	-		-	-	+
Initial Spares/Repair Parts	-	-	-	-	-	1.530	-	-	-	-	-	-	-	-	_	-	-	
Initial Support Equipment	-	-	-	-	-	0.140	-	-	-	-	-	-	-	-	-	-	-	<b>†</b>
Subtotal: Support Cost	-	-	-	-	-	8.126	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Cost	-	-	-	339.125	40	13.565	-	-	-	-	-	-	-	-	-	-	-	
	0	ndo P'	náulh. Al a				FV	2046		EV 2047		FY 2			FY 2018		FY 20	
A	2600		stribution				FY	2016	00	FY 2017		Ва			осо		Tota	<u> </u>
Army		Qua	riuty						20		-		-			-		

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 20	P-1 Line Item Number / Title: R64001 / HUSKY MOUNTED DETECTION SYSTEM (HMDS)	Item Number / Title [DODIC]: R64005 / HMDS - Common Operating Group (COG)

ID Code (A=Service Ready, B=Not	Service Ready):		MDAP/MAIS Code:			
	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Total Obligation Authority	6.783	-	-	-	-
ANG	Quantity	10	-	-	-	-
	Total Obligation Authority	3.391	-	-	-	-
AR	Quantity	10	-	-	-	-
	Total Obligation Authority	3.391	-	-	-	-
Total:	Quantity	40	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	13.565	-	-	-	-

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

M80400 / Robotic Combat Support System (RCSS)

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): B

construction) Equipmen

Program Elements for Code B Items: 0606808A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	4	16	14	-	14	16	24	12	26	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	78.474	2.136	2.951	4.516	-	4.516	5.124	12.467	10.013	18.828	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	78.474	2.136	2.951	4.516	-	4.516	5.124	12.467	10.013	18.828	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	78.474	2.136	2.951	4.516	-	4.516	5.124	12.467	10.013	18.828	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	534.000	184.438	322.571	-	322.571	320.250	519.458	834.417	724.154	Continuing	Continuing

### **Description:**

This Robotic Combat Support System (RCSS) Budget line procures the M160 Mine Flail and the Route Clearance and Interrogation System (RCIS) Type I.

The M160 is a 6.1-ton tracked, combat engineer vehicle designed for teleoperation by soldiers from either mounted or dismounted positions to perform area clearance of antipersonnel mine-sown areas. The revised Army Acquisition Objective (AAO) is 72. The M160 detonates or destroys anti-personnel mines in a 68-inch wide path through the action of a rotating chain and hammer flail system. The M160 provides standoff and increased protection for engineer units conducting route and area clearance missions. It fills the Light Flail mission in the Area Clearance Family of Systems. The M160 is a program of record, developed from a modified Commercial Off The Shelf (COTS) system.

The Route Clearance and Interrogation System (RCIS) Type I and Type II will enable an operator to semi-autonomously control (tele-operate) a High Mobility Engineering Excavator (HMEE) and an RG-31, Medium Mine Protected Vehicle. The RCIS Type I enables the Soldier to semi-autonomously control a HMEE, enabling operators to interrogate, classify and excavate deep buried explosive hazards, Improvised Explosive Devices (IEDs), and caches in a wide range of road surfaces and soil conditions from a standoff distance for Soldier protection. The RCIS Type I AAO is 266. The RCIS Type II enables Soldiers to semi-autonomously control the RG-31 and its route clearance payloads from another Route Clearance vehicle. The RCIS Type II AAO is 350. RCIS procurement is scheduled to start in FY20.

#### Justification:

FY 2018 procurement dollars in the amount of \$4.516 million supports the Total Package Fielding of M160s to Army IBCTs, National Guard and Reserve Area Clearance Platoons. Total Package Fielding includes new equipment training with an increased PM fielding staff, and equipment transportation. FY 2018 procurement dollars will also provide Contractor Logistics Support (CLS) for all maintenance actions for fielded M160's. Technical manual updates incorporating Engineering Change Proposals will be made using the latest Mil-Standard, thereby making the M160 organically supported anticipated in FY20.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities..

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

W12001 / EOD Robotics Systems Recapitalization

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	145	38	18	61	-	61	87	88	97	98	-	632
Gross/Weapon System Cost (\$ in Millions)	7.909	6.960	1.949	10.073	-	10.073	14.383	14.465	15.975	30.065	-	101.779
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	7.909	6.960	1.949	10.073	-	10.073	14.383	14.465	15.975	30.065	-	101.779
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	7.909	6.960	1.949	10.073	-	10.073	14.383	14.465	15.975	30.065	-	101.779
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	54.545	183.158	108.278	165.131	-	165.131	165.322	164.375	164.691	306.786	-	161.043

### Description:

Army Explosive Ordnance Disposal (EOD) Robotics Recapitalization Program encompasses the Man Transportable Robotic System (MTRS) MK I / MK II family of medium-sized robots. The robot provides EOD teams with a peacetime/wartime remote standoff capability to perform reconnaissance, access sites, conduct render-safe procedures, "pick-up and carry away" hazardous material, and perform disposal tasks in a high-risk and/or contaminated environment. Recapitalization is intended to upgrade the MTRS MK II platform to address obsolescence and wear issues. These robots have not been reset subsequent to Operation Enduring Freedom. They will provide capability through FY 2026 until the program of record Man Transportable Robotic Systems Increment II (MTRS Inc II) is fielded.

This SSN transitioned from Program Executive Office, Ammunition (PEO AMMO), Project Manager Close Combat Systems (PM CCS) to Program Executive Office, Combat Support and Combat Service Support (PEO CS&CSS), Robot Logistics Support Center (RLSC), in FY 2016, per Army Acquisition Executive (AAE) memorandum dated 28 July 2014.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	38	18	61	-	61	87	88	97	98
	Total Obligation Authority	6.960	1.949	10.073	-	10.073	14.383	14.465	15.975	30.065
Total:	Quantity	38	18	61	-	61	87	88	97	98
Secondary Distribution	Total Obligation Authority	6.960	1.949	10.073	-	10.073	14.383	14.465	15.975	30.065

#### Justification:

FY 2018 Base procurement dollars in the amount of \$10.073 million supports the recapitalization of 61 Man Transportable Robotic System (MTRS) MK II platforms. The currently fielded MTRS MK II platforms have obsolescence issues due to software and electrical unit upgrades. Recapitalization of the MTRS MKII platforms will reduce sustainment costs and eliminate dependency on the original manufacturer. Completion of the program will extend the life of the system through the next decade until this bridge capability is replaced by the program of record MTRS Inc II in FY 2026. The Army Acquisition Objective (AAO) for MTRS MK II robots is 587.

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Exhibit P-40, Budget Line Item Justification: FY 20	18 Army		<b>Date</b> : May 2017					
Appropriation / Budget Activity / Budget Sub Active 2035A: Other Procurement, Army / BA 03: Other Suppression (Non-Construction) Equipment		P-1 Line Item Number / Title: W12001 / EOD Robotics Systems Recapitalization						
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A					
Line Item MDAP/MAIS Code: N/A								
In accordance with Section 1815 of the FY 2008 National Defense defense missions, domestic emergency responses, and providing		is item is necessary for us	se by the active and reserve components of the Armed Forces for homeland					

LI W12001 - EOD Robotics Systems Recapitalization Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

W12002 / Robotics and Applique Systems

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): B

Program Elements for Code B Items: 0604808A

Other Related Program Elements: 0605053A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	OCO	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	28	200	-	200	814	1,112	1,387	1,446	-	4,987
Gross/Weapon System Cost (\$ in Millions)	-	-	5.471	3.000	-	3.000	21.724	52.057	107.888	127.152	-	317.292
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	5.471	3.000	-	3.000	21.724	52.057	107.888	127.152	-	317.292
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	5.471	3.000	-	3.000	21.724	52.057	107.888	127.152	-	317.292
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	195.393	15.000	-	15.000	26.688	46.814	77.785	87.934	-	63.624

### **Description:**

The Soldier Borne Sensor (SBS) is a situational awareness system, providing the squad with an organic "quick look" capability for real-time video feeds of larger, complex, and restrictive environments. SBS reduces exposure to potential threats and enhances freedom of maneuver by providing actionable information to support decisions at the lowest echelon. Approved Acquisition Objective (AAO) of 7,175.

The Man-Transportable Robotic System (MTRS) Inc II is a modular system providing a common chassis with a multitude of standoff capabilities through different payloads for the Army reducing overall procurement, training, and sustainment costs. These capabilities include detect and confirm presence, identify disposition, and counter hazards by providing a platform for payloads in support of current and future mission requirements. Additionally, MTRS Inc II will support current and future payload missions for the engineer's route clearance platoons, Special Operational Forces (SOF) detachments, Explosive Ordnance Disposal (EOD), and Chemical Biological Radiological and Nuclear (CBRN) Units. MTRS Inc II will provide a medium sized robot configuration compatible with legacy robotic systems across all medium-sized robot users. Approved Acquisition Objective (AAO) of 1,210.

RDTE funding for the Man-Transportable Robotic System (MTRS) Inc II is on PE 0605053A Ground Robotics, Project FB2 Man Transportable Robotic System (MTRS) Inc II.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	28	200	-	200	814	1,112	1,327	1,393
	Total Obligation Authority	-	5.471	3.000	-	3.000	21.724	52.057	92.696	113.683
ANG	Quantity	-	-	-	-	-	-	-	43	35
	Total Obligation Authority	-	-	-	-	-	-	-	10.782	8.816
AR	Quantity	-	-	-	-	-	-	-	17	18
	Total Obligation Authority	-	-	-	-	-	-	-	4.410	4.653
Total:	Quantity	-	28	200	-	200	814	1,112	1,387	1,446
Secondary Distribution	Total Obligation Authority	-	5.471	3.000	-	3.000	21.724	52.057	107.888	127.152

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Exhibit P-40, Budget Line Item Justification:	FY 2018 Army		<b>Date:</b> May 2017	
Appropriation / Budget Activity / Budget Sub 2035A: Other Procurement, Army / BA 03: Othe Engineer (Non-Construction) Equipment		P-1 Line Item Num W12002 / Robotics	and Applique Systems	
ID Code (A=Service Ready, B=Not Service Ready): B	Program Elements for Code B	Items: 0604808A	Other Related Program Elements: 0605053A	
Line Item MDAP/MAIS Code: N/A		_		
Justification: FY 2018 Base procurement dollars, in the amount of \$3.000				
In accordance with Section 1815 of the FY 2008 National D defense missions, domestic emergency responses, and pro	Defense Authorization Act (P.L 110-151), this	s item is necessary for use b	by the active and reserve components of the Armed Forces for homeland	
detense missions, domestic emergency responses, and pro	oviding military support to civil authorities.			

LI W12002 - Robotics and Applique Systems Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

MA9200 / Explosive Ordnance Disposal Egpmt (EOD EQPMT)

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	131	359	640	-	-	-	111	43	56	-	-	1,340
Gross/Weapon System Cost (\$ in Millions)	557.674	17.143	5.570	-	-	-	9.500	4.000	5.000	-	-	598.887
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	557.674	17.143	5.570	-	-	-	9.500	4.000	5.000	-	-	598.887
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	557.674	17.143	5.570	-	-	-	9.500	4.000	5.000	-	-	598.887
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	4,257.053	47.752	8.703	-	-	-	85.586	93.023	89.286	-	-	446.931

### **Description:**

The Explosive Ordnance Disposal (EOD) equipment provides the capability to examine, identify, and defuse ordnance effectively and safely for Homeland Defense and Force Protection throughout the world. This equipment enables EOD soldiers to rapidly and safely render safe Unexploded Ordnance (UXO) and Improvised Explosive Devices (IEDs) that constitute a hazard to friendly operations, installations, personnel, or material, and is also used for dismounted operations. EOD equipment will be fielded throughout the active Army and National Guard units.

Future Radiographic System (FRS) -- The FRS, Radiographic Imaging System EOD (RISEOD), AN/GSQ-275, provides the EOD soldier with the integrated capability to obtain real-time digital x-ray images of fuzes and Improvised Explosive Devices (IEDs). The Army Acquisition Objective (AAO) for FRS is 627.

Decision Support System (DSS) -- Common control station hardware and software for all EOD systems including FRS. The Army Acquisition Objective (AAO) for DSS is 640.

	•			FY 2018	FY 2018	FY 2018				
Secondary	/ Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	262	486	-	-	-	76	33	46	-
	Total Obligation Authority	12.419	3.577	-	-	-	6.500	3.000	4.000	-
ANG	Quantity	97	154	-	-	-	35	10	10	-
	Total Obligation Authority	4.724	1.993	-	-	-	3.000	1.000	1.000	-
Total:	Quantity	359	640	-	-	-	111	43	56	-
Secondary Distribution	Total Obligation Authority	17.143	5.570	-	-	-	9.500	4.000	5.000	-

Justification:

No FY 2018 PB Request.

	UNCL	ASSIFIED						
Exhibit P-40, Budget Line Item Justification: F	Y 2018 Army		<b>Date</b> : May 2017					
Appropriation / Budget Activity / Budget Sub 2035A: Other Procurement, Army / BA 03: Other Engineer (Non-Construction) Equipment		P-1 Line Item Number / Title:  MA9200 / Explosive Ordnance Disposal Eqpmt (EOD EQPMT)						
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A					
Line Item MDAP/MAIS Code: N/A								
		is item is necessary for us	se by the active and reserve components of the Armed Forces for homeland					

LI MA9200 - Explosive Ordnance Disposal Eqpmt (EOD E... Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

M60001 / Remote Demolition Systems

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	18	142	102	135	-	135	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	13.580	8.284	6.238	5.847	-	5.847	-	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	=	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	13.580	8.284	6.238	5.847	-	5.847	-	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	13.580	8.284	6.238	5.847	-	5.847	-	-	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	ed elsewhere.)	•			1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	754.444	58.338	61.157	43.311	-	43.311	-	-	-	-	Continuing	Continuing

### **Description:**

Radio Frequency Remote Activation Munition System (RF RAMS)(MK152) M60002 is a radio-controlled wireless firing device that provides the capability to wirelessly control the initiation and the detonation of demolition charges or the remote operation of other items such as laser markers and radio functioning munitions. The basic components of the RF RAMS complete set are (1) MK26 Transmitter with two antennas, (6) MK16 Receivers with antennas and (1) M6 Battery Retainer which provides additional power for the transmitter. RF RAMS has a nominal range of 2 kilometers line-of-sight (LOS) and 5 kilometers LOS with the M6 Battery Retainer. The Shock Tube Initiator (STI) M50 is an associated component/interface that is required when using the MK152 to initiate Modernized Demolition Initiators M19, M21 and M23. This item is Code A, approved for service use.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	63	5	56	-	56	-	-	-	-
	Total Obligation Authority	3.690	0.211	2.100	-	2.100	-	-	-	-
ANG	Quantity	53	79	65	-	65	-	-	-	-
	Total Obligation Authority	3.102	4.912	2.971	-	2.971	-	-	-	-
AR	Quantity	26	18	14	-	14	-	-	-	-
	Total Obligation Authority	1.492	1.115	0.776	-	0.776	-	-	-	-
Total:	Quantity	142	102	135	-	135	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	8.284	6.238	5.847	-	5.847	-	-	-	-

#### Justification:

FY 2018 Base procurement dollars in the amount of \$5.847 million supports production of 135 RF RAMS sets.

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	UNCL	ASSIFIED						
Exhibit P-40, Budget Line Item Justification: F	/ 2018 Army		<b>Date</b> : May 2017					
Appropriation / Budget Activity / Budget Sub A 2035A: Other Procurement, Army / BA 03: Other S Engineer (Non-Construction) Equipment	ctivity: Support Equipment / BSA 20:	P-1 Line Item Number / Title:  M60001 / Remote Demolition Systems						
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A					
Line Item MDAP/MAIS Code: N/A	<u> </u>							
In accordance with Section 1815 of the FY 2008 National Defidefense missions, domestic emergency responses and provide		is item is necessary for us	se by the active and reserve components of the Armed Force	es for homeland				

LI M60001 - Remote Demolition Systems Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

MA7700 / < \$5M, Countermine Equipment

Engineer (Non-Construction) Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	269	105	-	7	-	7	8	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	59.299	5.459	0.836	1.530	-	1.530	1.481	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	59.299	5.459	0.836	1.530	-	1.530	1.481	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	59.299	5.459	0.836	1.530	-	1.530	1.481	-	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)	1			1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	220.442	51.990	-	218.571	-	218.571	185.125	-	-	-	Continuing	Continuing

### **Description:**

This line covers procurement of countermine equipment with a total cost of less than five million dollars. This line includes detectors, neutralizing devices, training aids and devices to support New Equipment Training (NET), initial entry training, and institutional training, as well as any related tasks.

The M303 Blasting Demolition Kit (BDK) contains shaped charge liners and other demolition items that are used to fabricate customized demolitions in the field. The kit can be procured as a whole kit or as individual components.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	105	-	-	-	-	-	-	-	-
	Total Obligation Authority	5.459	0.836	-	-	-	-	-	-	-
ANG	Quantity	-	-	6	-	6	4	-	-	-
	Total Obligation Authority	-	-	1.089	-	1.089	0.688	-	-	-
AR	Quantity	-	-	1	-	1	4	-	-	-
	Total Obligation Authority	-	-	0.441	-	0.441	0.793	-	-	-
Total:	Quantity	105	-	7	-	7	8	-	-	
Secondary Distribution	Total Obligation Authority	5.459	0.836	1.530	-	1.530	1.481	-	-	

#### Justification:

FY 2018 Procurement dollars in the amount of \$1.530 million supports initial fielding and deployment of Blasting Demolition Kits to combat engineers. War reserve requirements support OSD-approved Combatant Commander Operational Plans, Homeland Defense, and other OSD-directed missions. Training requirements support individual and collective training of Active and Reserve Component forces at Army schools, home station and the combined training centers. Test requirements support the development, fielding, safety and quality assurance of Army munitions and equipment throughout their life-cycle.

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Exhibit P-40, Budget Line Item Justification: FY	′ 2018 Army		<b>Date:</b> May 2017	
Appropriation / Budget Activity / Budget Sub A 2035A: Other Procurement, Army / BA 03: Other S Engineer (Non-Construction) Equipment	ctivity: Support Equipment / BSA 20:	<b>P-1 Line Item Nu</b> MA7700 / < \$5M,	umber / Title: , Countermine Equipment	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A	,			
The FY 2018 Base procurement dollars in the amount of \$1.53	30M supports the Fielding and New Equi	pment Training for the M3	303 Blasting Demolition Kits.	

LI MA7700 - < \$5M, Countermine Equipment Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 20:

R12001 / Family of Boats and Motors

Engineer (Non-Construction) Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То		
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total	
Procurement Quantity (Units in Each)	-	410	116	167	-	167	248	123	89	71	Continuing	Continuing	
Gross/Weapon System Cost (\$ in Millions)	-	8.429	3.451	4.302	-	4.302	5.966	4.199	2.663	1.951	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	-	8.429	3.451	4.302	-	4.302	5.966	4.199	2.663	1.951	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	-	8.429	3.451	4.302	-	4.302	5.966	4.199	2.663	1.951	Continuing	Continuing	
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)			ĺ		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	20.559	29.750	25.760	-	25.760	24.056	34.138	29.921	27.479	Continuing	Continuing	

### **Description:**

The Family of Boats and Motors (FoBaM) consists of 7-person Inflatable Combat Raiding Craft (I-CRC), 15 person Inflatable Combat Assault Craft (I-CAC), Common Motor, and Rigid Inflatable Boat (RIB). The 7-person I-CRC, 15-person I-CAC, and Common Motor replace current outdated legacy systems. The RIB adds a new capability to the field. All systems support both engineer and special forces in a variety of operations such as: assault landings; reconnaissance and river crossing operations; infiltration and exfiltration; long-range surveillance; amphibious raid, surface swimming, dive, submarine, ravine, anti-mine, bridging, and air operations; underwater construction; underwater repair work; dam and pier repairs; light salvage; and humanitarian aid/disaster relief. Army Acquisition Objective (AAO) for FoBaM is: 7-person I-CRC 394, 15-person I-CAC 528, Common Motor 932, and RIB 19.

Funds in this program are realignment of funds from program Items Less than \$5M, SSN ML5301 for more efficient, effective program management.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	159	69	167	-	167	248	123	89	71
	Total Obligation Authority	3.671	2.505	4.302	-	4.302	5.966	4.199	2.663	1.951
ANG	Quantity	220	38	-	-	-	-	-	-	-
	Total Obligation Authority	4.335	0.782	-	-	-	-	-	-	-
AR	Quantity	31	9	-	-	-	-	-	-	-
	Total Obligation Authority	0.423	0.164	-	-	-	-	-	-	-
Total:	Quantity	410	116	167	-	167	248	123	89	71
Secondary Distribution	Total Obligation Authority	8.429	3.451	4.302	-	4.302	5.966	4.199	2.663	1.951

Justification:

LI R12001 - Family of Boats and Motors

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Exhibit P-40, Budget Line Item Justification:	FY 2018 Army		<b>Date:</b> May 2017	
Appropriation / Budget Activity / Budget Sul 2035A: Other Procurement, Army / BA 03: Other Engineer (Non-Construction) Equipment		P-1 Line Item N R12001 / Family	umber / Title: of Boats and Motors	
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code E	3 Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
FY18 Base procurement dollars in the amount of \$4.302 mm the capability to complete required missions, provide supp	nillion supports a quantity of 101 Common Mort to civil authorities and deter and defeat h	lotors, 5 RIB, 37 7-persor lybrid threats in support c	n I-CRC,and 24 15-person I-CAC. Providing soldiers these systems will give to farmy requirements.	hem
In accordance with Section 1815 of the FY 2008 National I defense missions, domestic emergency responses, and pr		ese item are necessary f	for use by the active and reserve components of the Armed Forces for homela	and

LI R12001 - Family of Boats and Motors Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MF9000 / Heaters and ECU's

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: 0608804A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То		
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total	
Procurement Quantity (Units in Each)	-	-	1,644	414	30	444	793	706	1,265	1,267	Continuing	Continuing	
Gross/Weapon System Cost (\$ in Millions)	107.782	1.360	19.601	7.405	0.270	7.675	13.521	12.012	27.857	28.090	Continuing	Continuing	
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	107.782	1.360	19.601	7.405	0.270	7.675	13.521	12.012	27.857	28.090	Continuing	Continuing	
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Total Obligation Authority (\$ in Millions)	107.782	1.360	19.601	7.405	0.270	7.675	13.521	12.012	27.857	28.090	Continuing	Continuing	
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)					
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	11.923	17.886	9.000	17.286	17.050	17.014	22.021	22.170	Continuing	Continuing	

### **Description:**

This budget line represents the Army's family of Improved Environmental Control Units (IECUs), commonly known as Air Conditioners. IECUs provide cooling and supplemental heating for Army tents and shelters. Systems range in size from 9,000 to 60,000 British Thermal Units/hour (BTU/hr) and are powered by common electrical currents supplied by both mobile electric power systems and standard commercial facilities. IECUs also provide dehumidification and filtering of air in support of environmentally sensitive electronic equipment in mobile shelters and vans. IECUs support critical electronic equipment that would not support the Army mission without proper environmental control. IECUs support over 180 separate tactical weapon systems. The majority of the supported weapon systems are command, control, and communication items. Other applications include medical facilities, expeditionary basing, 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 IECU program will provide a new generation of Environmental Control Units (ECUs) that use environmentally approved refrigerants, with zero ozone-depleting chemicals (ODCs), to replace the current Military Standard (MIL-STD) Family of ECUs. The IECUs will provide improved cooling, heating, and dehumidification to soldiers and materiel systems in combat, combat support and combat service support units. IECUs are required to replace currently fielded environmental control units in order to comply with statutory and regulatory restrictions on the use of Class II Ozone Depleting Chemicals (ODCs) and to increase the performance of military ECUs. They are form, fit and function replacements to the current MIL-STD ECUs. IECUs operate at wider operating temperatures, are more ruggedized than commercial ECUs, and employ embedded diagnostics and automatic safety controls. Technical improvements over existing military-standard ECUs will yield significant fuel and weight savings, reduction in scheduled maintenance, and increased reliability.

60.000 (3 phase / 50-60 hertz) BTUH (British Thermal Units per Hour) Army Acquisition Objective (AAO) = 2,432

9,000 (single phase / 60 hertz) BTUH AAO = 1,130

18,000 (3 phase / 60 hertz / 208V) BTUH AAO = 2,231

18,000 (single phase / 60 hertz / 230V) BTUH AAO= 842

36,000 (3 phase / 60 hertz) BTUH AAO= 1,318

All OCO funding is Active Component.

Secondary	Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army Quantity		-	976	220	30	250	421	378	710	711

LI MF9000 - Heaters and ECU's Army

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MF9000 / Heaters and ECU's

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: 0608804A

Line Item MDAP/MAIS Code: N/A

				FY 2018	FY 2018	FY 2018				
Secondary	y Distribution	FY 2016	FY 2017	Base	осо	Total	FY 2019	FY 2020	FY 2021	FY 2022
	Total Obligation Authority	1.360	10.843	4.459	0.270	4.729	6.845	5.980	14.756	13.427
ANG	Quantity	-	479	140	-	140	274	245	464	465
	Total Obligation Authority	-	6.258	2.911	-	2.911	5.103	3.687	11.295	8.144
AR	Quantity	-	189	54	-	54	98	83	91	91
	Total Obligation Authority	-	2.500	0.035	-	0.035	1.573	2.345	1.806	6.519
Total:	Quantity	-	1,644	414	30	444	793	706	1,265	1,267
Secondary Distribution	Total Obligation Authority	1.360	19.601	7.405	0.270	7.675	13.521	12.012	27.857	28.090

#### Justification:

FY18 Base procurement dollars in the amount of \$7.405 million supports the family of Improved Environmental Control Units 9,000 BTU/hr (British Thermal Units), 18,000 BTU/hr and 36,000 BTU/hr IECUs 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. The IECUs are critical to the systems they support. Additionally, IECUs are required to fill urgent shortages on new fieldings of high priority weapon systems. They are used in select shelters which house critical life-saving operations in Combat Support Hospitals and storage of perishable supplies in Brigade Support Battalions. The 9,000 BTU/hr, 18,000 BTU/hr and 36,000 BTU/hr IECUs provide an EPA compliant capability to the force structure before commercial/military stocks of previously used refrigerant are exhausted and no longer available.

FY18 OCO procurement dollars in the amount of \$0.270 million supports the European Reassurance Initiative effort.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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LI MF9000 - Heaters and ECU's Army

₽ #138

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MA6800 / Soldier Enhancement

Combat Service Support Equipment

25: | IVIA6800 / Soldier Enhancemen

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	256.946	2.287	2.112	1.095	-	1.095	1.117	1.139	1.162	1.175	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	256.946	2.287	2.112	1.095	-	1.095	1.117	1.139	1.162	1.175	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	256.946	2.287	2.112	1.095	-	1.095	1.117	1.139	1.162	1.175	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

The Soldier Enhancement Program (SEP) was established by the National Defense Authorization Act for Fiscal Year 1990 and 1991. The SEP evaluates available Commercial Off the Shelf (COTS), Government Off the Shelf (GOTS) and Non-Developmental Item (NDI) equipment to determine if items have the potential to provide increased combat effectiveness to the Soldier. The SEP OPA 3 funding provides a means of procuring individual equipment designed to increase the Soldiers' operational effectiveness for evaluation.

Secondar	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	2.287	2.112	1.095	-	1.095	1.117	1.139	1.162	1.175
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	<b>Total Obligation Authority</b>	2.287	2.112	1.095	-	1.095	1.117	1.139	1.162	1.175

#### Justification:

FY2018 Base procurement dollars in the amount of \$1.095 million supports the procurement of approved COTS, GOTS, and NDI hardware (optics and accessories, night vision devices, and individual Soldier equipment) for the purpose of evaluation by soldiers.

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for the use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

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Page 1 of 1

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

G01101 / Personnel Recovery Support System (PRSS)

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	3,750	2,000	10,032	2,000	-	2,000	2,000	2,000	2,000	2,000	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	68.804	7.733	10.856	5.390	-	5.390	6.630	5.518	5.957	6.099	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	68.804	7.733	10.856	5.390	-	5.390	6.630	5.518	5.957	6.099	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	68.804	7.733	10.856	5.390	-	5.390	6.630	5.518	5.957	6.099	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget requests	are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	18.348	3.867	1.082	2.695	-	2.695	3.315	2.759	2.979	3.050	Continuing	Continuing

### **Description:**

The Personnel Recovery Support System (PRSS) consists of items including Secure Personal Locator Beacons and Personnel Recovery equipment items to report and locate isolated, missing, detained and captured Soldiers.

Secondar	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	2,000	10,032	2,000	-	2,000	2,000	2,000	2,000	2,000
	Total Obligation Authority	7.733	10.856	5.390	-	5.390	6.630	5.518	5.957	6.099
Total:	Quantity	2,000	10,032	2,000	-	2,000	2,000	2,000	2,000	2,000
Secondary Distribution	Total Obligation Authority	7.733	10.856	5.390	-	5.390	6.630	5.518	5.957	6.099

#### Justification:

FY 18 Base procurement dollars in the amount of \$5.390 million support procurement of Personnel Recovery Support System (PRSS) products that support the Army's capability to report and locate isolated, missing, detained and captured Soldiers. Funding procures equipment and material to support a balanced investment strategy for the Army's approved force structure.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R80501 / Ground Soldier System

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Line item MDAI /MAIO Oode: N/A												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	18,813	3,016	1,493	1,666	-	1,666	1,793	1,238	1,027	1,446	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219	38.642	39.171	37.926	41.739	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219	38.642	39.171	37.926	41.739	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219	38.642	39.171	37.926	41.739	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	20.176	16.511	21.714	22.941	-	22.941	21.552	31.641	36.929	28.865	Continuing	Continuing

### **Description:**

The Nett Warrior (NW) (named in honor of Medal of Honor recipient Colonel Robert C. Nett and also known as Ground Soldier System) leverages commercial smart phone devices and secure Army tactical radios to provide the dismounted leader an integrated mission command and situational awareness system for use during combat operations. The NW system provides operators real-time information on friendly positions, information about enemy activity and movement, navigational data and map imagery, and other mission related graphics. This information effectively puts the power of the entire Army tactical network in the hands of the dismounted leader. The NW system also provides the same integrated mission command capability tied to Joint Battle Command Platform (JBC-P) to tactical vehicle mounted leaders so that upon dismount, they still have access to the common operating picture (COP) and full situational awareness. This capability provides the dismounted leader faster, more accurate decisions and reduced fratricide in the tactical fight. NW also procures supporting power systems aimed at significantly reducing power requirements in the expeditionary environment. The NW also provides the dismounted common computational platform for the Mobile Handheld Computing Environment. Includes integration and interface of products on Soldiers.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R80501 / Ground Soldier System

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

LI R80501 - Ground Soldier System

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule		,		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	R80501 / Ground Soldier System	P-5a			18,813 / 379.565	3,016 / 49.798	1,493 / 32.419	1,666 / 38.219	- / -	1,666 / 38.219
P-40	Total Gross/Weapon System Cost	-			18,813 / 379.565	3,016 / 49.798	1,493 / 32.419	1,666 / 38.219	- 1 -	1,666 / 38.219

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 Base procurement dollars in the amount of \$38.219 million procures NW Soldier worn hardware, NW support equipment, NW system fielding, sustainment of New Equipment Training (NET) and support services for fielding to Army Brigade Combat Teams in Capability Set fielding and Army Special Forces. NW equipped units directly enhance the Army's combat overmatch capability in two Army mission essential tasks: 1) Enhances small unit combat fighting capabilities by providing unparalleled situational awareness and mission command to dismounted combat leaders through an integrated smart device and supporting equipment such as battery chargers and power managers and 2) enables commanders to combine the elements of combat power (mission command, movement and maneuver, leadership, intelligence, fires, information, sustainment, and protection) to engage the enemy and swiftly end tactical engagements and reduce possible fratricide. NW brings the dismounted tactical combat leaders into the Army Network and the acquisition program is aligned with Army Capability Sets providing a balanced investment strategy. Due to the commercial nature of the Nett Warrior system hardware (e.g. smart phones, smart phone cases, screen protectors, memory cards and other associated accessories) and to address diminishing manufacturing (obsolescence parts), request consolidating the purchase of NW commercial-based items requirements across multiple years in order to execute a buyout of up to three years beyond FY18 as needed.

"In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities."

Comments: P21 form is not provided, as program procures commercial off the shelf (COTS) products.

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Army Page 2 of 4 P-1 Line #141

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 25

Date: May 2017

Item Number / Title [DODIC]:

R80501 / Ground Soldier System

MDAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready):		ML	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	18,813	3,016	1,493	1,666	-	1,666
Gross/Weapon System Cost (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	379.565	49.798	32.419	38.219	-	38.219
(The following Resource Summary rows are for informati	ional purposes only. The cor	responding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	20.176	16.511	21.714	22.941	-	22.941

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Prior Years		1		FY 2016			FY 2017		F۱	/ 2018 Bas	se	FY 2018 OCO		0	FY 2018 Total		al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Hardware Cost	'	<u>'</u>			'		'	'					<u> </u>			·	<u>'</u>	
Recurring Cost																		
NW Soldier Worn Hardware <sup>(†)</sup>	9.943	18,813	187.065	2.686	3,016	8.100	2.074	1,493	3.097	2.127	1,666	3.543	-	-	-	2.127	1,666	3.54
NW Support Equipment (COMPO 1)	-	-	100.782	-	-	16.200	-	-	9.538	-	-	9.847	-	-	-	-	-	9.84
NW Sys Fielding, Sustain & Sup (COMPO 1)	-	-	71.475	-	-	25.497	-	-	19.784	-	-	16.655	-	-	-	-	-	16.65
Dismounted C2/SA Dir Req (COMPO 1)	-	-	20.250	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NW Support Equipment (COMPO 2)	-	-	-	-	-	-	-	-	-	-	-	3.235	-	-	-	-	-	3.23
NW System Fielding, Sustainment Support (COMPO 2)	-	-	-	-	-	-	-	-	-	-	-	4.938	-	-	-	-	-	4.938
Subtotal: Recurring Cost	-	-	379.565	-	-	49.798	-	-	32.418	-	-	38.219	-	-	-	-	-	38.21
Subtotal: Hardware Cost	-	-	379.565	-	-	49.798	-	-	32.418	-	-	38.219	-	-	-	-	-	38.21
Gross/Weapon System Cost	20.176	18,813	379.565	16.511	3,016	49.798	21.714	1,493	32.419	22.941	1,666	38.219	-	-	-	22.941	1,666	38.219

<sup>(†)</sup> indicates the presence of a P-5a

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LI R80501 - Ground Soldier System Army

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P-1 Line #141

Exhibit P-5a, Procurement History and Planning: FY 2018 A	Date: May 2017	
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 25	P-1 Line Item Number / Title: R80501 / Ground Soldier System	Item Number / Title [DODIC]: R80501 / Ground Soldier System

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
NW Soldier Worn Hardware		2016	Various / Various	C / FFP	APG, MD	Mar 2016	Apr 2016	3,016	2.686			
NW Soldier Worn Hardware		2017	Various / Various	C / FFP	APG, MD	May 2017	Aug 2017	1,493	2.074			
NW Soldier Worn Hardware		2018	TBD / APG, MD	C / FFP	APG, MD	Mar 2018	Apr 2019	1,666	2.130			

#### Remarks:

Prior year quantities have been delivered.

P21 is not required. The NW program focuses on the integration and evaluation of commercial off the shelf (COTS) smart devices for the MC/SA system.

**UNCLASSIFIED** LI R80501 - Ground Soldier System Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R80800 / Mobile Soldier Power

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	20,367	13,255	3,150	-	3,150	13,041	20,515	22,231	23,858	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	-	25.306	30.014	10.456	-	10.456	31.603	44.076	49.747	52.207	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	=	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	25.306	30.014	10.456	-	10.456	31.603	44.076	49.747	52.207	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	25.306	30.014	10.456	-	10.456	31.603	44.076	49.747	52.207	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1.243	2.264	3.319	-	3.319	2.423	2.148	2.238	2.188	Continuing	Continuing

### Description:

Soldier and Small Unit Power systems enable dismounted Soldiers and squads to execute their missions with significantly less battery weight and enable longer missions without a daily unit re-supply of batteries. These improved renewable systems enable the warfighter to sustain themselves for extended mission duration in the most austere operating environments.

The Integrated Soldier Power and Data System-Core (ISPDS-C), Conformal Wearable Battery (CWB), and Squad Power Manager (SPM) fill the power and energy gaps created by the increase in mission essential, Soldier portable power consumers, such as situational awareness displays, GPS systems, weapon sensors, radios, and other devices. Specific systems of Soldier Power Integrated (SPI) are the ISPDS-C, the CWB and the SPM. These power solutions are intended for use in the most austere operating environments and include, but are not limited to, individual Soldier worn systems, integrated power management, and renewable energy. SPI systems will enable dismounted Soldiers to execute their missions more efficiently, for longer durations and with fewer battery resupplies and also reduce the logistical burden associated with moving fuel and primary (disposable) batteries, and allow dismounted Soldiers to operate independently for longer missions without being tethered to a large generator, vehicle, or supply train. This effort is consistent with the Soldier Protection Capability Development Document (CDD) (March 2011), Operational Energy Initial Capabilities Document (26 April 2012), the Sep 2013 Small Unit Power CDD (26 September 2013), and the draft SPM, ISPDS-C with Conformal Central Power Source (CCPS) Capability Production Document.

The Universal Battery Charger (UBC) fills the power and energy gap created by the increase in mission essential, Soldier portable power consumers, by providing a sole charging solution capable of providing power to handheld communication devices and a suite of military batteries. The UBC charging solution is suited for the platoon and intended for use in the most austere operating environments. The UBC enables dismounted Soldiers to execute their missions with fewer battery resupplies, thus reducing the logistical burden associated with moving fuel and primary (disposable) batteries. The UBC capability also allows dismounted Soldiers to operate independently for longer missions without being tethered to a large generator, vehicle, or supply train. This effort is consistent with the Operational Energy ICD (26 April 2012) and the Universal Battery Charger CPD (27 May 2015).

	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	20,367	13,255	3,150	-	3,150	13,041	20,515	22,231	23,858
	Total Obligation Authority	25.306	30.014	10.456	-	10.456	31.603	44.076	49.747	52.207
Total:	Quantity	20,367	13,255	3,150	-	3,150	13,041	20,515	22,231	23,858

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LI R80800 - Mobile Soldier Power Army

P-1 Line #142

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R80800 / Mobile Soldier Power

Combat Service Support Equipment

Tredede / Media Colaidi / Owe

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

				FY 2018	FY 2018	FY 2018				
Secondary	/ Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distribution	Total Obligation Authority	25.306	30.014	10.456	-	10.456	31.603	44.076	49.747	52.207

#### Justification:

FY18 Base procurement dollars in the amount of \$7.370 procures and fields Integrated Soldier Power Data System - Core and \$3.086 million procures Universal Battery Chargers and associated equipment.

The increased digital capability of electronic devices generates an increased demand for power. Historically, innovations in Soldier power struggle to keep pace with the growing power requirements that accompany these increased capabilities. Additionally, batteries add weight that consumes more space in the combat load. Power management is a significant mission planning consideration for the dismounted squad leader who manages combat loads. Dismounted squads operating in the most austere environments have traditionally carried enough batteries to sustain individual Soldier devices for up to 72 hours before resupply. Small Unit Power seeks to reduce the number of batteries that the Soldier must carry to reduce the combat load. The Soldier and the squad are the centerpiece of the modernization strategy, as the U.S. Army develops strategies to effectively equip and train the Soldier of Force 2025; it must reconcile how to power the growing number of Soldier-worn devices while also reducing the Soldier's battery load and decreasing the logistical demand for battery resupply. Soldier and small unit power systems reduce the number of logistical convoys pushing supplies to the forward edge of the battlefield and associated cost and risk involved with battery and fuel resupply missions.

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LI R80800 - Mobile Soldier Power Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

M80200 / Force Provider

Combat Service Support Equipment

Program Elements for Code B Items: N/A Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready):

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	1
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	12	3	12	-	-	-	-	-	-	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,061.586	21.300	53.800	-	-	-	-	-	-	-	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,061.586	21.300	53.800	-	-	-	-	-	-	-	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,061.586	21.300	53.800	-	-	-	-	-	-	-	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				•
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	88,465.500	7,100.000	4,483.333	-	-	-	-	-	-	-	Continuing	Continuing

### Description:

Force Provider is a fully integrated system providing critical basic life support for Soldiers deployed in remote areas. A Force Provider module provides billeting, field feeding and hygiene capabilities that include all the integrated utilities to include climate control, power generation, water and waste water systems, and fuel storage. A typical Force Provider module is capable of sustaining 150 personnel. Force Provider is fully containerized for rapid deployment and is transportable by rail, sea, land, and air using C-130, C-17 or C-5A aircraft. With the addition of Cold Weather Kits (CWKs), the module is deployable in temperatures as low as -15 degrees Fahrenheit. Missions for Force Provider are: Base camps for enforcement missions, peace keeping, theater reception/redeployment, intermediate staging base operations, humanitarian aid and disaster relief (both in theater and in austere environments). Force Provider modules are placed in Prepositioned Stocks to meet critical Operational Plan requirements of the Army Service Component Commands (ASCC). Each Force Provider module is configured in 150-Soldier or 50/75-Soldier expeditionary subsets that are capable of operating independently as mission requirements dictate. These systems are configured with optional Resource and Energy Efficiency Kits, Power Generation Kits, Cold Weather Kits and Prime Power Kits which increase their deployment versatility. The Army Acquisition Objective for Force Provider is 226 each 150-Soldier modules and 20 each 50/75 Soldier modules. Twenty four of the 150-Soldier Modules will be equipped with energy-efficient Rigid-Walled Shelters in lieu of the standard soft-walled shelters.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	3	12	-	-	-	-	-	-	-
	Total Obligation Authority	21.300	53.800	-	-	-	-	-	-	-
Total:	Quantity	3	12	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	21.300	53.800	-	-	-	-	-	-	-

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Justification:

Army

There is no FY 2018 PB Request.

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	UNCL	ASSIFIED		
Exhibit P-40, Budget Line Item Justification: FY 2018	3 Army		<b>Date:</b> May 2017	
Appropriation / Budget Activity / Budget Sub Activity 2035A: Other Procurement, Army / BA 03: Other Support Combat Service Support Equipment	y: rt Equipment / BSA 25:	P-1 Line Item Nui M80200 / Force P		
D Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A	1
Line Item MDAP/MAIS Code: N/A				
In accordance with Section 1815 of the FY 2008 National Defense Au defense missions, domestic emergency responses, and providing mil		s item is necessary for use	e by the active and reserve components of the Armed	Forces for homeland

LI M80200 - Force Provider Army

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P-1 Line #143

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

M65800 / Field Feeding Equipment

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604713A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То			
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total		
Procurement Quantity (Units in Each)	149	104	332	146	1	147	152	149	221	214	Continuing	Continuing		
Gross/Weapon System Cost (\$ in Millions)	253.483	14.318	15.209	15.340	0.145	15.485	17.789	21.801	29.063	28.714	Continuing	Continuing		
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	=	-	=	-	-	-	-		
Net Procurement (P-1) (\$ in Millions)	253.483	14.318	15.209	15.340	0.145	15.485	17.789	21.801	29.063	28.714	Continuing	Continuing		
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Total Obligation Authority (\$ in Millions)	253.483	14.318	15.209	15.340	0.145	15.485	17.789	21.801	29.063	28.714	Continuing	Continuing		
(The following	(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-		
Gross/Weapon System Unit Cost (\$ in Thousands)	1,701.228	137.673	45.810	105.068	145.000	105.340	117.033	146.315	131.507	134.178	Continuing	Continuing		

### **Description:**

The Field Feeding and Refrigeration program provides equipment to conduct tactical food service operations. Field Feeding is a combat multiplier which improves morale and enhances the Soldier's physical and cognitive capabilities. Associated with food service operations are storage, preparation, serving and cleanup. Equipment items include: field kitchens, food sanitation centers, and refrigerated containers. This program supports the production of the Battlefield Kitchen that will replace the over-age and outdated Mobile Kitchen Trailer (MKT) as the Army's midsized kitchen. The Battlefield Kitchen will provide units with a modern, safer, and more operationally and energy efficient capability. It is designed for today's rations and tactical prime movers that meets Army requirements for improved mobility, survivability, and deployability. In conjunction with food service personnel and field rations, this equipment comprises the Army Field Feeding System (AFFS) which supports the Army standard of a minimum of one hot prepared meal per day in the field. This program provides a critical capability that supports Army transformation and modularity concept while maintaining readiness through fielding and integration of new equipment. It enhances the field Soldier's well being and reduces requirements for related lift demands, combat zone footprint, and logistical support costs.

The correct prior year quantities through FY 15 are 1435 for Multi Temperature Refrigerator Containers and 668 for Assault Kitchen.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	34	253	77	1	78	100	107	221	214
	Total Obligation Authority	10.986	10.730	11.323	0.145	11.468	13.771	21.801	29.063	28.714
ANG	Quantity	70	79	69	-	69	52	-	-	-
	Total Obligation Authority	3.332	4.479	4.017	-	4.017	4.018	-	-	-
Total:	Quantity	104	332	146	1	147	152	107	221	214
Secondary Distribution	Total Obligation Authority	14.318	15.209	15.340	0.145	15.485	17.789	21.801	29.063	28.714

#### Justification:

FY 18 Base procurement dollars in the amount of \$15.340 million supports production of 67 Multi Temperature Refrigerated Container Systems (MTRCS) for issue to Subsistence Platoons, and maneuver and Support BCT's to implement the configured load subsistence supply concept and 79 Assault Kitchens (AK's) to support company level feeding in light through heavy forces.

LI M65800 - Field Feeding Equipment Army

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P-1 Line #144

UNCLASSIFIED													
Exhibit P-40, Budget Line Item Justification: F	xhibit P-40, Budget Line Item Justification: FY 2018 Army  Date: May 2017												
Appropriation / Budget Activity / Budget Sub A 2035A: Other Procurement, Army / BA 03: Other Combat Service Support Equipment		P-1 Line Item Number / Title: M65800 / Field Feeding Equipment											
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: 0604713A										
ine Item MDAP/MAIS Code: N/A													
FY 18 OCO procurement dollars in the amount of \$.145 million Support BCT's to implement the configured load subsistence	supply concept.  fense Authorization Act (P.L. 110-181), th		ainer System (MTRCS) for issue to Subsistence Platoons, and maneuver and use by the active and reserve components of the Armed Forces for homeland										

LI M65800 - Field Feeding Equipment Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MA7804 / Cargo Aerial Del & Personnel Parachute Systems

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То			
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total		
Procurement Quantity (Units in Each)	1,453	1,611	2,415	1,865	60	1,925	6,835	5,963	9,985	8,760	Continuing	Continuing		
Gross/Weapon System Cost (\$ in Millions)	559.928	34.153	20.909	30.607	1.980	32.587	43.788	51.038	62.562	56.612	Continuing	Continuing		
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Net Procurement (P-1) (\$ in Millions)	559.928	34.153	20.909	30.607	1.980	32.587	43.788	51.038	62.562	56.612	Continuing	Continuing		
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Total Obligation Authority (\$ in Millions)	559.928	34.153	20.909	30.607	1.980	32.587	43.788	51.038	62.562	56.612	Continuing	Continuing		
(The following	(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)													
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-		
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-		
Gross/Weapon System Unit Cost (\$ in Thousands)	385.360	21.200	8.658	16.411	33.000	16.928	6.406	8.559	6.266	6.463	Continuing	Continuing		

### Description:

FY2018 base procurement dollars procures a mix of Joint Precision Air Drop System (JPADS) (15), MC-6 (1,100), RA-1 (652), PARANAVSYS (414), T-11 (1,100), & T-11R Pack Trays (18,000). FY2018 OCO procurement dollars procures JPADS (60).

- -The Advanced Tactical Parachute System (ATPS) is the Army's next generation parachute system for personnel static line airdrop operations and consists of the T-11 (non-steerable) and MC-6 (steerable) systems. The T-11 consists of an integrated harness, reserve parachute and the T-11 main canopy for mass tactical static line airdrop operations. The T-11 replaced the T-10 main canopy, the Modified Improved Reserve Parachute System (MIRPS) and the existing parachute harness. The total Army Acquisition Objective (AAO) of 43,708 has been procured. Fielding was completed in FY15.
- -Early T-11 and MC-6 parachutes are reaching the end of their service life and replacement systems are being procured. MC-6 procurements began in FY16 and T-11/associated T-11 Pack Tray procurements will begin in FY18.
- -The RA-1 Parachute System is replacing the current MC-4 ram air parachute system with a multi-mission High Altitude Low Opening (HALO) and High Altitude High Opening (HAHO) standoff capability, that also provides a static line deployed ram air parachute insertion capability. The RA-1 allows personnel to exit at altitudes between 3,500 ft to 35,000 ft Mean Sea Level with a total jumper weight of 450 lbs. The AAO is 5,470 and is being procured from FY14 through FY18.
- -The Parachutist Navigation System (PARANAVSYS) provides a Global Positioning System (GPS) capability for the RA-1 Free-fall parachutists. Procurement begins in 2018 with an AAO of 5,228. -Joint Precision Air Drop System (JPADS) represents the DoD's next generation of cargo aerial delivery. The system provides autonomous guidance of loads dropped from altitudes up to 25,000 feet Mean Sea Level (MSL) at increments of 2,000 (2K) and 10,000 (10K) pounds. JPADS will allow precise delivery of critical supplies to the Warfighter on the ground while allowing aircraft delivering payloads to fly at significantly safer altitudes. This line includes both 2K and 10K procurement.

Secon	dary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1,306	1,529	1,863	60	1,923	6,509	4,266	9,985	8,632
	Total Obligation Authority	28.180	14.620	30.318	1.980	32.298	39.960	42.035	62.562	55.719
ANG	Quantity	305	693	2	-	2	133	1,697	-	128
	Total Obligation Authority	5.973	4.919	0.289	-	0.289	1.705	9.003	-	0.893

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MA7804 / Cargo Aerial Del & Personnel Parachute Systems

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Secondar	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
AR	Quantity	-	193	-	-	-	193	-	-	-
	Total Obligation Authority	-	1.370	-	-	-	2.123	-	-	-
Total:	Quantity	1,611	2,415	1,865	60	1,925	6,835	5,963	9,985	8,760
Secondary Distribution	Total Obligation Authority	34.153	20.909	30.607	1.980	32.587	43.788	51.038	62.562	56.612

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

MA7804 / Cargo Aerial Del & Personnel Parachute Systems

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule		,		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	MA7801 / Advanced Tactical Parachute System	P-5a			1,358 / 408.329	1,576 / 30.862	2,340 / 16.611	1,850 / 28.440	- / -	1,850 / 28.440
P-5	MA7806 / Precision Airdrop	P-5a			95 / 151.599	35 / 3.291	75 / 4.298	15 / 2.167	60 / 1.980	75 / 4.147
P-40	Total Gross/Weapon System Cost				1,453 / 559.928	1,611 / 34.153	2,415 / 20.909	1,865 / 30.607	60 / 1.980	1,925 / 32.587

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 procurement dollars in the amount of \$2.167 million supports production of 15 JPADS 10K systems. The success of JPADS in theater has reinforced the need to execute critical resupply missions without having to place Soldiers and ground vehicle convoys on the ground in high risk situations. Procurement of this system provides a vital precision aerial resupply capability to support the full spectrum of operations. Funding supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements.

FY 18 OCO procurement dollars in the amount of \$1.980 million supports production of an additional 60 Joint Precision Airdrop 2K systems for contingency operations.

FY18 Base procurement dollars in the amount of \$28.440 million supports the procurement of RA-1 parachutes, MC-6, T-11 and PARANAVSYS.

							Ui	NCLASS	HLIEF	,								
Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: N	/lay 2017			
<b>Appropriation / B</b> 2035A / 03 / 25					ivity:			<b>n Number</b> rgo Aerial			l Parach	ute Syst	tems				<b>DIC]:</b> tical Para	chute
ID Code (A=Service Read	dy, B=Not Service	ce Ready):							M	DAP/MAIS	Code:							
F	Resource	Summa	ary		F	Prior Yea	ars	FY 20	16	FY	2017	FY 2	2018 Bas	se F	Y 2018 (	осо	FY 2018	Total
Procurement Quantity (Un	its in Each)						1,358		1,576		2,34	0		1,850		-		1,85
Gross/Weapon System Co		s)					408.329		30.862		16.61	1	28	3.440		-		28.44
Less PY Advance Procure	ement (\$ in Mill	ions)					-		-		-			-		-		
Net Procurement (P-1) (\$	in Millions)						408.329		30.862		16.61	1	28	3.440		-		28.44
Plus CY Advance Procure	ement (\$ in Milli	ons)					-		-		-			-		-		_
Total Obligation Authori	ty (\$ in Millions)	)					408.329		30.862		16.61	1	28	3.440		-		28.44
(T	he following F	Resource Su	ımmary row	s are for info	ormational pu	urposes only	. The corres	sponding budg	et request	s are docume	ented elsewh	ere.)				*		
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System U	nit Cost (\$ in T	housands)					300.684		19.582		7.09	9	15	5.373		-		15.37
					'							'						
Note: Subtotals or Totals i	in this Exhibit	P-5 may no	t be exact o	r sum exact	ly due to rou	nding.												
	Р	rior Years	;		FY 2016			FY 2017		FY	2018 Bas	е	F	′ 2018 O	СО	F	Y 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	. ,	. , ,	. ,			. ,	. ,				. ,						,	
Recurring Cost															_			
Engrg/Fldg/NET	68,867.000	1	68.867	10,774.000	1	10.774	-	-	3.219	4,022.000	1	4.022	-	-	-	4,022.000	1	4.02
MC-6 <sup>(†)</sup>	5.092	25,042	127.510	3.501	857	3.000	3.800	215	0.817	3.800	1,100	4.180	-	-	-	3.800	1,100	4.18
RA-1 (ARAPS) <sup>(†)</sup>	8.940	1,800	16.092	11.500	1,300	14.950	16.172	640	10.350	13.069	652	8.521	-	-	-	13.069	652	8.52
RA-1 SPARE PARTS <sup>(†)</sup>	-	-	-	2,138.000	1	2.138	2,225.000	1	2.225	1,299.000	1	1.299	-	-	-	1,299.000	1	1.29
T-11 <sup>(†)</sup>	4.481	43,708	195.843	-	-	-	-	-	-	4.000	1,100	4.400	-	-	-	4.000	1,100	4.40
PARANAVSYS <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	6.928	414	2.868	-	-	-	6.928	414	2.86
T-11R Pack Tray <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	0.175	18,000	3.150	-	-	-	0.175	18,000	3.15
Subtotal: Recurring Cost	-	-	408.328	-	-	30.862	-	-	16.611	-	-	28.440	-	-	-	-	-	28.44
Subtotal: Flyaway Cost	-	-	408.328	-	-	30.862	-	-	16.611	-	-	28.440	-	-	-	-	-	28.44
Gross/Weapon System Cost	300.684	1,358	408.329	19.582	1,576	30.862	7.099	2,340	16.611	15.373	1,850	28.440	-	-	-	15.373	1,850	28.44
	Seco	ondary Dis	stribution				FY	2016		FY 2017		FY 2 Bas			FY 2018 OCO		FY 201 Total	
Army		Quar	ntity					1,27	1		1,454		1,85	0		-		1,85
			Obligation A	uthority				24.88			10.322		28.44	0		-		28.44
ANG		Quar	ntity					30	5		693		-	1		-		-

LI MA7804 - Cargo Aerial Del & Personnel Parachute S... Army

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P-1 Line #145

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 25	P-1 Line Item Number / Title: MA7804 / Cargo Aerial Del & Personnel Parachute Systems	Item Number / Title [DODIC]: MA7801 / Advanced Tactical Parachute System

ID Code (A=Service Ready, B=Not Service Read)	y) :		MDAP/MAIS Code	:		
Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Total Obligation Authority	5.973	4.919	-	=	-
AR	Quantity	-	193	-	-	-
	Total Obligation Authority	-	1.370	-	-	-
	Quantity	1,576	2,340	1,850	-	1,850
Secondary Distribution	Total Obligation Authority	30.862	16.611	28.440	-	28.440

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 25

P-1 Line Item Number / Title:

MA7804 / Cargo Aerial Del & Personnel Parachute Systems

MA7801 / Advanced Tactical Parachute System

	0		·	Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
MC-6		2016	Mills Manufacturing / Ashville, NC	C / FFP	Warren, MI	Apr 2016	Jul 2016	857	3.501			
MC-6		2017	Mills Manufacturing / Ashville, NC	C / FFP	TBD	Apr 2017	Jul 2017	215	3.800			
MC-6		2018	TBD MC-6 / TBD	C / FFP	TBD	Feb 2018	May 2018	1,100	3.800			
RA-1 (ARAPS)		2015	Airborne Systems North America / Santa Ana, CA	C / FFP	Natick, MA	Nov 2014	Jan 2016	1,039	11.500			
RA-1 (ARAPS)		2016	Airborne Sys N America of NJ / Pennsauken, NJ	C / FFP	Natick, MA	Apr 2016	Jan 2017	1,300	11.500			
RA-1 (ARAPS)		2017	TBD RA-1 / TBD	C / FFP	TBD	Jun 2017	Aug 2017	640	16.170			
RA-1 (ARAPS)		2018	TBD RA-1 / TBD	C / FFP	TBD	Jun 2018	Aug 2018	652	13.070			
RA-1 SPARE PARTS		2016	Airborne Sys N America of NJ / Pennsauken, NJ	C / FFP	Natick, MA	Apr 2016	Jul 2016	1	2,138.000			
RA-1 SPARE PARTS		2017	TBD RA-1 / TBD	C / FFP	TBD	Jun 2017	Aug 2017	1	2,225.000			
RA-1 SPARE PARTS		2018	TBD RA-1 / TBD	C / FFP	TBD	Jun 2018	Aug 2018	1	1,299.000			
T-11		2018	TBD T-11 / TBD	C / FFP	TBD	Oct 2017	Jan 2018	1,100	4.000			
PARANAVSYS		2018	TBD PARANAVSYS / TBD	C / FFP	TBD	Feb 2018	May 2018	414	6.930			
T-11R Pack Tray		2018	TBD Pack Tray / TBD	C / FFP	TBD	Dec 2017	Apr 2018	18,000	0.180			

#### Remarks

The Engineering/Fielding/New Equipment Training Cost element includes funding to procure Technical Data Packages for various systems including Protective Equipment and Organizational Clothing and Equipment valued at more than \$250,000.00

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 25

Date: May 2017

Item Number / Title [DODIC]:

MA7804 / Cargo Aerial Del & Personnel Parachute Systems

MA7806 / Precision Airdrop

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2016	FY 2017	<b>FY 2018 Base</b>	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	95	35	75	15	60	75
Gross/Weapon System Cost (\$ in Millions)	151.599	3.291	4.298	2.167	1.980	4.147
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	=
Net Procurement (P-1) (\$ in Millions)	151.599	3.291	4.298	2.167	1.980	4.147
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	151.599	3.291	4.298	2.167	1.980	4.147
(The following Resource Summary rows are for information	tional purposes only. The co	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1,595.779	94.029	57.307	144.467	33.000	55.293

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

	P	rior Years			FY 2016			FY 2017		FY	′ 2018 Ba	se	FY	2018 OC	0	FY	/ 2018 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost					,									,				
Recurring Cost																		
Hardware JPADS 2K <sup>(†)</sup>	4,600.067	15	69.001	35.000	20	0.700	33.000	57	1.881	-	-	-	33.000	60	1.980	33.000	60	1.98
Hardware Spares JPADS 2K	-	-	-	-	-	-	-	-	0.096	-	-	-	-	-	-	-	-	-
Sys Test & Evaluate, Production JPADS 2K	-	-	-	-	-	-	-	-	0.063	-	-	-	-	-	-	-	-	-
Sys Engineer/Program Mgt JPADS 2K	-	-	-	-	-	-	-	-	0.043	-	-	-	-	-	-	-	-	-
Fielding/Training JPADS 2K	-	-	-	-	-	-	-	-	0.062	-	-	-	-	-	-	-	-	-
Data JPADS 2K	-	-	-	-	-	-	-	-	0.099	-	-	-	-	-	-	-	-	-
Engineering Changes JPADS 2K	-	-	-	-	-	-	-	-	0.070	-	-	-	-	-	-	-	-	-
CLS/Shipping JPADS 2K	-	-	-	-	-	-	-	-	0.086	-	-	-	-	-	-	-	-	-
Hardware JPADS 10K <sup>(†)</sup>	773.443	70	54.141	97.000	15	1.455	94.000	13	1.222	97.000	15	1.455	-	-	-	97.000	15	1.4
System Test & Evaluation, Production	-	-	5.279	-	-	0.220	-	-	0.092	-	-	0.186	-	-	-	-	-	0.18
Engineering Changes	-	-	5.660	-	-	0.150	-	-	0.085	-	-	0.135	-	-	-	-	-	0.13
Fielding/Training	-	-	5.783	-	-	0.179	-	-	0.156	-	-	0.180	-	-	-	-	-	0.18
System Engineering/ Program Management	-	-	5.335	-	-	0.252	-	-	0.035	-	-	0.058	-	-	-	-	-	0.0

Exhibit P-5, Cost Analysis: FY 2018 Army
Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 25

P-1 Line Item Number / Title:
MA7804 / Cargo Aerial Del & Personnel Parachute Systems

MA7806 / Precision Airdrop

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

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	F	Prior Years	S		FY 2016			FY 2017		FY	′ 2018 Ba	se	F	Y 2018 OC	0	F	Y 2018 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Data	-	-	5.147	-	-	0.168	-	-	0.151	-	-	0.067	-	-	-	-	-	0.067
Spares	-	-	0.780	-	-	0.082	-	-	0.090	-	-	0.040	-	-	-	-	-	0.040
CLS/Shipping	-	-	0.473	-	-	0.085	-	-	0.067	-	-	0.046	-	-	-	-	-	0.046
Subtotal: Recurring Cost	-	-	151.599	-	-	3.291	-	-	4.298	-	-	2.167	-	-	1.980	-	-	4.147
Subtotal: Flyaway Cost	-	-	151.599	-	-	3.291	-	-	4.298	-	-	2.167	-	-	1.980	-	-	4.147
Gross/Weapon System Cost	1,595.779	95	151.599	94.029	35	3.291	57.307	75	4.298	144.467	15	2.167	33.000	60	1.980	55.293	75	4.147

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	35	75	13	60	73
	Total Obligation Authority	3.291	4.298	1.878	1.980	3.858
ANG	Quantity	-	-	2	-	2
	Total Obligation Authority	-	-	0.289	-	0.289
Total:	Quantity	35	75	15	60	75
Secondary Distribution	Total Obligation Authority	3.291	4.298	2.167	1.980	4.147

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 25	MA7804 / Cargo Aerial Del & Personnel Parachute Systems	MA7806 / Precision Airdrop

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Hardware JPADS 2K		2017	TBD / TBD	C / IDIQ	RDECOM, Natick MA	Mar 2017	Aug 2017	57	33.000	Υ		Jun 2014
Hardware JPADS 2K	1	2018	TBD / TBD	C / IDIQ	RDECOM, Natick MA	Feb 2018	Jul 2018	60	33.000	Υ		Jun 2014
Hardware JPADS 10K		2016	Airborne Systems NJ / Pennsauken, NJ	C / IDIQ	RDECOM, Natick MA	Mar 2016	Aug 2016	15	97.000	Y		Sep 2013
Hardware JPADS 10K		2017	Airborne Systems NJ / Pennsauken, NJ	C / IDIQ	RDECOM, Natick MA	Mar 2017	Aug 2017	13	94.000	Y		Sep 2013
Hardware JPADS 10K		2018	Airborne Systems / Pennsauken, NJ	C / IDIQ	RDECOM, Natick MA	Feb 2018	Jul 2018	15	97.000	Υ		Sep 2013

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R70001 / Family Of Engr Combat and Construction Sets

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	482	250	570	157	-	157	159	363	445	572	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	165.829	34.544	39.173	10.426	-	10.426	6.719	16.529	22.996	31.490	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	165.829	34.544	39.173	10.426	-	10.426	6.719	16.529	22.996	31.490	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	165.829	34.544	39.173	10.426	-	10.426	6.719	16.529	22.996	31.490	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	n budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	344.044	138.176	68.725	66.408	-	66.408	42.258	45.534	51.676	55.052	Continuing	Continuing

#### **Description:**

The Family Of Engineering Combat and Construction Sets (ECACS) is a family of systems that will support operations by combat and construction engineer teams in urban and rural environments. ECACS sets utilized in urban environment will aid in detection, protection, surveillance, monitoring, evacuation and clearing. ECACS sets utilized in rural environments will allow clearing and troop mobility support areas to include airfields, ports, facilities, and roads. Vertical Skills Engineer Construction Kits (VSECK)has six types which each provide tools and power equipment to meet maintenance and construction mission requirements.

The Engineer Equipment Set: Urban Operations, Platoon Set (UOpPS) consists of high technology equipment that provides soldiers with enhanced capabilities to perform missions in urbanized or complex terrain. It provides engineers and others with specialized tools enabling them to conduct operations in urban environments in a safer, more expedient manner. The components include thermal scopes, remote viewing instruments, detectors for explosives and gases, portable welders, metal cutting torches, rescue tools, mechanical entry tools, winch, and battery operated drills and saws. The set will standardize tools, reducing logistical support and provide a Type Classified (TC)-standard Army system.

Army Acquisition Objective (AAO) for Urban Operations, Platoon Set (UOpPS) is 1952.

The Engineer Equipment Set: Urban Operations, Squad Set (UOpSS) consists of equipment that provides Soldiers with enhanced capabilities to perform missions in urbanized or complex terrain. Components include portal blast shield, collapsible lightweight assault ladders, mechanical entry tools, and rappelling gear. This set supports dismounted engineer Soldiers and others in conducting Military Operations in Urban Terrain (MOUT). The set will standardize tools, reducing logistical support and provide a Type Classified (TC)-standard Army system.

Army Acquisition Objective (AAO) for Urban Operations, Squad Set (UOpSS) is 772.

The Engineer Equipment Set: Hydraulic Electric Pneumatic Petroleum Operated Equipment (HEPPOE) supports combat and construction engineer tasks across the entire spectrum of the operation area such as clearing buildings for repair and construction, clearing areas around road constructions, port openings and any other urban areas that require operations. The HEPPOE consists of 2 power units that provide hydraulic, electric and pneumatic power in conjunction with a rapid inventory 13 case tool load (Concrete Chain Saws, Hammer Drill, Sump Pump, Pavement Breakers, etc.) that will enhance the ability to operate in an urban area. The HEPPOE replaces two legacy systems through modernization, consolidation and optimization.

Army Acquisition Objective (AAO) for Hydraulic Electric Pneumatic Petroleum Operated Equipment (HEPPOE) is 710.

VSECK - Type I Carpenters Tool Kit Squad (CTKS) is a new configuration containing industrial quality hand tools, safety equipment, deployment bags and tool belts for up to eight Construction Engineers secured in a waterproof rapid inventory case. Hand tools include hammers, utility knives, chisels, punches, hacksaws, hand saws, pliers, screwdrivers, squares and tape measures. VSECK Type I replaces one

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R70001 / Family Of Engr Combat and Construction Sets

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

legacy system through modernization, consolidation and optimization. The legacy system this replaces does not meet current mission requirements and does not have any warranty associated with the current components. Army Acquisition Objective for Type I is 5517.

VSECK Type II Carpenters Supplemental Tool Kit (CSTK) is a new configuration containing battery powered & carpentry hand tools to increase productivity at remote sites supporting a platoon size element. The cordless tools are a minimum of 18v and standardized to use the same power source with a power management system capable of recharging multiple power sources simultaneously. Cordless power tools include: hammer drills, right angle drills, circular saws, jig saws and reciprocating saws. VSECK Type II replaces one legacy system through modernization, consolidation and optimization. The legacy system this replaces does not meet current mission requirements and does not have any warranty associated with the current components. Army Acquisition Objective for Type II is 830.

VSECK Type III Carpenters Tool Kit (CTK) is a new configuration containing commercial pneumatic, electric & hand carpentry tools that enable Soldiers to perform common carpentry tasks including construction of fighting positions, shelters, base camps, POW camps, temporary structures, bridges, ports & repair of existing structures. Tool load includes pneumatic nailer, blow gun, router, jig saw, 10" table saw, 10" circular saw, 14" cut off saw, 12" miter saw, nibbler, electric shears and tile cutter. VSECK Type III replaces one legacy system through modernization, consolidation and optimization. The legacy system this replaces does not meet current mission requirements and does not have any warranty associated with the current components. Army Acquisition Objective for Type III is 314.

VSECK Type IV Electricians Tool Kit (ETK) enables 3 electricians to perform construction & maintenance tasks related to distribution & transmission of electrical power: interior & exterior lighting, installation & repair of lighting & wiring aboard ships. Kit contains conduit benders, auger bits, pliers, knives, wood chisels, crimpers, tube & PVC cutters, key sets, levels multimeter, strippers, wrenches, ladders, electric saws & drills and flood lights. VSECK IV replaces one legacy system through modernization, consolidation and optimization. The legacy system this replaces does not meet current mission requirements and does not have any warranty associated with the current components. Army Acquisition Objective for Type IV is 928.

VSECK Type V Mason and Concrete Tool Kit (MCTK) includes brick hammers, levels, chalk line, rulers, plumb bobs, trowels, floats, bull floats, specialized floats, screeds, edger, groover, brooms, hoses & nozzles, mortar mixer, scaffolding, sealant sprayer, pliers, vibrator, cut-off saws, grinder, rebar cutters & benders, hacksaws, knee boards, mortar boards & stands, buckets, brushes, laser level, come-a-long, tarps, hoes, rakes & shovels. VSECK Type V replaces one legacy system through modernization, consolidation and optimization. The legacy system this replaces does not meet current mission requirements and does not have any warranty associated with the current components. Army Acquisition Objective for Type V is 892.

VSECK Type VI Plumbers and Pipefitters Tool Kit (PPTK) is specialized equipment required by a team of plumbers and pipefitters stock to perform construction and maintenance tasks working with metal, brass, aluminum, PVC or PEX. Contains hand tools enabling performance of individual & collective tasks related to heating & air conditioning, water distribution, waste water removal & solid waste removal. The tool load includes: hammers, hack saws, chisels, wrenches, pliers, putty knives, screwdrivers, saws, level plumb bob, tool box, ladder, powered saws & drills, pry & line up bars, tubing & pipe cutters, floodlight, key set, & plunger. VSECK VI replaces three legacy systems through modernization, consolidation and optimization. The legacy systems this replaces do not meet current mission requirements and do not have any warranty associated with the current components. Army Acquisition Objective for Type V is 898.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	7	260	157	-	157	159	363	445	572
	Total Obligation Authority	7.446	19.444	10.426	-	10.426	6.719	16.529	22.996	31.490
ANG	Quantity	168	197	-	-	-	-	-	-	-
	Total Obligation Authority	16.392	13.295	-	-	-	-	-	-	-
AR	Quantity	75	113	-	-	-	-	-	-	-
	Total Obligation Authority	10.706	6.434	-	-	-	-	-	-	-
Total:	Quantity	250	570	157	-	157	159	363	445	572
Secondary Distribution	Total Obligation Authority	34.544	39.173	10.426	-	10.426	6.719	16.529	22.996	31.490

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LI R70001 - Family Of Engr Combat and Construction S... Army

P-1 Line #146

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

R70001 / Family Of Engr Combat and Construction Sets

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready); A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

#### .....

#### Justification:

FY18 Funding in the amount of \$2.552 million procures 9 HEPPOE. The Engineer Equipment Set: Hydraulic-Electric-Pneumatic-Petroleum-Operated Equipment (HEPPOE) will enhance mission accomplishment by replacing outdated systems. Providing this soldier portable set will allow soldiers to increase capability to complete required missions, provide support to civil authorities, and deter/defeat hybrid threats in support of the Army process.

FY18 base funding in the amount of \$4.354 million procures 25 Urban Operations Platoon Sets. The Engineer Equipment Set: Urban Operations, Platoon Set (UOpPS) uniquely fills capability gaps that exist at the platoon level for conducting operations in urban environments. The specialized high technology tools included in this kit provide engineers, infantry, military police and other military units with enhanced capability to conduct operations in urban environments in a safe and expeditious manner. This set will standardize the tools used for conducting urban operations thereby reducing logistical support and provide a Type Classified (TC)-standard Army system.

FY18 base funding in the amount of \$.567 million procures 7 Urban Operations Squad Sets. The Engineer Equipment Set: Urban Operations, Squad Set (UOpSS) uniquely fills capability gaps that exist at the squad level for conducting operations in urban environments. The specialized low technology tools included in this set provide engineers, infantry, military police and other military units with enhanced capability to conduct operations in urban environments in a safe and expeditious manner. This set will standardize the tools used for conducting urban operations thereby reducing logistical support and provide a Type Classified (TC)-Army system.

FY18 base funding in the amount of \$.208 million procures 22 Type I VSECK assets. Currently there is a large capability gap in the field that severely needs this material solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the Soldier will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process.

FY18 base funding in the amount of \$.321 million procures 16 Type II VSECK assets. Currently there is a large capability gap in the field that severely needs this materiel solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the Soldier will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process.

FY18 base funding in the amount of \$.338 million procures 9 Type III VSECK assets. Currently there is a large capability gap in the field that severely needs this materiel solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the solider will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process.

FY18 base funding in the amount of \$.326 million procures 14 Type IV VSECK assets. Currently there is a large capability gap in the field that severely needs this materiel solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the Soldier will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process.

FY18 base funding in the amount of \$.348 million procures 8 Type V VSECK assets. Currently there is a large capability gap in the field that severely needs this material solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the Soldier will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process

FY18 base funding in the amount of \$1.412 million procures 47 Type VI VSECK assets. Currently there is a large capability gap in the field that severely needs this material solution for a rapidly available, portable and modernized tool kit for the Engineer community. This will increase productivity, expand capabilities, reduce risk and will contribute to rapid mobility of Construction Engineers. Providing this capability to the Soldier will increase the Soldier's ability to complete the required missions, provide support to civil authorities and deter/defeat hybrid threats in support of the Army process.

ONOL	ASSII ILD					
Y 2018 Army		<b>Date:</b> May 2017				
Activity: Support Equipment / BSA 25:	P-1 Line Item Number / Title: R70001 / Family Of Engr Combat and Construction Sets					
Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A				
1						
ense Authorization Act (P.L. 110-181), th ding military support to civil authorities.	ese items are necessary	for use by the active and reserve components of the Armed Forces for homeland				
	Y 2018 Army Activity: Support Equipment / BSA 25:  Program Elements for Code Beense Authorization Act (P.L. 110-181), the	P-1 Line Item No R70001 / Family  Program Elements for Code B Items: N/A  ense Authorization Act (P.L. 110-181), these items are necessary				

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P-1 Line #146

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

ML5301 / Items Less Than \$5M (Eng Spt)

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

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

Line Item MDAP/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
•					000							
Procurement Quantity (Units in Each)	522	1	20	-	-	-	-	-	-	-	-	543
Gross/Weapon System Cost (\$ in Millions)	219.782	0.595	0.300	-	-	-	-	-	-	-	-	220.677
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	219.782	0.595	0.300	-	-	-	-	-	-	-	-	220.677
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	219.782	0.595	0.300	-	-	-	-	-	-	-	-	220.677
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	!			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	421.038	595.000	15.000	_	_	_	_	_	_	-	-	406.403

#### **Description:**

Underwater Construction Set (UCS): The Underwater Construction Set (UCS) provides the MOS 12D Diver the tools and equipment required to support all Engineer Diving operations and will reduce the footprint of the legacy set from five individual containers (QUADCON) to four. The UCS includes the following package: Salvage package used for lifting heavy debris and recovering objects up to 160,000 pounds; Cutting and welding package used for underwater and surface operations; Reconnaissance package with increased capability using Instrument Set, Reconnaissance and Surveying (ENFIRE); Hydraulic tool package used for construction/debris removal and cutting concrete, wood, and metal; and Hand tools and hardware package for surface construction and support tools. Army Acquisition Objective (AAO) for UCS is 5.

Firefighting Protection Equipment (FPE): The Firefighter Protection Equipment (FPE) is a superior firefighting capability used in critical life and equipment saving situations due to Improvised Explosive Devices (IED) and battle damage. FPE is employed by soldiers as an immediate means to combat vehicle convoy fires and conduct rescue operations to extract trapped and injured soldiers from burning and damaged vehicles. FPE suppresses fires faster which will minimize fire damage and loss of equipment. The FPE set has been given a Joint Designator to support the Army as well as other services. FPE consists three types: Type 1 is a Soldier-portable firefighting set; Type 2 is a skid mounted system, with dual side rails to enhance mobility, capable of being used as a ground or vehicle mounted set; Type 3 is a larger set capable of being mounted as a secondary load to army vehicles or trailers. All three types of FPE provide a superior fire suppression capability for convoy operations in all combat, garrison operations and in all terrain and conditions. FPE equipment supports mounted and dismounted soldiers by increasing firefighting suppression capability at the immediate point of need. Army Acquisition Objective (AAO) is: Type I 9301, Type II 2048, Type III 543.

Firefighter Individual Requirements Equipment Set (FIRES): The Firefighter Individual Requirements Equipment Set (FIRES) is an assembly of standardized critical life saving fire fighting suits and equipment consisting of a Structural, Aircraft and Wildland fire fighting set to support the MOS 12M Army and Department of Defense (DoD) Firefighters. The FIRES equipment provides the Soldier/DoD Firefighter with the capability to safely conduct life, equipment and property saving fire fighting missions in all terrain, conditions, combat operations, garrison environments and disaster relief support. The FIRES has the deployability, transportability, versatility and functionality to support early entry expeditionary forces, counter- IED operations, and battle damaged equipment recovery. FIRES provides rapid fire fighting capability to commanders at Combat Operating Bases (COB), Forward Operating Bases (FOB) Camp/Station to support all military and sustainment operations. Army Acquisition Objective (AAO) for FIRES is 868.

Family of High Pressure Breathing Air Compressors (FoHPBAC): The Family of High Pressure Breathing Air Compressors (FoHPBAC) will provide pure breathing air in support of the Self Contained Underwater Breathing Apparatus (SCUBA), Surface Supplied Diving operations, Fire Fighting Missions, and Chemical operations. This set will serve to replace and modernize current equipment and provide current and safe technology for these critical life support systems and supports the following MOS: Engineer Diver (12D), Special Forces Diver (18 series), Rangers combat diver, and 21M Fire Fighters. The FoHPBAC is

Exhibit P-40, Budget Line Item Justification: FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

ML5301 / Items Less Than \$5M (Eng Spt)

Combat Service Support Equipment ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

100% commercial off the shelf and will consist of three different compressor variants: Type I 26 Cubic Feet per Minute (CFM), 5000 Pounds per Square Inch (PSI) compressor; Type II Diving 6.0 CFM 5000 PSI compressor: and Type II Fire 6.0 CFM 5000 PSI CFM 5000 PSI compressor with blast cabinet. Army Acquisition Objective (AAO) for FoHPBAC; Type I 12, Type II Diving 40, and Type II Fire 118.

Family of Boats & Motors (FoBaM): The Family Boats and Motors (FoBaM) will replace current outdated legacy systems and support both engineer and special forces in a variety of operations such as: assault landings; reconnaissance and river crossing operations; infiltration and exfiltration; long-range surveillance; amphibious raid, surface swimming, dive, submarine, ravine, anti-mine, bridging, and air operations; underwater construction; underwater repair work; dam and pier repairs; light salvage; and humanitarian aid/disaster relief. The FoBaM will consist of a 3-Person Pneumatic Combat Reconnaissance Craft(P-CRC), 7-Person Inflatable Combat Raiding Craft (I-CRC), 15-Person Inflatable Combat Assault Craft (I-CAC), I-CRC Submersible Outboard Motor, I-CAC Submersible Outboard Motor, and a Rigid Inflatable Combat Support Craft (RI-CSC). Army Acquisition Objective (AAO) for FoBaM is: 7-person I-CRC 922, 15-person I-CAC 528, I-CRC Outboard Motor 922, I-CAC Outboard Motor 528, and RI-CSC 29. In FY16, funds in this program are realigned to Family of Boats and Motors, SSN R12001 for more efficient effective program management.

Deep Sea Set (DSS): The Deep Sea Set provides diver-worn critical life support and safety related equipment required to conduct surface supplied diving operations in accordance with all commercial and military safety standards. It includes a full helmet diving assembly that provides air, and protection from pollution, falling debris, and other hazards. It allows for communications with the surface in a dry environment, and is required equipment for construction, cutting and welding, and salvage operations. The set also includes an umbilical assembly that supplies breathing air, depth monitoring and a communications/strength member capable of supporting the diver's weight. The communications assembly allows three divers and the diving supervisor to communicate. The set can be used to a depth of 250 feet and is the only system that protects the diver while conducting heavy construction and salvage operations. Army Acquisition Objective (AAO) for DSS is 6. In FY16, funds for this program are realigned to Family of Diver Support Equipment, SSN R07005 for more efficient, effective program management.

Diving Equipment: The critical life support and safety related sets include Underwater Construction Set; Underwater Photo Set; Supervisor, Propulsion, Emergency and Recovery Set (SPEARS) Set; Surface Swimmer Support Set: Individual Swimmer Support Set: Deep Sea Set: and Closed & Open Circuit Set. Engineer divers support Corps/Theater level operations as a force multiplier by performing current diving missions in South West Asia to include debris removal, bridge construction, salvage operations, underwater mine and explosive detection, and personnel recovery operations. Special operations dive teams use the sets for clandestine combat waterborne infiltration/ex-filtration and to aid in search and recovery operations.

Pioneer Land Clearing and Building Erection Set: Provides safety equipment for working above ground and for chain saw operation. The set is configured with individual hand and pioneer tools to enable engineer squads to perform individual and collective tasks in a timely manner, such as construction of field fortifications and protective shelters; construction operations in restricted terrain, construction of individual Soldier and critical asset survivability positions; obstacle emplacement and obstacle marking.

Army Acquisition Objective (AAO) for Pioneer Land Clearing and Building Erection set is 805.

Vertical Skills Engineer Construction Kit (VSECK): The VSECK effort combines eight existing sets into a family of six systems which include hand and power tools used by carpenters, plumbers, pipefitters, electricians, and concrete & masonry craftsmen. VSECK systems leverage the latest in technological advances to support tactical missions providing means for security, stability, transition and reconstruction across Unified Land Operations. The family of VSECK enables Soldiers to efficiently respond to catastrophic events requiring humanitarian aid by enabling civil authority and shaping recovery efforts. Army Acquisition Objective (AAO) for VSECK is: Type 1 - Carpenters Tool Kit Squad (CTKS) 5,517; Type II - Carpenters Supplemental Tool Kit (CSTK) 830; Type III - Carpenters Tool Kit (CTK) 314; Type IV -Electricians Tool Kit (ETK) 928; Type V - Mason & Concrete Tool Kit (MCTK) 892; Type VI - Plumbers & Pipefitters Tool Kit (PPTK) 898. In FY17, VSECK will move to Engineer Combat and Construction Sets (ECACS), SSN R70001 for more efficient, effective program management.

This buys a variety of critical life support equipment such as; diving equipment, fire supression sets, and soldier portable Engineer kits.

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1	20	-	-	-	-	-	-	-
	Total Obligation Authority	0.595	0.300	-	-	-	-	-	-	-
Total:	Quantity	1	20	-	-	-	-	-	-	-

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P-1 Line #147

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 25:

ML5301 / Items Less Than \$5M (Eng Spt)

Combat Service Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distribution	<b>Total Obligation Authority</b>	0.595	0.300	-	-	-	-	-	-	-

#### Justification:

There is no FY18 Base or OCO procurement funds to support this program.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these items are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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P-1 Line #147

90

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30:

MB6400 / QUALITY SURVEILLANCE EQUIPMENT

Petroleum Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	4	6	5	-	5	5	-	-	-	-	20
Gross/Weapon System Cost (\$ in Millions)	129.387	5.368	9.287	6.903	-	6.903	6.670	-	-	-	-	157.615
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	129.387	5.368	9.287	6.903	-	6.903	6.670	-	-	-	-	157.615
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	129.387	5.368	9.287	6.903	-	6.903	6.670	-	-	-	-	157.615
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	!			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1,342.000	1,547.833	1,380.600	-	1,380.600	1,334.000	-	-	-	-	7,880.750

#### **Description:**

Quality Surveillance Equipment is a family of petroleum and water laboratories used to evaluate the quality of military fuels and palatable water for our soldiers.

The Petroleum Quality Analysis System Enhanced (PQAS-E) is a fully integrated fuel laboratory installed in an environmentally controlled International Organization for Standardization (ISO) style shelter mounted on a trailer with support equipment, supplies, and a tent. The mission of the PQAS-E consists of testing fuels received through normal supply channels, locally procured from civil sources, and captured enemy stocks. The PQAS-E is employed as the Army's single petroleum laboratory capable of performing all levels of quality surveillance tests throughout each echelon on the battlefield. The PQAS-E is capable of modified B-2 level testing In Accordance With (IAW) Military Standard (MIL-STD) 3004 on kerosene based (e.g. Jet Propellant [JP] 5, JP-8, Jet A, Jet A-1) and diesel military mobility fuels. The shelter contains fuel test equipment (Automated Instrumentation System [AIS]), support equipment and supplies, an Environmental Control Unit (ECU), and an Auxiliary Power Unit (APU). System software provides an information database/expert system for the technician to consult in the interpretation of test results and in making recommendations for the disposition of fuels. The automated data acquisition features allow test data from instrumentation to be sent directly to the system software, which reduces data transcription errors and eliminates the need for hard-copy laboratory notebooks. The PQAS-E system is being built at Rock Island Arsenal. The Army Acquisition Objective (AAO) is 92 PQAS-E systems.

				FY 2018	FY 2018	FY 2018		<b>-</b> 2.000		
Secondary	Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	2	5	2	-	2	3	-	-	-
	Total Obligation Authority	2.662	7.016	2.709	-	2.709	4.038	-	-	-
ANG	Quantity	1	1	3	-	3	2	-	-	-
	Total Obligation Authority	1.353	2.271	4.194	-	4.194	2.632	-	-	-
AR	Quantity	1	-	-	-	-	-	-	-	-
	Total Obligation Authority	1.353	-	-	-	-	-	-	-	-
Total:	Quantity	4	6	5	-	5	5	-	-	-
Secondary Distribution	Total Obligation Authority	5.368	9.287	6.903	-	6.903	6.670	-	-	-

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Exhibit P-40, Budget Line Item Justification	n: FY 2018 Army		<b>Date:</b> May 2017	_			
Appropriation / Budget Activity / Budget Society / Badget		P-1 Line Item Number / Title:  MB6400 / QUALITY SURVEILLANCE EQUIPMENT					
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A							
Petroleum and Water Quartermaster (QM) War Fighting capability down to brigade level in a flexible, responsive,	Capabilities. Quality surveillance of bulk fuel is mobile lab mounted on a 5-ton trailer. The PC Armed Ground Forces' strategic responsivene	critical to aviation and o QAS-E is required for co	from Rock Island Arsenal to support the Modular Brigades and enhances the ground mobility equipment. The PQAS-E gives bulk petroleum quality surveillance inducting quality tests on kerosene based and diesel fuels thus ensuring quality projection. The fuels that we put in our warfighting platforms must meet purity				

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30:

MA6000 / Distribution Systems, Petroleum & Water

Petroleum Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	1,861	291	773	523	-	523	485	501	459	566	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing
(The following	Resource Sumi	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	451.562	121.584	156.398	91.008	-	91.008	101.087	104.968	102.015	65.168	Continuing	Continuing

#### **Description:**

The Family of Petroleum and Water Distribution Systems supports the Army Equipment Modernization Strategy of 2025, along with the Army's mission to supply bulk fuel and water, at the operational and tactical levels, to all Department of Defense (DoD) forces in the various worldwide Joint Operations Area. The systems support aircraft refueling, ground vehicles, and other Army equipment. Distribution Systems are comprised of hoses, pumps, tanks, filter separators, fittings, couplings, and nozzles.

The Modular Fuel System (MFS) Tank Rack Module (TRM) is a 2,500 gallon mobile storage and distribution platform. It is configured in a 20 foot ISO frame with integrated bale bar and is Heavy Expanded Mobility Tactical Truck-Load Handling System (HEMTT-LHS), Palletized Load Handling System (PLS) and PLS Trailer transportable. The MFS-TRM has a Stand-Alone Retail Capability (S-ARC) with its integrated continuous use electric pump, filter separator and flow meter. It can be operated while truck or trailer mounted or on the ground. The MFS-TRM can also be coupled with the HEMTT Tanker to form a highly mobile 5,000 gallon distribution platform within Brigade Combat Teams. Seven MFS-TRMs and one Pump Rack (PRM) Module form the full Modular Fuel System, which provides the ability to rapidly establish a fuel distribution and storage capability at any location regardless of the availability of construction equipment or material handling equipment. The Army Acquisition Objective (AAO) is 3,340 TRMs.

The Modular Fuel System (MFS) Pump Rack Module (PRM) is fuel pumping capability for use with Tank Rack Modules (TRM) or Collapsible Fabric Storage Tanks to create a bulk fuel storage and distribution system. The MFS-PRM is configured in a 20 foot ISO frame with integrated bale bar and is HEMTT-LHS, PLS and PLS Trailer Transportable. It has a 600 gallon per minute pump, filter separator, and on board storage with sufficient hoses, fittings and nozzles for eight bulk or retail refueling points. The MFS-PRM and MFS-TRM provide the ability to rapidly establish a fuel distribution and storage capability at any location regardless of the availability of construction equipment or material handling equipment. The full MFS consists of one PRM and seven TRMs. The Army Acquisition Objective (AAO) is 27 PRMs.

The Load Handling System (LHS) Compatible Water Tank Racks System (Hippo) is a 2000 gallon potable water tank. It is configured in a 20 foot ISO frame with integrated bale bar and is Heavy Expanded Mobility Tactical Truck-Load Handling System (HEMTT-LHS), Palletized Load Handling System (PLS) and PLS Trailer transportable. The Hippo can distribute to multiple locations or be placed on the ground/ off-loaded to establish a water supply point. It is outfitted with a water pump, hose reel, and filling station. It is used for bulk load and discharge, retail distribution, and bulk storage of potable water. Hippos will replace the Semi-trailer Mounted Fabric Tank (SMFT) and most Forward Area Water Point Supply Systems (FAWPSS). The Army Acquisition Objective (AAO) is 2,911 Hippo systems.

The Expeditionary Water Packaging System (EWPS) is a completely containerized fully automated water packaging system that fills and caps one-liter bottles with potable water for individual Soldier consumption. The EWPS features end-to-end automated production (e.g. loading pre-forms, stretch blow molding of pre-forms into bottles, filling, capping, and labeling) within a closed, hygienic environment. It is capable of filling, at a minimum, 900 one-liter plastic bottles per hour. The EWPS is powered by multiple sources to include standard military or commercial generator sets. The finished bottles are palletized for shipment. The EWPS provides the following three main benefits: (1) reduces distribution footprint for bottled water and causalities associated with line haul distribution; (2) provides inherent safety and health

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30:

MA6000 / Distribution Systems, Petroleum & Water

Petroleum Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

benefits over bulk systems through reduction of Soldier contamination at bulk system fill points; (3) minimizes the cost associated with procuring and transporting bottled water. The Army Acquisition Objective (AAO) is 30 EWPS systems.

The Camel II is an 800 gallon hard wall stainless steel water tank mounted on a 5-Ton trailer. It includes retail dispensing hardware comprised of the hoses and fittings necessary to gravity dispense water. The Camel II also includes integrated freeze protection that can be powered by external sources. The Camel II will partially replace the M149 and M1112 (400 gallon) potable water trailers within Field Feeding Units with Containerized Kitchens (CKs). The increase from 400-gallons to 800-gallons in capacity will decrease the frequency of water refill requirements by reducing the number of resupplies required per day. The Camel II will provide a CK with a greater capacity for carrying one full day of supply (DOS) of potable water required, approximately 1.92 gallons/person/day (gpd), for field feeding (two Unitized Group Rations [UGRs] and one Meal, Ready to Eat [MRE] per day). Current and emerging doctrine dictates the need for a combat enabler that increases unit level storage and DOS capabilities on the battlefield. Camel II will interface with the MTV 5-ton Truck as the prime mover and is operationally compatible with existing and future water purification, transport, and distribution systems. The design of Camel II Increment One includes an allowance for the space and weight necessary for the add-on capability of Increment Two, which includes a modular unit capable of water chilling, circulation, pumping (self-load/unload), and power generation. The Army Acquisition Objective (AAO) is 488 CAMEL IIs.

The Early Entry Fluid Distribution System (E2FDS) is a highly automated flexible conduit system that complements the Inland Petroleum Distribution System (IPDS) by providing up to 50 miles of early entry capability for petroleum and water throughput. It can throughput 850,000 gallons of petroleum or 650,000 gallons of non-potable water per day and is able to emplace/retrieve conduit at a rate of 25/10 miles per day respectively. The E2FDS consists of five major modules: automated pump stations, Employment and Retrieval System (ERS), 50 miles of flexible conduit and conduit support equipment, command and control, and a trace planning tool. The components of the E2FDS will be packaged in ISO (nine high stackable) 20-foot equivalent units (TEU) for deployment and are transportable via Heavy Expanded Mobility Tactical Truck (HEMTT) Load Handling System (LHS), Palletized Load System (PLS) and PLS Trailer. During the early phases of operations, the E2FDS reduces the requirement for line-haul petroleum semitrailers and relieves main supply route congestion. The E2FDS enables rapid setup of the conduit trace, and the automation and centralized control enable greater precision of pipeline operations with fewer personnel. Once the IPDS pipeline is emplaced, the E2FDS can be used to extend the pipeline trace or be moved to another location. The Army Acquisition Objective (AAO) is 12 (5 mile sets).

The Mobile Tactical Retail Refueling System (MTRRS) provides retail fuel distribution for echelons above brigade organizations. It consists of a 1050 gallon tank, pump, and filter/separator mounted in a rack that is Family of Medium Tactical Vehicles (FMTV) transportable. The MTRRS can be operated while on the truck or on the ground. It will replace the aging Tank and Pump Unit (TPU) and the Tank Unit Liquid Dispensing (TULD) systems. The Army Acquisition Objective (AAO) is 2,464.

The Fuel System Supply Point (FSSP) is a family of systems which consists of three storage capacities: 120K, 300K, and 800K gallon systems. This system is a bulk fuel receiving, issuing, and storing facility consisting of a 600 Gallons per Minute (GPM) pump, 350 GPM pump, 350 GPM filter separator and collapsible fabric storage tanks. The tanks vary in size from 20,000 gallons to 210,000 gallons. The 120K FSSP has 6 ea 20K fuel bags and 2 ea 350 GPM pumps. The 300K FSSP has 6 ea 20K fuel bags and 2 ea 350 GPM pumps. The Army Acquisition Objective (AAO): FSSP 120K is 178 systems. FSSP 300K is 219 systems. and FSSP 800K is 58 systems.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	52	526	267	-	267	248	210	221	566
	Total Obligation Authority	13.631	99.716	28.607	-	28.607	29.550	35.168	31.947	36.885
ANG	Quantity	208	203	223	-	223	169	246	190	=
	Total Obligation Authority	17.250	16.494	15.613	-	15.613	13.168	14.545	11.914	-
AR	Quantity	31	44	33	-	33	68	45	48	-
	Total Obligation Authority	4.500	4.686	3.377	-	3.377	6.309	2.876	2.964	=
Total:	Quantity	291	773	523	-	523	485	501	459	566
Secondary Distribution	Total Obligation Authority	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30:

MA6000 / Distribution Systems, Petroleum & Water

Petroleum Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	M60300 / FUEL SYSTEM SUPPLY POINT	P-5a	Α		- / 322.548	- / -	68 / 60.120	- / -	- / -	- / -
P-5	R02600 / Modular Fuel System (MFS)	P-5a, P-21	Α		385 / 191.281	286 / 16.134	349 / 22.253	365 / 21.610	- / -	365 / 21.610
P-5	R02670 / EXPEDITIONARY WATER PACKAGING SYSTEM (EWPS)		Α		- / 1.615	2 / 3.001	2 / 3.582	2 / 3.116	- / -	2 / 3.116
P-5	R02690 / EARLY ENTRY FLUID DISTRIBUTION SYSTEM (E2FDS)	P-5a	В		- / -	- / -	- / 0.748	1 / 5.706	- / -	1 / 5.706
P-5	R38000 / Mobile Tactical Refueling System		В		- /5.911	- / -	10 / 1.660	58 / 4.082	- / -	58 / 4.082
P-5	R38100 / HIPPO WATER DISTRIBUTION SYSTEM	P-5a	Α		1,476 / 235.764	- / 14.429	261 / 24.976	56 / 8.181	- / -	56 / 8.181
P-5	R38101 / Unit Water Pod System (Camel)	P-5a	Α		- / 83.238	3 / 1.817	83 / 7.557	41 / 4.902	- / -	41 / 4.902
P-40	Total Gross/Weapon System Cost		1,861 / 840.357	291 / 35.381	773 / 120.896	523 / 47.597	- 1 -	523 / 47.597		

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 Base funding in the amount of \$47.597 million supports the procurement of the Modular Fuel System (MFS), Hippo Water Distribution Systems, Expeditionary Water Packaging Systems (EWPS), Unit Water Pod System (CAMEL II), Mobile Tactical Refueling System (MTRRS), and Early Entry Fluid Distribution System (E2FDS). The Army is the executive agent for the Management of Land-Based Water Resources in support of Contingency Operations and has responsibility for all inland distribution of fuel and water to include support to other services. Distribution Systems support the Stryker Brigade Combat Teams (SBCTs), Brigade Combat Teams, Field Artillery, Maneuver Enhancement Brigades, and the Petroleum and Water Quartermaster (QM) modular force warfighting capabilities. These systems are the Army's primary means of distributing and issuing retail and bulk petroleum and water. The Army cannot fight without clean water and fuel. These systems enable the Army to achieve its Force 2025 vision by providing highly mobile and self-sustaining equipment to hostile theaters of operation. The ability to rapidly, efficiently, and safely distribute fuel on the battlefield is a critical combat enabler. Funding supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements to support Active, National Guard, and Reserve Components.

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Exhibit P-5, Cost	Analysis	s: FY 20	18 Army	,										Date: N	/lay 2017							
<b>Appropriation / B</b> 2035A / 03 / 30	udget A	ctivity /	Budget	Sub Acti	ivity:		P-1 Line Item Number / Title:  MA6000 / Distribution Systems, Petroleum & Water									Item Number / Title [DODIC]: M60300 / FUEL SYSTEM SUPPLY POINT						
ID Code (A=Service Read	ly, B=Not Servi	ice Ready) :	A			,			MI	DAP/MAIS	Code:											
F	Resource	Summ	ary			Prior Ye	ars	FY 20	)16	FY	2017	FY	2018 Bas	se F	Y 2018 (	ОСО	FY 2018	3 Total				
Procurement Quantity (Uni	its in Each)						-				(	68		-		-						
Gross/Weapon System Co		ıs)					322.548		_		60.12			-		-						
Less PY Advance Procure							-		_					-		-						
Net Procurement (P-1) (\$ i	n Millions)	,					322.548		_		60.12	20		-		-						
Plus CY Advance Procure	ment (\$ in Mili	lions)					-		_		_			-		-						
Total Obligation Authori	y (\$ in Millions	s)					322.548		-		60.12	20		-		-						
	he following l	Resource Su	ummary row	s are for info	rmational p	purposes onl	y. The corres	ponding bud	lget reguesi	s are docume	ented elsew	here.)				· · · · · · · · · · · · · · · · · · ·						
Initial Spares (\$ in Millions)			-				-		-		_			-		-						
Gross/Weapon System Ur	nit Cost (\$ in 7	Thousands)					-		_		884.1	18		-		-						
		-														ı						
Note: Subtotals or Totals i	n this Exhibit	P-5 may no	ot be exact o	r sum exactly	y due to ro	unding.	"								'							
	F	Prior Years	rior Years FY 2016			FY 2016				FY	′ 2018 Bas	se	F	Y 2018 O	СО	F	Y 2018 Tot	tal				
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost				
Flyaway Cost	(\$10)	(Lacii)	(\$ W)	(\$10)	(Lacii)	(\$ W)	(\$ 11)	(Lacii)	(\$ W)	(\$70)	(Lacii)	(\$ 101)	(\$10)	(Lacii)	(\$ 101)	(\$10)	(Lacii)	(\$ 101)				
Recurring Cost																						
FSSP 300K SIAD <sup>(†)</sup>	-	-	22.083	-	_	-	814.000	68	55.352	_	-	_	-	-	-	-	-					
Engineering Changes	-	-	14.238	-	-	-	-	-	0.848	-	-	-	-	-	-	-	-					
System Engineering/ Program Management	-	-	95.627	-	-	-	-	-	1.200	-	-	-	-	-	-	-	-					
System Test & Evaluation, Production	-	-	10.600	-	-	-	-	-	0.450	-	-	-	-	-	-	-	-					
Training	-	-	25.000	-	-	-	-	-	0.450	-	-	-	-	-	-	-	-					
Data	-	-	20.000	-	-	-	-	-	0.350	-	-	-	-	-	-	-	-					
Support Equipment	-	-	35.000	-	-	-	-	-	0.520	-	-	-	-	-	-	-	-					
Fielding	-	-	100.000 322.548	-	-	-	-	-	0.950 60.120	-	-	-	-	-	-	-	-					
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	322.548 322.548	-	-	-	-	-	60.120		-	-	-	-	-	-	-					
Gross/Weapon System	_	_	322.548	-	_	_	884.118	68	60.120	-	_	_	-	_	_	_	-					
Cost	_		322.340				004.110	00	00.120								_					
	Sec	ondary Di	stribution				FY	2016		FY 2017			2018 ise		FY 2018 OCO		FY 20 <sup>-</sup> Total					
Army		Qua	intity						-		68		-			-						
		Tota	al Obligation A	uthority					-		60.120		-			-						
Total:		Qua	intity						_		68		_	1		_						

LI MA6000 - Distribution Systems, Petroleum & Water Army

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P-1 Line #149

Exhibit P-5, Cost Analysis: FY 2018 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: M60300 / FUEL SYSTEM SUPPLY POINT
ID Code (so the property of th	MDAD/MAIS Code:	

ID Code (A=Service Ready, B=Not Service R	Ready): A		MDAP/MAIS Code	):		
Second	dary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Secondary Distribution	Total Obligation Authority	-	60.120	-	-	-

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018	3 Army				Date	: May 201	7		
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Nun MA6000 / Distributi	nber / Title: on Systems, Petroleum	& Water			Number / 300 / FUEI NT	-	•	LY
0	Method/Type		and	Date			Specs [	Date	DED 1

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
OOST Elements	•		Contractor and Ecoation	i anding vernore	Location of 1 00	Dute	Denvery	(Lacii)	(\$11)	11011	Available	Date
FSSP 300K SIAD		2017	Sierra Army Depot / Herlong	MIPR	TACOM	Jan 2017	Nov 2017	68	814.000	Y		

							UI	NCLAS	SIFIED	)								
Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: M	lay 2017			
<b>Appropriation / B</b> 2035A / 03 / 30					vity:			n Numbe tribution		s, Petrole	um & Wa	ter			imber / 1 / Modula		DIC]: ystem (M	1FS)
ID Code (A=Service Read	y, B=Not Servic	e Ready) : A	4						М	DAP/MAIS	Code:		l					
F	esource	Summa	arv		F	Prior Yea	ars	FY 20	16	FY 2	2017	FY 2	2018 Bas	se F	Y 2018 C	ОСО	FY 2018	Total
Procurement Quantity (Uni							385		286		349	)		365		-		36
Gross/Weapon System Co		)					191.281		16.134		22.253	3	2	1.610		-		21.61
Less PY Advance Procure							-		-		-			-		-		_
Net Procurement (P-1) (\$ i	n Millions)						191.281		16.134		22.253	3	2	1.610		-		21.6
Plus CY Advance Procure	ment (\$ in Millio	ons)					-		-		-			-		-		-
Total Obligation Authorit	<b>y</b> (\$ in Millions)						191.281		16.134		22.253	3	2	1.610		-		21.61
(Tř	e following R	esource Su	mmary row	s are for info	rmational pu	ırposes only	. The corres	ponding bud	get request	s are docume	nted elsewh	ere.)				· ·		
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Ur	it Cost (\$ in TI	nousands)					496.834		56.413		63.762	2	5	9.205		-		59.20
Note: Subtotals or Totals ii	n this Exhibit I	P-5 may no	t be exact o	r sum exactly	due to rou	nding.												
	_	rior Years			FY 2016			FY 2017		FY	2018 Base	)	F'	Y 2018 OC	co	F	Y 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(+ - 7	(====)	(+)	(+1)	(====)	(+)	(+1)	(===-/	(+)	(+ - 9	(===-,	(+)	(+1)	(====)	(+)	(+1)	(====)	(\$)
Recurring Cost																		
Pump Rack Modules <sup>(†)</sup>	-	-	-	450.000	3	1.350	450.000	3	1.350	-	-	-	-	-	-	-	-	-
Tank Rack Modules <sup>(†)</sup>	42.000	385	16.170	47.000	286	13.442	50.000	349	17.450	50.000	365	18.250	-	-	-	50.000	365	18.25
Engineering Changes	-	-	35.000	-	-	0.434	-	-	0.800	-	-	0.456	-	-	-	-	-	0.45
System Engineering/ Program Management	-	-	65.138	-	-	0.508	-	-	1.350	-	-	1.527	-	-	-	-	-	1.52
System Test & Evaluation, Production	-	-	36.729	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.10
Training	-	-	0.984	-	-	0.050	-	-	0.088	-	-	0.092	-	-	-	-	-	0.09
Data	-	-	2.350	-	-	0.050	-	-	0.090	-	-	0.050	-	-	-	-	-	0.05
Support Equipment Fielding	-	-	3.150 31.760	-	-	0.048	-	-	0.085 1.040	-	-	0.089 1.046	-	-	-	-	-	1.04
Subtotal: Recurring Cost	-	-	191.281	-	-	16.134	-	-	22.253	-	-	21.610		-	-	-	-	21.61
Subtotal: Flyaway Cost	-	_	191,281	_	_	16.134	_	_	22.253		-	21,610	_	_	_	_	_	21.6
Gross/Weapon System Cost	496.834	385	191.281	56.413	286	16.134	63.762	349	22.253	59.205	365	21.610	-	-	-	59.205	365	21.61
<u> </u>	Seco	ndary Dis	stribution				FY	2016		FY 2017		FY 2			FY 2018 OCO		FY 201 Total	
Army	0600	Quar							47	2017	241	Das	19	5		-	iotai	19
,			Obligation A					2.7			15.552		11.54	_		-		11.54

LI MA6000 - Distribution Systems, Petroleum & Water Army

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P-1 Line #149

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 30	MA6000 / Distribution Systems, Petroleum & Water	R02600 / Modular Fuel System (MFS)

ID Code (A=Service Ready, B=Not Service	Ready) : A		MDAP/MAIS Code	):		
Secon	dary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
ANG	Quantity	208	108	170	-	170
	Total Obligation Authority	11.650	6.701	10.065	-	10.065
AR	Quantity	31	-	-	-	-
	Total Obligation Authority	1.770	-	-	-	-
Total:	Quantity	286	349	365	=	365
Secondary Distribution	Total Obligation Authority	16.134	22.253	21.610	-	21.610

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 30	MA6000 / Distribution Systems, Petroleum & Water	R02600 / Modular Fuel System (MFS)

					•						•	` ,
Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue
Pump Rack Modules		2016	DRS - PRM / St. Louis, MO	SS / FFP	TACOM	Nov 2015	Jul 2016	3	450.000	Υ		
Pump Rack Modules		2017	DRS - PRM / St. Louis, MO	SS / FFP	TACOM	Nov 2016	Jul 2017	3	450.000	Y		
Tank Rack Modules		2015	ISOMETRICS - TRM / Reidsville, NC	C / FFP	TACOM	Mar 2015	Nov 2015	385	48.000	Y		
Tank Rack Modules <sup>(†)</sup>		2016	ISOMETRICS - TRM / Reidsville, NC	C / FFP	TACOM	Mar 2016	Nov 2016	286	47.000	Y		
Tank Rack Modules <sup>(†)</sup>		2017	TBD / TBD	C / FFP	TACOM	Mar 2017	Nov 2017	349	50.000	N		
Tank Rack Modules <sup>(†)</sup>		2018	TBD / TBD	C / FFP	TACOM	Mar 2018	Nov 2018	365	50.000	N		

<sup>&</sup>lt;sup>(†)</sup> indicates the presence of a P-21

Exh	nib	it P	P-21, Pro	oducti	on Sc	hedu	le: F	/ 2018	3 Arm	ıy														Date	e: Ma	y 201	7				
		-	iation / 03 / 30	Budge	et Acti	vity /	Bud	get Sı	ıb Ac	tivity	:		<b>Line</b> .6000						roleur	n & V	/ater						<b>Title</b> ular F		DIC]: /stem	(MFS	3)
				lements in Each)								Fiscal Y	ear 2015											Fiscal Y	ear 2016			,			В
					ACCEPT										Calendar	Year 201	5								Caler	ndar Yea	r 2016				L
O F C R O #	1 : !	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2014	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	n 1	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J J	A U G	S E P	A N C E
Tank	Rac	ck Mo	dules																												
1	2	016	ARMY	286	0	286																		Α -	-	-	-	-	-	-	286
2	2	2017	ARMY	349	0	349																									349
2	2	2018	ARMY	365	0	365																									365
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	

Ex	thik	bit F	P-21, Pro	oducti	ion Sc	hedu	le: F	Y 201	3 Arm	у														Date	: May	/ 2017	7				
			<b>iation</b> / 03 / 30	Budge	et Acti	vity /	Budg	get Sı	ıb Ac	tivity:			_				Title:	, Petr	oleur	n & V	/ater					<b>ber</b> / Modu			DIC]: /stem	(MFS	3)
				lements in Each)								Fiscal Y	ear 2017											Fiscal Ye	ear 2018						ВА
	м				ACCEPT PRIOR	BAL			1					C	alendar	Year 20	17				1				Calen	dar Year	2018				L
0 C 0	F R #	FY	SERVICE	PROC QTY	TO 1 OCT 2016	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J U L	A U G	S E P	N C E
Tai	nk Ra	ack Mo	odules					•		'																					
	1	2016	ARMY	286	0	286	-	25	25	25	25	25	25	28	28	28	27	25		_											(
	2	2017	ARMY	349	0	349						Α -	-	-	-	-	-	-	-	32	32	32	32	32	32	32	32	32	29	32	С
	2	2018	ARMY	365	0	365		_																Α -	-	-	-	-	-	-	365
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

P-1 Line   Item Number / Title   Title   Number / Numb	Ex	hi	bit	P-21, Pro	ducti	on Sc	hedul	e: F\	2018	Arm	у														Date	e: Ma	y 201	7			
Service   Column   Fiscal Year   2019   Fiscal Ye					Budge	t Acti	vity /	Budg	jet Su	b Ac	tivity		1						, Petr	oleun	n & V	/ater									(MFS
0   M   F   F   N   N   N   N   N   N   N   N													Fiscal Ye	ear 2019											Fiscal Y	ear 2020			,		
O F C R FY SERVICE QTY 2018 1OCT T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N R I J J A S C N R R Y N R I J J A S C N R R R R R R R R R R R R R R R R R R															C	alendar	Year 201	9								Caler	ndar Year	2020		,	
1 2016 ARMY 286 286 0 2 2017 ARMY 349 349 0 2 2018 ARMY 365 0 365 - 30 30 30 31 31 31 31 30 30 30 30  O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A U U U U E C O E A E A P A U U U U E	o c	F R	FY	SERVICE		TO 1 OCT	DUE AS OF	С	0	E	J A N	F E B	Α	P	Α		J U L	U	S E P	С	0	E	Α	E	Α		Α		J U L	U	E
2 2017 ARMY 349 349 0 2 2018 ARMY 365 0 365 - 30 30 30 31 31 31 31 31 30 30 30 30  O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D J F M A M J J J A S O N D J F M A D U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U E C O E C O E A E A P A U U U U U U U E C O E C O E A E A P A U U U U U U E C O E C O E C O E A E A P A U U U U U U U U E C O E C	Tar	ık R	ack N	Modules					,				,					,													
2 2018 ARMY 365 0 365 - 30 30 30 31 31 31 31 31 30 30 30 30 30 30 30 30 30 30 30 30 30		1	2016	ARMY	286	286	0																								
O N D J F M A M J J A S O N D J F M A M J J A S C O E A E A P A U U U E C O E A E A P A U U U E	$\rightarrow$	$\rightarrow$				349															1										
C   O   E   A   E   A   P   A   U   U   U   E   C   O   E   A   E   A   P   A   U   U   U   E		2	2018	ARMY	365	0	365	-		30	30			31		31	30	30		30											
									0	E	Α	E	Α	P	Α		U L	U	E	С	0	E	Α	E	Α	P	Α		n n	U	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 30	MA6000 / Distribution Systems, Petroleum & Water	R02600 / Modular Fuel System (MFS)

		Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						Ir	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	ISOMETRICS - TRM - Reidsville, NC	15	32	45	0	(	8	14	0	6	8	14
2	TBD - TBD	15	32	45	0	(	8	14	0	6	8	14

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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-XIIIDICI O, GOOL	, ,a.y o.c	20	10 / 111119												, _0			
<b>Appropriation / E</b> 2035A / 03 / 30	Budget Ad	ctivity /	Budget	Sub Act	ivity:			n Numbe stribution		=	eum & W	/ater		R0267	lumber / 1 0 / EXPEI AGING SY	DITIONA	RY WAT	ER
ID Code (A=Service Rea	dy, B=Not Servi	ce Ready) :	A						МІ	DAP/MAIS	Code:							
	Resource	Summ	ary		F	Prior Yea	ars	FY 20	016	FY	2017	FY	2018 Bas	se	FY 2018 (	ОСО	FY 2018	Total
Procurement Quantity (Un	nits in Each)						-		2			2		2		-		2
Gross/Weapon System C	ost (\$ in Million	s)					1.615		3.001		3.5	82	3	3.116		-		3.116
Less PY Advance Procure	ement (\$ in Mill	ions)					-		-			-		-		-		-
Net Procurement (P-1) (\$	in Millions)						1.615		3.001		3.5	82	3	3.116		-		3.116
Plus CY Advance Procure	ement (\$ in Milli	ions)					-		-			-		-		-		-
Total Obligation Authori	ity (\$ in Millions,	)					1.615		3.001		3.5	82	;	3.116		-		3.116
(T	he following F	Resource S	ummary row	s are for info	rmational pu	ırposes only	. The corres	sponding bud	dget request	s are docum	ented elsew	here.)						
Initial Spares (\$ in Millions)							-		-			-		-		-		-
Gross/Weapon System U	nit Cost (\$ in T	housands)					-		1,500.500		1,791.0	00	1,558	8.000		-		1,558.000
Note: Subtotals or Totals	_	P-5 may no		r sum exactl	y due to rou	nding.		FY 2017		F	Y 2018 Bas	se	F	Y 2018 C	осо	F`	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					,			•					'					
Recurring Cost																		
Hardware Recurring	-	-	-	1,400.000	2	2.800	1,400.000	2	2.800	1,420.000	2	2.840	-	-		1,420.000	2	2.840
System Engineering/ Program Management	-	-	0.600	-	-	0.101	-	-	0.350	-	-	0.200	-	-		-	-	0.200
Training	-	-	0.300	-	-	-	-	-	0.100	-	-	-	-	-	-	-	-	-

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	2	2	2	-	2
	Total Obligation Authority	3.001	3.582	3.116	-	3.116
Total:	Quantity	2	2	2	-	2
Secondary Distribution	Total Obligation Authority	3.001	3.582	3.116	-	3.116

0.050

0.050

0.232

3.582

3.582

3.582

-

1,558.000

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LI MA6000 - Distribution Systems, Petroleum & Water Army

-

Data

Fielding

Subtotal: Flyaway Cost

Cost

Gross/Weapon System

Support Equipment

Subtotal: Recurring Cost

0.500

0.215

1.615

1.615

1.615

-

1,500.500

0.100

3.001

3.001

3.001

1,791.000

Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line #149

-

0.076

3.116

3.116

3.116

-

1,558.000

**Date:** May 2017

106

0.076

3.116

3.116

3.116

Exhibit P-5, Cost	Analysis	: FY 20	18 Armv	,										Date: N	/lay 2017			
Appropriation / B 2035A / 03 / 30					ivity:		L <b>ine Item</b> 000 / Dis			s, Petrole	um & W	ater	I	tem N R02690	umber / 1 D / EARLY BUTION	/ ENTRY	'FLŪID	 S)
ID Code (A=Service Read	ly, B=Not Servi	ce Ready) : I	<u></u> В						М	DAP/MAIS	Code:						`	
F	Resource	Summ	ary		F	Prior Ye	ars	FY 20	016	FY	2017	FY	2018 Bas	e l	Y 2018 (	ОСО	FY 2018	Total
Procurement Quantity (Uni	ts in Each)						-		-		_			1		-		
Gross/Weapon System Co		5)					-		_		0.74	18	5	.706		-		5.70
Less PY Advance Procure	ment (\$ in Mill	ions)					-		-					-		-		
Net Procurement (P-1) (\$ i	n Millions)	,					-		-		0.74	18	5	.706		-		5.70
Plus CY Advance Procure		ons)					-		_		_			-		-		_
Total Obligation Authorit	•						-		-		0.74	18	5	.706		-		5.70
	ne followina F	esource Si	ummary row	s are for info	rmational p	urposes onl	v. The corres	pondina bud	daet reauest	s are docume	ented elsew	here.)						
Initial Spares (\$ in Millions)						,	-	,,,,,,,,,	-		-			_		-		
Gross/Weapon System Ur	nit Cost (\$ in T	housands)					-		_		-		5,706	5.000		-		5,706.00
. ,							I			l			<u> </u>	l		l		
Note: Subtotals or Totals i	n this Exhibit	P-5 may no	t be exact o	or sum exactl	y due to rou	inding.												
	Р	rior Years	3		FY 2016			FY 2017		FY	2018 Bas	e	FY	′ 2018 O	СО	F	Y 2018 Tot	lal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(\$10)	(Lacii)	(\$ 101)	(\$ 11)	(Lacii)	(\$ 101)	(\$ 11)	(Lacii)	(\$ 101)	(\$10)	(Lacii)	(\$ 101)	(\$10)	(Lacii)	(\$ 101)	(\$10)	(Lacii)	(\$ 101)
Recurring Cost																		
E2FDS System <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	2,950.000	1	2.950	-	-	-	2,950.000	1	2.95
Engineering Changes	-	-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.50
System engineering/ Program management	-	-	-	-	-	-	-	-	0.748	-	-	0.956	-	-	-	-	-	0.95
System Test & Evaluation, Production	-	-	-	-	-	-	-	-	-	-	-	0.450	-	-	-	-	-	0.45
Training	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.20
Data	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.20
Support Equipment	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-		-	-	0.20
Fielding	-	-	-	-	-	-	-	-	-	-	-	0.250	-	-		-	-	0.25
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	0.748 <b>0.748</b>	-	-	5.706 <b>5.706</b>	-	-		-	-	5.70 <b>5.70</b>
Subtotal: Flyaway Cost  Gross/Weapon System	-	-	-	-	-	-	-	-					-	-	-			
Cost	-	-	-	-	-	-	-	-	0.748	5,706.000	1	5.706	-	-	-	5,706.000	1	5.70
	Seco	ondary Di	stribution	l			FY	2016		FY 2017		FY 2 Ba			FY 2018 OCO		FY 201 Total	
Army		Qua	ntity						-		-		1			-		
		Tota	l Obligation A	uthority					-		0.748		5.706	6		-		5.70

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P-1 Line #149

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 30	MA6000 / Distribution Systems, Petroleum & Water	R02690 / EARLY ENTRY FLUID
		DISTRIBUTION SYSTEM (E2FDS)
ID Code (t. o. i. p. t. p. t. p. t. p.	MDAD/MAIS Codo:	•

ID Code (A=Service Ready, B=Not	t Service Ready) :B		MDAP/MAIS Code	<b>):</b>		
	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Secondary Distribution	Total Obligation Authority	-	0.748	5.706	-	5.706

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R02690 / EARLY ENTRY FLUID DISTRIBUTION SYSTEM (E2FDS)

	0			Method/Type			Date			Specs	Date	
	C			or		Award	of First	Qty	Unit Cost	Avail	Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
	1 1	I					,	' '				

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							UN	ICLAS	SIFIE	)								
Exhibit P-5, Cost	Analysis	s: FY 20	18 Army											Date: N	1ay 2017			
<b>Appropriation / B</b> 2035A / 03 / 30	udget A	ctivity /	Budget	Sub Acti	ivity:	I	L <b>ine Item</b> 000 / Dis				um & Wa	ater			/ Mobile	Title [DO Tactical	DIC]: Refueling	<b></b>
ID Code (A=Service Read	y, B=Not Servi	ice Ready):I	3			'		_	МІ	DAP/MAIS	Code:							
R	Resource	Summ	ary			Prior Ye	ars	FY 20	16	FY	2017	FY	2018 Bas	se F	Y 2018	осо	FY 2018	Total
Procurement Quantity (Unit	ts in Each)						-		-		1	0		58		-		58
Gross/Weapon System Co	st (\$ in Million	ıs)					5.911		-		1.66	0	4	1.082		-		4.082
Less PY Advance Procure	ment (\$ in Mil	llions)					-		-		-			-		-		-
Net Procurement (P-1) (\$ in	n Millions)						5.911		-		1.66	0	4	1.082		-		4.082
Plus CY Advance Procurer	ment (\$ in Mil	lions)					-		-		-			-		-		-
Total Obligation Authorit	<b>y</b> (\$ in Millions	s)					5.911		-		1.66	0	4	1.082		-		4.082
(Th	ne following l	Resource St	ımmary row	s are for info	rmational p	urposes only	y. The corres	ponding bud	get request	s are docume	ented elsewh	nere.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		-
Gross/Weapon System Un	nit Cost (\$ in 7	Thousands)					-		-		166.00	0	70	).379		-		70.379
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact o	or sum exactl	v due to roi	ındina	-						-					
Troto: Gastotale or Fotale II		Prior Years		- Cam Chaca	FY 2016			FY 2017		FY	2018 Bas	e	F	7 2018 O	CO	F	Y 2018 Tota	al
	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Cost Elements	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Flyaway Cost																		
Recurring Cost  Mobile Tactical  Refueling System	-	-	-	-	-	-	150.000	10	1.500	49.000	58	2.842	-	-	-	49.000	58	2.84
Engineering Changes (ECPs)	-	-	0.811	-	-	-	-	-	0.040	-	-	-	-	-	-	-	-	-
System Engineering/ Program Management	-	-	0.450	-	-	-	-	-	0.065	-	-	0.440	-	-	-	-	-	0.44
System Test & Evaluation, Production	-	-	0.500	-	-	-	-	-	0.010	-	-	-	-	-	-	-	-	-
Training	-	-	-	-	-	-	-	-	0.005	-	-	0.100		-	-	-	-	0.10
Data	-	-	4.000	-	-	-	-	-	0.005	-	-	0.600		-	-	-	-	0.60
Support Equipment	-	-	0.150	-	-	-	-	-	0.010	-	-	- 0.400	-	-	-	-	-	0.10
Fielding  Subtotal: Recurring Cost	-	-	5.911	-	-	-	-	-	0.025 1.660	-	-	0.100 4.082		-	-	-	-	4.08
Subtotal: Flyaway Cost	-	-	5.911	-		-	-	-	1.660	-	-	4.082			-	-	-	4.08
Gross/Weapon System Cost	-	-	5.911	-	-	-	166.000	10	1.660	70.379	58	4.082		-	-	70.379	58	4.08
	Sec	ondary Di	stribution				FY:	2016		FY 2017		FY 2 Ba:			FY 2018 OCO		FY 201 Total	-
Army		Qua								-	3		18	3		-		1

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P-1 Line #149

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R38000 / Mobile Tactical Refueling System

ID Code (A=Service Ready, B=Not Service Rea	dy): B		MDAP/MAIS Code	<b>)</b> :		
Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Total Obligation Authority	-	0.481	1.287	-	1.287
ANG	Quantity	-	4	21	-	21
	Total Obligation Authority	-	0.679	1.463	-	1.463
AR	Quantity	-	3	19	-	19
	Total Obligation Authority	-	0.500	1.332	-	1.332
Total:	Quantity	-	10	58	-	58
Secondary Distribution	Total Obligation Authority	-	1.660	4.082	-	4.082

Exhibit P-5, Cost	Analysis	s: FY 20	18 Army										I	Date: M	ay 2017			
<b>Appropriation / B</b> 2035A / 03 / 30	udget A	ctivity /	Budget	Sub Act	ivity:			<b>Number</b> tribution S			um & Wa	ater	F	38100	/ HIPPC	<b>Fitle [DOI</b> WATER SYSTEM	-	
ID Code (A=Service Read	y, B=Not Servi	ice Ready):/	4			·			М	DAP/MAIS	Code:		·					
R	Resource	Summa	ary		F	Prior Yea	ars	FY 20	16	FY	2017	FY	2018 Bas	e F	Y 2018 (	осо	FY 2018	Total
Procurement Quantity (Unit	ts in Each)						1,476		-		26	51		56		-		56
Gross/Weapon System Co	st (\$ in Million	ıs)					235.764		14.429		24.97	6	8	.181		-		8.18
Less PY Advance Procure	ment (\$ in Mil	llions)					-		-		-			-		-		-
Net Procurement (P-1) (\$ ii	n Millions)						235.764		14.429		24.97	6	8	.181		-		8.18
Plus CY Advance Procure	ment (\$ in Mil	lions)					-		-		-			-		-		-
Total Obligation Authorit	<b>y</b> (\$ in Millions	s)					235.764		14.429		24.97	6	8	.181		-		8.18 <sup>,</sup>
(Th	ne following l	Resource Su	ımmary rows	s are for info	ormational pu	ırposes only	. The corres	ponding budg	et request	s are docume	ented elsewl	nere.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		
Gross/Weapon System Un	it Cost (\$ in 7	Thousands)					159.732		-		95.69	3	146	.089		-		146.089
Note: Subtotals or Totals in	this Evhibit	P-5 may no	t he exact o	r sum evact	ly due to rou	ndina												
Note: Subtotals of Totals II		Prior Years		i sum exacti	FY 2016	nung.		FY 2017		FY	′ 2018 Bas	e	FY	2018 OC	20	F	′ 2018 Tota	al
Cost Elements	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Flyaway Cost	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Recurring Cost																		
HIPPO <sup>(†)</sup>	86.000	1,476	126.936	82.000	159	13.038	84.000	261	21.924	93.000	56	5.208	-	_	-	93.000	56	5.208
Engineering Changes	-	-	12.348	-	-	0.226	-	-	0.550	-	-	0.130	-	-	-	-	-	0.130
System Engineering/ Program Management	-	-	48.076	-	-	0.650	-	-	1.019	-	-	1.826	-	-	-	-	-	1.826
System Test & Evaluation, Production	-	-	18.950	-	-	0.140	-	-	0.300	-	-	0.400	-	-	-	-	-	0.40
Training	-	-	0.850	-	-	0.075	-	-	0.140	-	-	0.090	-	-	-	-	-	0.090
Data	-	-	0.850	-	-	0.050	-	-	0.118	-	-	0.250		-	-	-	-	0.250
Support Equipment	-	-	12.852	-	-	0.050	-	-	0.275	-	-	0.048		-	-	-	-	0.048
Fielding	-	-	14.902	-	-	0.200	-	-	0.650	-	-	0.229	-	-	-	-	-	0.229
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	235.764 235.764	-	-	14.429 <b>14.429</b>	-	-	24.976 <b>24.976</b>	-	-	8.181 <b>8.181</b>		-	-	-	-	8.181 <b>8.18</b> 1
Gross/Weapon System				-											_			
Cost	159.732	1,476	235.764	-	-	14.429	95.693	261	24.976	146.089	56	8.181	-	-	-	146.089	56	8.181
	Sec	ondary Dis	stribution				FY	2016		FY 2017		FY 2			FY 2018 OCO		FY 201 Total	
Army		Quai	ntity					-			162		31			-		3′
			l Obligation Au	uthority				6.09	9		14.862		4.529 11			-		4.529
ANG	Quantity							- 58								_		11

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P-1 Line #149

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Exhibit P-5, Cost Analysis: FY 2018 Army	Date: May 2017	
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R38100 / HIPPO WATER DISTRIBUTION SYSTEM

ID Code (A=Service Ready, B=Not Service Rea	A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:					
Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Total Obligation Authority	5.600	5.928	1.607	-	1.607
AR	Quantity	-	41	14	-	14
	Total Obligation Authority	2.730	4.186	2.045	-	2.045
Total: Secondary Distribution	Quantity	-	261	56	-	56
	Total Obligation Authority	14.429	24.976	8.181	-	8.181

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R38100 / HIPPO WATER
		DISTRIBUTION SYSTEM

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
HIPPO		2015	The Entwistle Company / Danville, VA	C / IDIQ	TACOM	Dec 2014	Apr 2016	138	78.000	Y		
HIPPO		2016	The Entwistle Company 2 / Danville, VA	C / IDIQ	TACOM	Jan 2016	May 2016	159	82.000	Y		
HIPPO		2017	The Entwistle Company 3 / Danville, VA	C / IDIQ	TACOM	Jan 2017	Aug 2017	261	84.000	Y		
HIPPO		2018	TBD / TBD	C / FFP	TACOM	Sep 2018	Mar 2019	56	93.000	N		

#### Remarks:

A new competitive contract will be awarded in January 2019.

Exhibit P-5, Cost	Analysis	s: EV 20	10 Army					10LAG					-	Dato: M	lay 2017			
Appropriation / B 2035A / 03 / 30				Sub Acti	ivity:			Number		<b>I</b>	Item Number / Title [DODIC]: R38101 / Unit Water Pod System (Camel)							
ID Code (A=Service Read	ly, B=Not Servi	ice Ready): /	Ą			l			М	DAP/MAIS	Code:		L					
F	Resource	Summa	arv			Prior Years FY 2016			16				FY 2018 Base		FY 2018 OCO		CO FY 2018	
Procurement Quantity (Unit							-		3		8	33		41		-		4
Gross/Weapon System Co	ost (\$ in Million	ns)					83.238		1.817		7.55	57	4	.902		-		4.90
Less PY Advance Procure							-		_		-			-		-		-
Net Procurement (P-1) (\$ ii	n Millions)	,					83.238		1.817		7.55	57	4	.902		-		4.90
Plus CY Advance Procure	ment (\$ in Mil	lions)					-		_		-			-		-		
Total Obligation Authorit	· · · · · · · · · · · · · · · · · · ·						83.238		1.817		7.55	57	4	.902		-		4.90
	-		ımmarv rows	s are for info	rmational n	urnoses only	The corresi	The corresponding budget requests are documented elsewher		here )								
Initial Spares (\$ in Millions)	io ionowing i	10000,000	anninary rows			ur pooce or 11	_	oonang baag	-		-	1010.)		_		_		
Gross/Weapon System Un	nit Cost (\$ in 7	Thousands)					_		605.667		91.04	18	119	.561		_		119.56
Cross/Troupon Cystem on		Thousands)							000.001		01.01		110	.001				
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact or	r sum exactl	y due to rou	 ınding.		-		1	-				"			
	F	Prior Years	6		FY 2016			FY 2017		FY	2018 Bas	е	FY	2018 O	CO	F	Y 2018 Tota	al
Coat Florounts	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost		Total Cost
Cost Elements	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Flyaway Cost  Recurring Cost																		
(1)		_		90.000	3	0.270	90.000	83	7.470	100.000	41	4.100	_			100.000	41	4.10
Camel II <sup>(†)</sup> Engineering Changes	-	-	12.891	-	-	0.270	90.000	-	0.005	-	-	0.050	-		-	100.000	-	0.05
System Engineering/	_	_	13.500	-		0.800	_	-	0.030	_	-	0.450	-		_	_	_	0.45
Program Management System Test &	_	_	12.147	_		0.150	_	_	0.010	_	_	0.075	_		_	_	_	0.07
Evaluation, Production	_						_						_					
Training	-	-	8.500	-	-	0.050	-	-	0.010	-	-	0.050	-	-	-	-	-	0.05
Data Support Equipment	-	-	11.050 10.150	-	-	0.045	-	-	0.010	-		0.061	-	-	-	-	-	0.06
Fielding	-	-	15.000	-		0.032	_	-	0.003	-	-	0.100	-		-	-	-	0.10
Subtotal: Recurring Cost	-	_	83.238	-	_	1.817	_	-	7.557	_	-	4.902	-	_	_	_	_	4.90
Subtotal: Flyaway Cost	-	-	83.238	-	-	1.817	-	-	7.557	-	-	4.902	-	-	-	-	-	4.90
Gross/Weapon System Cost	-	-	83.238	605.667	3	1.817	91.048	83	7.557	119.561	41	4.902	-	-	-	119.561	41	4.90
0031	_	ondary Di	stribution				FY:	2016		FY 2017		FY 20			FY 2018 OCO		FY 201 Total	
	Sec																·otai	2
Armv	Sec		ntitv						3		50		20			-		
Army	Sec	Qua	ntity Il Obligation Au	ıthority				1.81	3		50 4.371		2.424			-		2.42

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P-1 Line #149

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R38101 / Unit Water Pod System (Camel)
ID Code (1.0. i. D. i. D. i. D. i. D. i. A.	MDAD/MAIS Codo:	·

ID Code (A=Service Ready, B=Not Service Read	ly) : A		MDAP/MAIS Code	9:		
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
	Total Obligation Authority	-	3.186	2.478	-	2.478
	Quantity	3	83	41	-	41
Secondary Distribution	Total Obligation Authority	1.817	7.557	4.902	-	4.902

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R38101 / Unit Water Pod System (Camel)

		0			Method/Type			Date			Specs	Date	
		С			or		Award	of First	Qty	Unit Cost	Avail	Revision	RFP Issue
Cost Eler	ments	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Camel II			2016	Choctaw / McAlester	SS / FFP	TACOM	Mar 2016	Jun 2017	3	90.000	Y		
Camel II			2017	Choctaw / McAlester	SS / FFP	TACOM	Jan 2017	Nov 2017	83	90.000	Y		
Camel II			2018	Choctaw / McAlester	SS / FFP	TACOM	Mar 2018	May 2019	41	100.000			

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 40:

MN1000 / Combat Support Medical

Medical Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Line item inda milato ocae: 11/7												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	1,589	1,977	7,649	2,711	-	2,711	2,300	3,527	3,603	4,967	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	797.230	73.828	65.524	69.033	-	69.033	49.592	34.172	35.324	35.286	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	797.230	73.828	65.524	69.033	-	69.033	49.592	34.172	35.324	35.286	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	797.230	73.828	65.524	69.033	-	69.033	49.592	34.172	35.324	35.286	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	501.718	37.343	8.566	25.464	-	25.464	21.562	9.689	9.804	7.104	Continuing	Continuing

#### Description:

Combat Support Medical (CSM) represents the equipping component of a broad band of operational medical and health service support (hospitalization, combat stress, dental, veterinary, optical, and preventive medicine) capabilities that promote, improve, conserve, and restore the mental and physical well-being of Warfighters across the broad range of military operations. The equipping component is illustrative of the technologically advanced medical/surgical equipment, medical materiel, and nonmedical equipment required in our Combat, Combat Support, and Combat Service Support force structure.

CSM equipment supports the capabilities of the AMEDD field units to support the Army's full spectrum of operations including offensive, defensive, stability and support of the Army Early Response Force who offers capabilities such as Chemical, Biological, Radiological, Nuclear, and high yield Explosives (CBRNE) Consequence Management Response Force (CCMRF).

CSM modernizes, converts, and recapitalizes the Army Medical Department's (AMEDD's) Table of Organizational Equipment (TOE) force structure with deployable medical platforms. These combat service support systems support medical force structure at all echelons of care. This program resources the acquisition of all categories of medical equipment including surgical, combat stress, medical evacuation, dental, laboratory, radiology, optometry and new medical technology. CSM equips the Army's medical personnel to provide medical and rehabilitative care from first responder, to forward resuscitative care, to theater hospitalization, and en-route care in the Joint Area of Operations.

There are two major new CSM requirements beginning in FY17 and FY18. In FY17, Combat Support Hospitals begin a multi-year effort to convert and activate in support of the Vice Chief of Staff of the Army approved Field Hospital (FH) Force Design Update (FDU). This update increases FH trauma capabilities and provides improved modularity and flexibility to increase responsiveness on the battlefield. In FY18, Forward Surgical Teams begin to convert, modernize and activate in support of the Vice Chief of Staff of the Army approved Forward Resuscitative Surgical Team FDU. This design provides a standardized, more responsive and rapidly deployable, modular resuscitative and surgical team able to support short (<72hr) and extended (>72hr) operations.

				FY 2018	FY 2018	FY 2018				
	Secondary Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1,192	5,302	2,711	-	2,711	2,300	1,525	1,973	3,398
	Total Obligation Authority	52.404	38.007	69.033	-	69.033	49.592	17.266	17.356	23.727
ANG	Quantity	665	1,593	-	-	-	-	974	679	1,181
	Total Obligation Authority	19.582	17.122	-	-	-	-	7.970	4.973	6.663
AR	Quantity	120	754	-	-	-	-	1,028	951	388
	Total Obligation Authority	1.842	10.395	-	-	-	-	8.936	12.995	4.896
Total:	Quantity	1,977	7,649	2,711	-	2,711	2,300	3,527	3,603	4,967

LI MN1000 - Combat Support Medical Army

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P-1 Line #150

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 40:

MN1000 / Combat Support Medical

Medical Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

				FY 2018	FY 2018	FY 2018				
Second	lary Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distribution	Total Obligation Authority	73.828	65.524	69.033	-	69.033	49.592	34.172	35.324	35.286

LI MN1000 - Combat Support Medical Army UNCLASSIFIED
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P-1 Line #150

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

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P-1 Line Item Number / Title:

Appropriation / Budget Activity / Budget Sub Activity: 2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 40:

40.

MN1000 / Combat Support Medical

Medical Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G13010 / MEDEVAC Misson Equipment Package (MEP)	P-5a			28 / 69.878	50 / 23.840	43 / 16.855	25 / 9.792	- / -	25 / 9.792
P-5	MB1100 / FIELD MEDICAL EQUIPMENT - Medical ASIOE	P-5a			1,561 / 727.352	1,927 / 49.988	7,606 / 48.669	2,686 / 59.241	- / -	2,686 / 59.241
P-40	Total Gross/Weapon System Cost				1,589 / 797.230	1,977 / 73.828	7,649 / 65.524	2,711 / 69.033	- 1 -	2,711 / 69.033

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

The Combat Support Medical (CSM) FY2018 Base Procurement dollars in the amount of \$69.033 Million procures medical equipment and material to support the AMEDD's balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements. It provides advanced medical equipment necessary to ensure essential care of combat casualties throughout the range of military operations and includes all care and treatment necessary to return casualties to duty (within the theater evacuation policy) or begin initial treatment and stabilization.

An important part of the CSM mission is the Field Medical Equipment-Medical Associated Support Items of Equipment (ASIOE). FY2018 Base Procurement dollars in the amount of \$33.551 Million procures, fields, incrementally modernizes & sustains medical field system (MFS) for the Deployable Force; TOE medical device development and major end items & sets, kits & outfits (SKOs) selection (e.g., trauma, EMT, surgery, optical, lab, dental, vet); TOE major end items (e.g., imaging, image management, systems linked to DoD Electronic Medical Record). MFS is carefully executed to best develop, acquire, sustain, project, and modernize medical materiel capabilities in support of Army priorities. POM priorities are a sustainable holistic approach true to the ARPL and address the needs of the Army's Total Force. MFS provide medical materiel support to all Army components (Active, Reserve, and National Guard) to optimize the medical materiel readiness of tactical Army organizations.

Critical to the CSM mission is the Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP), with a FY2018 base procurement funding in the amount of \$9.792 Million it provides operational capabilities necessary to ensure continuance of essential initial treatment, stabilization and care during rapid aeromedical evacuation of critically wounded combat casualties from the battlefield to Combat Support Hospitals (CSH). This rapid, lifesaving care in flight directly contributes to the reduction in the Golden Hour of trauma care, the result of which is the lowest number of combat fatalities seen in war.

FY 2018 Base procurement dollars in the amount of \$25.690 million procures Class VIII medical equipment in support of all units in the European Reassurance Initiative (ERI); backfills Field Medical Equipment from the Medical Materiel Readiness Program (MMRP) in support of DAMO-OD requested transfer of 28th Combat Support Hospital (CSH) mission critical organizational equipment to theatre provided equipment (TPE) in support of Combined Joint Task Force-Operation Inherent Resolve (CJTF-OIR). MEDCOM's role in ERI is to provide support for the accelerated medical build within Army Prepositioned Stocks (APS-2/Europe) and to assist with sourcing of medical equipment for the European Enduring Equipment Set.

Exhibit P-5, Cost	Analysis	: FY 20	18 Armv											Date: M	lay 2017			
Appropriation / B 2035A / 03 / 40				Sub Acti	vity:			Number nbat Supp			Item Number / Title [DODIC]: G13010 / MEDEVAC Misson Equipment Package (MEP)							
ID Code (A=Service Read	dy, B=Not Servi	ce Ready):							М	DAP/MAIS	Code							
ı	Resource	Summa	ary		F	Prior Yea	ars	FY 201	6	FY 2	2017	FY	2018 Bas	se F	Y 2018 (	ОСО	FY 2018	Total
Procurement Quantity (Un	its in Each)						28		50			43		25		-		2
Gross/Weapon System C	ost (\$ in Millions	s)					69.878		23.840		16	.855	Ş	9.792		-		9.79
Less PY Advance Procure	ement (\$ in Mill	ions)					-		-			-		-		-		-
Net Procurement (P-1) (\$	in Millions)						69.878		23.840		16	.855	ę	9.792		-		9.79
Plus CY Advance Procure	ment (\$ in Milli	ions)					-		-			-		-		-		-
Total Obligation Authori	ty (\$ in Millions,	)					69.878		23.840		16	.855	9	0.792		-		9.79
(T	he following F	Resource Su	mmary row	s are for info	mational pu	ırposes only	. The corres	oonding budge	t request	s are docume	ented els	ewhere.)				·		
Initial Spares (\$ in Millions)							-		-			-		-		-		-
Gross/Weapon System U	nit Cost (\$ in T	housands)				2	,495.643		476.800		391	.977	391	1.680		-		391.68
					· .			1										
Note: Subtotals or Totals	n this Exhibit	P-5 may no	t be exact o	r sum exactly	due to rou	nding.												
	Р	rior Years	i		FY 2016			FY 2017		FY	2018 E	ase	F	/ 2018 O	0	F	Y 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Medical Mission Sensor FLIR <sup>(†)</sup>	597.452	42	25.093	562.056	36	20.234	302.000	20	6.040	454.429		7 3.18	-	-	-	454.429	7	3.1
Interim Patient Handling System (IMMSS) <sup>(†)</sup>	973.587	46	44.785	257.571	14	3.606	470.217	23	10.815	472.214		6.6	1 -	-	-	472.214	14	6.6
Subtotal: Recurring Cost	-	-	69.878	-	-	23.840	-	-	16.855	-	-	9.7	)2 -	-	-	-	-	9.79
Subtotal: Flyaway Cost	-	-	69.878	-	-	23.840	-	-	16.855	-		9.7	-	-	-	-	-	9.7
Gross/Weapon System Cost	2,495.643	28	69.878	476.800	50	23.840	391.977	43	16.855	391.680	:	9.79	-	-	-	391.680	25	9.79
	Cook	andam. Die					FV (	2016		FY 2017			2018		FY 2018		FY 201	8
Army	2ecc	ondary Dis					FY 2	<b>2016</b> 18		r1 401/	16	В	ase 25		осо		Total	-
Army		Quar	Obligation A	uthority				8.996			6.272		9.792			-		9.79
ANG		Quar						32			27		-	-		-		5.71
			Obligation A	uthority				14.844			10.583		-			-		
		Quar	ntity					50			43		2!	5		-		
Total: Secondary Distribution		- Quu	icity															

LI MN1000 - Combat Support Medical Army

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P-1 Line #150

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 40	P-1 Line Item Number / Title: MN1000 / Combat Support Medical	Item Number / Title [DODIC]: G13010 / MEDEVAC Misson Equipment Package (MEP)

Cost Elements	000	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Medical Mission Sensor FLIR		2018	FLIR Systems, Inc. / Portland Oregon	SS / FFP	USACC, Redstone Arsenal, AL	Oct 2016	Apr 2018	7	454.430	N		
Interim Patient Handling System (IMMSS)		2018	Air Methods Corp / Denver, Colorado	SS / FFP	USACC, Redstone Arsenal, AL	Oct 2016	Jan 2018	14	472.210	N		

#### Remarks:

The Medical Evacuation (MEDEVAC) Mission Equipment Package (MEP) provides critical upgrades to legacy MEDEVAC helicopters to ensure the best medical capabilities are available to support the rapid evacuation of wounded Soldiers. The program consists of two subsystems installed on recapitalized legacy MEDEVAC UH-60A/L Black Hawk helicopters. These subsystems include the Interim MEDEVAC Mission Support System (IMMSS) patient handling system, and the Medical Mission Sensor (MMS) Forward Looking Infrared (FLIR). These aircraft provide the required operational capabilities for aeromedical evacuation, and are utilized throughout the MEDEVAC fleet. The Interim MEDEVAC Mission Support System (IMMSS) includes seat pallets, seats, interior components, and a litter lift system. Includes the Smart Window – This new window will replace the older bubble window on the cargo door, and the Internal Communications System (ICS) Relocation Kit - the ICS must be located further to the rear of the helicopter to accommodate the new interior design.

The MEDEVAC Mission Sensor (MMS) is a Forward Looking Infra-Red (FLIR) sensor that will be used as a patient location sensor. MMS is critical for the continuous visual capability during night and adverse weather conditions.

Exhibit P-5, Cost Analysis: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 40

P-1 Line Item Number / Title:
MN1000 / Combat Support Medical

Item Number / Title [DODIC]:
MB1100 / FIELD MEDICAL EQUIPMENT

- Medical ASIOE

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	1,561	1,927	7,606	2,686	-	2,686
Gross/Weapon System Cost (\$ in Millions)	727.352	49.988	48.669	59.241	-	59.241
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	727.352	49.988	48.669	59.241	-	59.241
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	727.352	49.988	48.669	59.241	-	59.241
(The following Resource Summary rows are for informat	ional purposes only. The cor	responding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	465.953	25.941	6.399	22.055	-	22.055

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	3		FY 2016			FY 2017		FY	' 2018 Bas	e	F۱	′ 2018 OC	:0	F۱	/ 2018 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
lyaway Cost	<u>'</u>	'		· · · · · · · · · · · · · · · · · · ·	'		·	'					· · · · · · · · · · · · · · · · · · ·		·	'	'	
Recurring Cost																		
Laboratory science Equipment <sup>(†)</sup>	178.349	215	38.345	6.538	587	3.838	6.603	242	1.598	27.206	233	6.339	-	-	-	27.206	233	6.3
Ambulatory Care Equipment <sup>(†)</sup>	33.748	2,531	85.415	12.183	564	6.871	5.410	4,758	25.739	20.385	1,560	31.801	-	-	-	20.385	1,560	31.8
Dental Equipment <sup>(†)</sup>	7,208.846	13	93.715	19.872	125	2.484	24.655	58	1.430	98.718	39	3.850	-	-	-	98.718	39	3.8
Opthamology/ optometry Equipment <sup>(†)</sup>	5,982.000	2	11.964	11.125	8	0.089	-	-	-	6.778	9	0.061	-	-	-	6.778	9	0.0
Surgical Equipment <sup>(†)</sup>	478.789	265	126.879	10.202	865	8.825	10.041	731	7.340	17.138	472	8.089	-	-	-	17.138	472	8.0
Nursing Equipment <sup>(†)</sup>	791.932	88	69.690	-	-	-	38.878	90	3.499	-	-	-	-	-	-	-	-	
Veterinary Equipment <sup>(†)</sup>	558.700	20	11.174	44.618	68	3.034	43.271	70	3.029	40.696	23	0.936	-	-	-	40.696	23	0.0
Diagnostic Imaging Equipment <sup>(†)</sup>	3,246.154	65	211.000	103.179	39	4.024	103.500	24	2.484	27.965	85	2.377	-	-	-	27.965	85	2.:
Oxygen Generation Equipment	-	-	37.532	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Water Distribution	-	-	41.637	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Therapy/Treatment <sup>(†)</sup>	-	-	-	3.883	1,072	4.163	4.354	271	1.180	1.583	12	0.019	-	-	-	1.583	12	0.
Sterilization <sup>(†)</sup>	-	-	-	83.357	56	4.668	83.500	6	0.501	-	-	-	-	-	-	-	-	

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Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

2035A / 03 / 40

MN1000 / Combat Support Medical

MB1100 / FIELD MEDICAL EQUIPMENT

- Medical ASIOE

**Date:** May 2017

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

	F	Prior Years	3		FY 2016			FY 2017		F	7 2018 Bas	se	F`	Y 2018 OC	0	F	Y 2018 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Environmental (Chemical) <sup>(†)</sup>	-	-	-	14.120	275	3.883	-	-	-	-	-	-	-	-	-	-	-	-
Environmental (Water) <sup>(†)</sup>	-	-	-	3.648	2,082	7.595	3.743	167	0.625	-	-	-	-	-	-	-	-	-
TMDE (Test, Measurement, Diagnostic Eq) <sup>(†)</sup>	-	-	-	6.438	80	0.515	6.444	27	0.174	13.922	166	2.311	-	-	-	13.922	166	2.311
EVAC/AREA SPT <sup>(†)</sup>	-	-	-	-	-	-	1.694	271	0.459	-	-	0.869	-	-	-	-	-	0.869
HOSPITAL <sup>(†)</sup>	-	-	-	-	-	-	16.486	37	0.610	29.759	87	2.589	-	-	-	29.759	87	2.589
Subtotal: Recurring Cost	-	-	727.352	-	-	49.988	-	-	48.670	-	-	59.241	-	-	-	-	-	59.241
Subtotal: Flyaway Cost	-	-	727.352	-	-	49.988	-	-	48.670	-	-	59.241	-	-	-	-	-	59.241
Gross/Weapon System Cost	465.953	1,561	727.352	25.941	1,927	49.988	6.399	7,606	48.669	22.055	2,686	59.241	-	-	-	22.055	2,686	59.241

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	1,174	5,286	2,686	-	2,686
	Total Obligation Authority	43.408	31.735	59.241	-	59.241
ANG	Quantity	633	1,566	-	-	-
	Total Obligation Authority	4.738	6.539	-	-	-
AR	Quantity	120	754	-	-	-
	Total Obligation Authority	1.842	10.395	-	-	-
Total:	Quantity	1,927	7,606	2,686	-	2,686
Secondary Distribution	Total Obligation Authority	49.988	48.669	59.241	-	59.241

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 40

P-1 Line Item Number / Title:

MN1000 / Combat Support Medical

**Date:** May 2017

Item Number / Title [DODIC]:

MB1100 / FIELD MEDICAL EQUIPMENT

- Medical ASIOE

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue
Laboratory science Equipment	Ť	2015	Various / Various	Various	various	Sep 2013	Sep 2015	215	6.261	Y		
Laboratory science Equipment		2016	Various / Various	Various	various	Sep 2015	Sep 2016	587	6.538			
Laboratory science Equipment		2017	Various / Various	Various	various	Mar 2017	Apr 2017	242	6.603			
Laboratory science Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	233	27.210	Y		
Ambulatory Care Equipment		2015	Various / Various	Various	various	Sep 2014	Sep 2014	581	6.420	Υ		
Ambulatory Care Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	564	12.183			
Ambulatory Care Equipment		2017	Various / Various	Various	various	Apr 2017	Sep 2017	4,758	5.410			
Ambulatory Care Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	1,560	20.390	Y		
Dental Equipment		2015	Various / Various	Various	various	Sep 2014	Sep 2015	13	0.057	Υ		
Dental Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	125	19.872			
Dental Equipment		2017	Various / Various	TBD	various	Apr 2017	Sep 2017	58	24.655			
Dental Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	39	98.720	Υ		
Opthamology/optometry Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	8	11.125			
Surgical Equipment		2015	Various / Various	Various	various	Sep 2015	Sep 2015	265	9.050	Υ		
Surgical Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	865	10.202			
Surgical Equipment		2017	Various / Various	Various	various	Apr 2017	Sep 2017	731	10.041			
Surgical Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	472	17.140	Y		
Nursing Equipment		2015	Various / Various	Various	various	Sep 2015	Sep 2015	88	24.625	Y		
Veterinary Equipment		2015	Various / Various	Various	various	Sep 2015	Sep 2015	20	43.455	Y		
Veterinary Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	68	44.618			
Veterinary Equipment		2017	Various / Various	Various	various	Sep 2017	Sep 2017	70	43.271			
Veterinary Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	23	40.700	Y		
Diagnostic Imaging Equipment		2015	Various / Various	Various	various	Sep 2015	Sep 2015	41	67.024	Y		
Diagnostic Imaging Equipment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	39	103.179			
Diagnostic Imaging Equipment		2017	Various / Various	Various	various	Apr 2017	Sep 2017	24	103.500			
Diagnostic Imaging Equipment		2018	Various / Various	Various	various	Aug 2017	Jan 2018	85	27.970	Y		
Therapy/Treatment		2016	Various / Various	Various	various	Sep 2016	Sep 2016	1,072	3.883			
Therapy/Treatment		2017	Various / Various	Various	various	Sep 2017	Sep 2017	271	4.354			
Therapy/Treatment		2018	Various / Various	Various	various	Aug 2017	Aug 2018	12	1.580	Y		
Sterilization		2016	Various / Various	Various	various	Sep 2016	Sep 2016	56	83.357			
Sterilization		2017	Various / Various	Various	various	Apr 2017	Sep 2017	6	83.500			
Sterilization		2018	Various / Various	Various	various	Aug 2017	Jan 2018	0	0.000	Υ		
Environmental (Chemical)		2016	Various / Various	Various	various	Sep 2016	Sep 2016	275	14.120			

LI MN1000 - Combat Support Medical Army

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P-1 Line #150

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 40

P-1 Line Item Number / Title:

MN1000 / Combat Support Medical

MB1100 / FIELD MEDICAL EQUIPMENT

- Medical ASIOE

	00			Method/Type or		Award	Date of First	Otv	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	O	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	<b>Qty</b> (Each)	(\$ K)	Now?	Available	Date
Environmental (Water)		2016	Various / Various	Various	various	Sep 2016	Sep 2016	2,082	3.648			
Environmental (Water)		2017	Various / Various	Various	various	Sep 2017	Sep 2017	167	3.743			
TMDE (Test, Measurement, Diagnostic Eq)		2016	Various / Various	Various	varioius	Sep 2016	Sep 2016	80	6.438			
TMDE (Test, Measurement, Diagnostic Eq)		2017	Various / Various	Various	various	Sep 2017	Sep 2017	27	6.444			
TMDE (Test, Measurement, Diagnostic Eq)		2018	Various / Various	Various	various	Aug 2017	Jan 2018	166	13.920	Y		
EVAC/AREA SPT		2017	Various / Various	Various	various	May 2017	Jun 2017	271	1.694			
EVAC/AREA SPT		2018	Various / Various	Various	various	Aug 2017	Jan 2018	0	0.000	Υ		
HOSPITAL		2017	Various / Various	Various	various	Jul 2016	Aug 2017	37	16.486			
HOSPITAL		2018	Various / Various	Various	various	Aug 2017	Jan 2018	87	29.760	Y		

#### Remarks:

Equipment is Commercial Off The Shelf (COTS)/Government Off the Shelf (GOTS), therefore is ordered on an as needed basis to manage program most effectively.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 45:

G05301 / Mobile Maintenance Equipment Systems

Maintenance Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	60	39	153	82	3	85	110	189	173	183	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	314.975	25.270	37.303	33.774	1.124	34.898	39.920	57.841	53.429	56.672	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	314.975	25.270	37.303	33.774	1.124	34.898	39.920	57.841	53.429	56.672	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	314.975	25.270	37.303	33.774	1.124	34.898	39.920	57.841	53.429	56.672	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)		*		1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	5,249.583	647.949	243.810	411.878	374.667	410.565	362.909	306.037	308.838	309.683	Continuina	Continuing

#### **Description:**

The Mobile Maintenance Equipment Systems (MMES) employs a system of systems approach to provide two-level maintenance capability to the Warfighter. Eight inter-connected maintenance systems distributed throughout the Army at multiple levels and echelons provide a holistic repair capability in all environments. This approach meets the Army's two-level maintenance philosophy and supports the current force while also providing modular configurations to meet the specific needs of the Army maintainer in today's transforming environment. The MMES family of systems includes Metal Working and Machining Shop Set, Fire Suppression Refill System, Armament Repair Shop Set, Hydraulic Systems Test and Repair Unit, Shop Equipment Welding, Shop Equipment Contact Maintenance, Forward Repair System, Standard Automotive Tool Set, and Additive Manufacturing Efforts.

The Metal Working and Machining Shop Set (MWMSS) program is a Shelter Mounted Set that assembles and packages tool load configurations based on the 91E (Allied Trades) Military Occupational Specialty (MOS). The MWMSS assembles and packages a tool load configuration to replace multiple obsolete Line Item Numbers (LINs) without losing any capability while reducing the logistics footprint. MWMSS increases safety and supportability for Allied Trades Soldiers and delivers state of the art machining capabilities using two module types, Type I and Type II. Type I contains a Computer Numeric Controlled (CNC) Lathe, Mill Drill, Multi-Process Welding, Thermal Cutting equipment, Air-Arc Gouging, air compressor, Mobile Electric Power (MEP) generator for shop power, Environmental Control Unit (ECU), and an assortment of hand/air tools. Type II augments Type I and contains a CNC Milling Machine, Plasma table, ECU, 3D Printing, and an assortment of hand/air tools. The MWMSS is transportable by standard ground (PLS/LHS), air (C-130), rail and sea assets. MWMSS is being produced organically by the Joint Manufacturing Technology Center in Rock Island, IL. Army Acquisition Objective (AAO) of MWMSS is 277 Type I and 190 Type II.

The Fire Suppression Refill System (FSRS) is a modular, flexible, standardized fire suppression refill station consisting of a transportable ISO 8x8x20 container with an integrated Environmental Control Unit (ECU). The FSRS will be an integrated unit equipped for safe performance of refilling fire suppression bottles and systems. The FSRS will consist of an enclosure (capable of stand-alone or trailer-mounted operation) containing the tools and equipment needed to fulfill the required refill tasks and a trailer for transportation. The FSRS provides the capability to refill the vast majority of fire suppression bottles and systems currently fielded. These systems include both man portable systems as well as the fire suppression systems that can be found in military vehicles. The FSRS shall operate in every Support Maintenance Company (SMC) and Field Maintenance Company (FMC), Ground Support Sections. The FSRS will be deployed and employed in all geographical locations and environments where the U.S. Army operates. FSRS is being produced organically by the Joint Manufacturing Technology Center in Rock Island, IL. Army Acquisition Objective (AAO) of FSRS is 171 systems.

The Armament Repair Shop Set (ARSS) significantly improves on-site maintenance capability with increased proficiency and deployability. The ARSS provides a field/sustainment level maintenance and repair support platform for armament weapon systems to support units across the full spectrum of military operations. By providing on-system maintenance repairs to weapon systems and/or components as far forward as possible on the battlefield, ARSS enables major combat systems to quickly return to the fight. provides technological advancements and professional-grade tools with lifetime warranties, which will bring

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 45:

G05301 / Mobile Maintenance Equipment Systems

Maintenance Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #151

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

a savings to the Army for many years. The ARSS consolidates four Line Item Numbers (LINs) to one and equips our forces with the most current and accurate tools to complete the mission while performing maintenance on the latest technologically advanced weaponry from small arms to field artillery. The consolidation of the four LINs to one results in a reduction from four tactical vehicles required to transport the individual shop sets to just one tactical vehicle to transport the ARSS. In addition, the ARSS eliminates a 51% tool redundancy across the previous six armament shop sets while reducing 43% of the armament repair tools in the field. The ARSS will be fielded to the Infantry Brigade Combat Teams (IBCTs), Heavy Brigade Combat Teams (HBCTs), Stryker Brigade Combat Teams (SBCTs), Support Maintenance Companies (SMCs), Component Repair Companies (CRCs), and Forward Support Companies (FSCs). ARSS is being produced organically by the Tobyhanna Army Depot, in Pennsylvania. Army Acquisition Objective (AAO) of ARSS is 995.

The Hydraulic Systems Test and Repair Unit (HSTRU) is a robust hydraulic repair system capable of supporting four trained ordnance/engineer soldiers at one time to conduct maintenance operations. It provides the capability to fabricate industry standard crimp-style hydraulic replacement hoses of all sizes, types, and end configurations as required to restore the hydraulic systems on battle damaged or otherwise non-mission capable equipment. HSTRU also provides the ability to fabricate industry standard steel replacement hydraulic tubes used in brake lines and other high pressure applications and bends and flares these tubes as required to create a proper replacement item. The HSTRU includes an on-system diagnostic test meter that is used for troubleshooting hydraulic problems on the supported platforms. It is a trailer-mounted system with a weather tight enclosure that is configured for rapid setup for use at the point of need. It can be deployed forward on the battlefield for battle damage repair or operated in the motor pool. The HSTRU is highly transportable on or to the battlefield by light tactical vehicle towing, highway trucks, helicopter sling load, C-130 and larger fixed-wing aircraft, smaller and larger marine vessels. and rail. Approved Acquisition Objective (AAO) is 691.

The Shop Equipment, Welding Trailer (SEW) provides a full spectrum of welding capabilities throughout the battlefield, allowing repairs to be performed in all weather, climatic and light conditions. The SEW is a 100% duty cycle welder that can operate continuously until all welds, cutting and repairs are finished and finalized. The SEW provides heavy-duty, on-site welding capability with increased mobility and deployability. The SEW integrates commercial off the shelf (COTS) and non-developmental item (NDI) components in an enclosure mounted on an M103A3 Trailer. The SEW will provide welding repairs to tactical engineer and ordnance maintenance units. The SEW supports two level maintenance utilizing the only qualified welders in the Army. The SEW provides the capability to perform Shielded Metal Arc Welding (SMAW) "STICK", Flux Cored Arc Welding (FCAW), Gas Tungsten Arc Welding (GTAW) "TIG", and Air-Carbon Arc Cutting (AAC) "Arc gouging". The SEW also provides capability to perform Oxyfuel Gas Welding (OFW), Oxy-fuel Gas Cutting (OFC) and Torch Brazing (TB). The SEW provides compressed air on demand, electrical power for lights and electric hand tools, and an illuminated work surface with a vise. Approved Acquisition Objective (AAO) is 992.

				FY 2018	FY 2018	FY 2018				
Secondar	y Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	16	93	82	3	85	110	189	173	183
	Total Obligation Authority	13.449	15.913	33.774	1.124	34.898	39.920	57.841	53.429	56.672
ANG	Quantity	20	44	-	-	-	-	-	-	-
	Total Obligation Authority	10.242	16.677	-	-	-	-	-	-	-
AR	Quantity	3	16	-	-	-	-	-	-	-
	Total Obligation Authority	1.579	4.713	-	-	-	-	-	-	-
Total:	Quantity	39	153	82	3	85	110	189	173	183
Secondary Distribution	Total Obligation Authority	25.270	37.303	33.774	1.124	34.898	39.920	57.841	53.429	56.672

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 45:

G05301 / Mobile Maintenance Equipment Systems

Maintenance Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	G05315 / METAL WORKING AND MACHING SHOP SET (MWMSS)	P-5a	В		20 / 19.951	24 / 9.342	52 / 13.252	26 / 10.520	- / -	26 / 10.520
P-5	G05320 / FIRE SUPPRESSION REFILL SYSTEM (FSRS)	P-5a	В		1 / 4.656	2 / 5.542	17 / 4.560	10 / 4.951	3 / 1.124	13 / 6.075
P-5	G05330 / ARMAMENT REPAIR SHOP SET (ARSS)	P-5a, P-21	В		39 / 15.346	13 / 10.386	36 / 15.108	32 / 15.517	- / -	32 / 15.517
P-5	G39200 / Hydraulic Systems Test and Repair Unit (HSTRU)	P-5a	Α		- / 57.463	- / -	42 / 3.084	8 / 1.482	- / -	8 / 1.482
P-5	M62700 / Shop Equipment, Welding (SEW)	P-5a			- / 217.559	- / -	6 / 1.299	6 / 1.304	- / -	6 / 1.304
P-40	Total Gross/Weapon System Cost			60 / 314.975	39 / 25.270	153 / 37.303	82 / 33.774	3 / 1.124	85 / 34.898	

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

LI G05301 - Mobile Maintenance Equipment Systems

#### Justification:

Army

The Mobile Maintenance Equipment Systems are maintenance multipliers that mobilize mechanics and maintenance equipment to repair damaged light, medium, and heavy Combat and Combat Support systems in the Brigade Combat Teams (BCTs) and Combat Aviation Brigades (CABs) as close to the front lines as is safely possible. The MMES significantly increases the capability of forward maintenance units to conduct necessary battlefield repairs. With the MMES, systems and Soldiers do not have to wait for recovery vehicles to arrive and remove the system from the battlefield, thus reducing risk to the soldiers and equipment.

Fire Suppression Refill System (FSRS): FY 18 Base Procurement dollars in the amount of \$4.951 million support 10 FSRS to be fielded to Armored Brigade Combat Teams and Stryker Brigade Combat Teams and Support Maintenance Companies (SMC).

Metal Working and Machining Shop Set (MWMSS): FY18 Base Procurement dollars in the amount of \$10.520 million supports 26 MWMSS modules (13 Type I and 13 Type II) to be fielded to Active units. MWMSS represents a significant upgrade in technology and replaces several outdated LINs.

Armament Repair Shop Set (ARSS): FY18 Base procurement dollars in the amount of \$15.517 million support 32 ARSS to be fielded to the Infantry Brigade Combat Teams (IBCTs), Heavy Brigade Combat Teams (BBCTs), Stryker Brigade Combat Teams (SBCTs), Support Maintenance Companies (SMCs), Component Repair Companies (CRCs), and Forward Support Companies (FSCs). ARSS replaces four Line Item Numbers (LINs) and provides the capability for forward maintenance for multiple weapon systems.

Hydraulic System Test and Repair Unit (HSTRU): FY18 Base procurement dollars in the amount of \$1.482 million will purchase 8 HSTRU to be fielded to the Infantry Brigade Combat Teams (IBCTs), Heavy Brigade Combat Teams (HBCTs), Stryker Brigade Combat Teams (SBCTs), Support Maintenance Companies (SMCs), Component Repair Companies (CRCs), and Forward Support Companies (FSCs).

Shop Equipment, Welding (SEW): FY18 Base procurement dollars in the amount of \$1.304 million will purchase 6 SEW to be fielded to the Infantry Brigade Combat Teams (IBCTs), Heavy Brigade Combat Teams (HBCTs), Stryker Brigade Combat Teams (SBCTs), Support Maintenance Companies (SMCs), Component Repair Companies (CRCs), and Forward Support Companies (FSCs).

Fire Suppression Refill System (FSRS): FY 18 OCO procurement dollars in the amount of \$1.124 million support 3 FSRS to accelerate APS-2.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these item are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 45

P-1 Line Item Number / Title:
G05301 / Mobile Maintenance Equipment Systems

G05315 / METAL WORKING AND MACHING SHOP SET (MWMSS)

MDAP/MAIS Code:

254.846

404.615

Resource Summary	Prior Years	FY 2016	FY 2017	<b>FY 2018 Base</b>	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	20	24	52	26	-	26
Gross/Weapon System Cost (\$ in Millions)	19.951	9.342	13.252	10.520	-	10.520
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	19.951	9.342	13.252	10.520	-	10.520
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	19.951	9.342	13.252	10.520	-	10.520
(The following Resource Summary rows are for inform	ational purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

389.250

997.550

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding

ID Code (A=Service Ready, B=Not Service Ready) : B

Gross/Weapon System Unit Cost (\$ in Thousands)

	P	rior Years	3		FY 2016			FY 2017		FY	2018 Bas	se	F۱	/ 2018 OC	0	FY	/ 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Flyaway Cost	'			'	'		'	'		<b>'</b>	'		<u> </u>			'		
Recurring Cost																		
Engineering Support	-	-	0.650	-	-	-	-	-	0.075	-	-	0.150	-	-	-	-	-	0.15
Quality Assurance Support	-	-	0.650	-	-	-	-	-	0.080	-	-	0.090	-	-	-	-	-	0.0
Engineer Change Proposal	-	-	1.027	-	-	0.140	-	-	0.199	-	-	0.200	-		-	-	-	0.20
Subtotal: Recurring Cost	-	-	2.327	-	-	0.140	-	-	0.354	-	-	0.440	-	-	-	-	-	0.44
Subtotal: Flyaway Cost	-	-	2.327	-	-	0.140	-	-	0.354	-	-	0.440	- [	-	-	-	-	0.44
Hardware Cost										*								
Recurring Cost																		
Metal Working Machining Shop Set Type I <sup>(†)</sup>	1,151.000	7	8.057	417.330	12	5.008	259.610	26	6.750	375.000	13	4.875	-		-	375.000	13	4.8
Metal Working Machining Shop Set Type II <sup>(†)</sup>	834.000	7	5.838	273.000	12	3.276	197.300	26	5.130	285.000	13	3.705	-	-	-	285.000	13	3.70
Subtotal: Recurring Cost	-	-	13.895	-	-	8.284	-	-	11.880	-	-	8.580	-	-	-	-	-	8.58
Subtotal: Hardware Cost	-	-	13.895	-	-	8.284	-	-	11.880	-	-	8.580	-	-	-	-	-	8.58
Package Fielding Cost							<u> </u>			,			'					
Recurring Cost																		
Fielding Support	_	-	1.060	-	-	0.240	-	-	0.320	_	_	0.100	_	_	_			0.10

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404.615

Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title:

**Date:** May 2017 Item Number / Title [DODIC]:

2035A / 03 / 45

G05301 / Mobile Maintenance Equipment Systems

G05315 / METAL WORKING AND MACHING SHOP SET (MWMSS)

ID Code (A=Service Ready, B=Not Service Ready): B

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Appropriation / Budget Activity / Budget Sub Activity:

	F	Prior Years	\$		FY 2016			FY 2017		FY	/ 2018 Ba	se	F	Y 2018 OC	:0	F	Y 2018 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Transportation	-	-	-	-	-	-	-	-	0.126	-	-	0.609	-	-	-	-	-	0.609
Tech Manuals	-	-	-	-	-	-	-	-	-	-	-	0.001	-	-	-	-	-	0.001
Subtotal: Recurring Cost	-	-	1.060	-	-	0.240	- 1	-	0.446	-	-	0.710	-	-	-	-	-	0.710
Subtotal: Package Fielding Cost	-	-	1.060	-	-	0.240	-	-	0.446	-	-	0.710	-	-	-	-	-	0.710
Support - Program Manageme	ent Cost						'			'					'			
Government Management	-	-	2.669	-	-	0.678	-	-	0.572	-	-	0.790	-	-	-	-	-	0.790
Subtotal: Support - Program Management Cost	-	-	2.669	-	-	0.678	-	-	0.572	-	-	0.790	-	-	-	-	-	0.790
Gross/Weapon System Cost	997.550	20	19.951	389.250	24	9.342	254.846	52	13.252	404.615	26	10.520	-	-	-	404.615	26	10.520

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	8	30	26	-	26
	Total Obligation Authority	3.114	5.360	10.520	-	10.520
ANG	Quantity	14	16	-	-	-
	Total Obligation Authority	5.449	6.084	-	-	-
AR	Quantity	2	6	-	-	-
	Total Obligation Authority	0.779	1.808	-	-	-
Total:	Quantity	24	52	26	-	26
Secondary Distribution	Total Obligation Authority	9.342	13.252	10.520	=	10.520

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 45

P-1 Line Item Number / Title:

G05301 / Mobile Maintenance Equipment Systems

G05315 / METAL WORKING AND MACHING SHOP SET (MWMSS)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Metal Working Machining Shop Set Type I		2016	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2015	Apr 2016	12	417.330			
Metal Working Machining Shop Set Type I		2017	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2016	Apr 2017	26	259.610			
Metal Working Machining Shop Set Type I		2018	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2017	Apr 2018	13	375.000			
Metal Working Machining Shop Set Type II		2016	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2015	Apr 2016	12	273.000			
Metal Working Machining Shop Set Type II		2017	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2016	Apr 2017	26	197.300			
Metal Working Machining Shop Set Type II		2018	JMTC / Rock Island	MIPR	JMTC, Rock Island, IL	Nov 2017	Apr 2018	13	285.000			

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 45

P-1 Line Item Number / Title:
G05301 / Mobile Maintenance Equipment Systems

G05320 / FIRE SUPPRESSION REFILL SYSTEM (FSRS)

FY 2016

**Prior Years** 

MDAP/MAIS Code:

FY 2017

**FY 2018 Base** 

P-1 Line #151

**FY 2018 OCO** 

FY 2018 Total

_						
Procurement Quantity (Units in Each)	1	2	17	10	3	13
Gross/Weapon System Cost (\$ in Millions)	4.656	5.542	4.560	4.951	1.124	6.075
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	4.656	5.542	4.560	4.951	1.124	6.075
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4.656	5.542	4.560	4.951	1.124	6.075
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	4 656 000	2 771 000	268 235	495 100	374 667	467 308

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready) : B

**Resource Summary** 

	P	rior Years	5		FY 2016			FY 2017		FY	' 2018 Bas	e	F۱	2018 OC	0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost								,										
Recurring Cost																		
Engineering Change Proposals	-	-	2.000	-	-	0.500	-	-	0.070	-	-	-	-	-	-	-	-	-
Transportation	-	-	-	-	-	0.632	-	-	0.132	-	-	-	-	-	0.132	-	-	0.132
Subtotal: Recurring Cost	-	-	2.000	-	-	1.132	-	-	0.202	-	-	-	-	-	0.132	-	-	0.132
Subtotal: Flyaway Cost	-	-	2.000	-	-	1.132	-	-	0.202	-	-	-	-	-	0.132	-	-	0.132
Hardware Cost										·								
Recurring Cost																		
Fire Suppression Refill System <sup>(†)</sup>	252.000	1	0.252	350.000	2	0.700	208.760	17	3.549	382.200	10	3.822	150.000	3	0.450	328.615	13	4.272
Subtotal: Recurring Cost	-	-	0.252	-	-	0.700	-	-	3.549	-	-	3.822	-	-	0.450	-	-	4.272
Subtotal: Hardware Cost	-	-	0.252	-	-	0.700	-	-	3.549	-	-	3.822	-	-	0.450	-	-	4.272
Support - Fielding Cost																		
Fielding	-	-	0.500	-	-	1.000	-	-	0.240	-	-	0.180	-	-	-	-	-	0.180
Subtotal: Support - Fielding Cost	-		0.500	-	-	1.000	-	-	0.240	-	-	0.180	-	-	-	-	•	0.180
Support - Production Engineer	ring Cost																	
Production Engineering	-	-	0.702	-	-	0.500	-	-	0.100	-	-	0.180	-	-	0.175	-	-	0.355
Subtotal: Support - Production Engineering Cost	-	-	0.702	-	-	0.500	-	-	0.100	-	-	0.180	-	-	0.175	-	-	0.355
Support - Program Manageme	ent Cost																	

Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title:

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45

G05301 / Mobile Maintenance Equipment Systems

Item Number / Title [DODIC]: G05320 / FIRE SUPPRESSION REFILL

SYSTEM (FSRS)

ID Code (A=Service Ready, B=Not Service Ready): B

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	6		FY 2016			FY 2017		FY	2018 Ba	se	F١	/ 2018 OC	0	FY	/ 2018 To	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Government Management	-	-	0.702	-	-	1.610	-	-	0.349	-	-	0.589	-	-	0.247	-	-	0.836
Subtotal: Support - Program Management Cost	-	-	0.702	-	-	1.610	-	-	0.349	-	-	0.589	-	-	0.247	-	-	0.836
Support - Quality Assurance C	Cost																	
Quality Assurance	-	-	0.500	-	-	0.600	-	-	0.120	-	-	0.180	-	-	0.120	-	-	0.300
Subtotal: Support - Quality Assurance Cost	-	-	0.500	-	-	0.600	-	-	0.120	-	-	0.180	-	-	0.120	-	-	0.300
Gross/Weapon System Cost	4,656.000	1	4.656	2,771.000	2	5.542	268.235	17	4.560	495.100	10	4.951	374.667	3	1.124	467.308	13	6.075

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	2	8	10	3	13
	Total Obligation Authority	5.542	1.580	4.951	1.124	6.075
ANG	Quantity	-	7	-	-	-
	Total Obligation Authority	-	2.418	-	-	-
AR	Quantity	-	2	-	-	-
	Total Obligation Authority	-	0.562	-	-	-
Total:	Quantity	2	17	10	3	13
Secondary Distribution	Total Obligation Authority	5.542	4.560	4.951	1.124	6.075

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: G05320 / FIRE SUPPRESSION REFILL SYSTEM (FSRS)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Fire Suppression Refill System		2016	JMTC - Integration / Rock Island Arsenal, IL	MIPR	Rock Island Arsenal, IL	Jun 2017	Oct 2017	2	350.000			
Fire Suppression Refill System		2017	JMTC - Integration / Rock Island Arsenal, IL	MIPR	Rock Island Arsenal, IL	Aug 2017	Dec 2017	17	208.760			
Fire Suppression Refill System		2018	JMTC - Integration / Rock Island Arsenal, IL	MIPR	Rock Island Arsenal, IL	Nov 2017	May 2018	13	328.620			

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 45

P-1 Line Item Number / Title:
G05301 / Mobile Maintenance Equipment Systems

G05330 / ARMAMENT REPAIR SHOP SET (ARSS)

MDAP/MAIS Code:

12 2 2 2 ( r comice ready, 2 recommendate), 12						
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	39	13	36	32	-	32
Gross/Weapon System Cost (\$ in Millions)	15.346	10.386	15.108	15.517	-	15.517
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	15.346	10.386	15.108	15.517	-	15.517
Plus CY Advance Procurement (\$ in Millions)	-	-	-	=	-	-
Total Obligation Authority (\$ in Millions)	15.346	10.386	15.108	15.517	-	15.517
(The following Resource Summary rows are for informat	ional purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	393.487	798.923	419.667	484.906	-	484.906

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready) : B

	Pi	rior Years	<b>;</b>		FY 2016			FY 2017		FY	' 2018 Bas	se	FY	2018 OC	0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)												
Flyaway Cost					,													
Recurring Cost																		
Engineering	-	-	0.120	-	-	0.200	-	-	0.150	-	-	0.450	-	-	-	-	-	0.45
Quality Assurance	-	-	0.040	-	-	0.100	-	-	0.040	-	-	0.064	-	-	-	-	-	0.06
Engineering Change Proposals	-	-	0.097	-	-	0.500	-	-	0.226	-	-	0.226	-	-	-	-	-	0.22
Transportation	-	-	0.060	-	-	0.150	-	-	0.078	-	-	0.098	-	-	-	-	-	0.09
Subtotal: Recurring Cost	-	-	0.317	-	-	0.950	-	-	0.494	-	-	0.838	-	-	-	-	-	0.83
Subtotal: Flyaway Cost	-	-	0.317	-	-	0.950	-	-	0.494	-	-	0.838	-	-	-	-	-	0.83
Hardware Cost																		
Recurring Cost																		
ARSS Hardware <sup>(†)</sup>	350.000	39	13.650	350.000	13	4.550	373.333	36	13.440	454.344	32	14.539	-	-	-	454.344	32	14.53
Subtotal: Recurring Cost	-	-	13.650	-	-	4.550	-	-	13.440	-	-	14.539	-	-	-	-	-	14.53
Subtotal: Hardware Cost	-	-	13.650	-	-	4.550	-	-	13.440	-	-	14.539	-	-	-	-	-	14.53
Package Fielding Cost		·	,		,					,								
Recurring Cost																		
Fielding Support	-	-	0.466	-	-	0.900	-	-	0.140	-	-	0.140	-	-	-	-	-	0.14
Subtotal: Recurring Cost	-	-	0.466	-	-	0.900	-	-	0.140	-	-	0.140	-	-	-	-	-	0.14
Subtotal: Package Fielding Cost	-	-	0.466	-	-	0.900	-	-	0.140	-	-	0.140	-	-	-	-	-	0.14
Support Cost					'			'								. '		

Exhibit P-5, Cost Analysis: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

2035A / 03 / 45

G05301 / Mobile Maintenance Equipment Systems

G05330 / ARMAMENT REPAIR SHOP

SET (ARSS)

ID Code (A=Service Ready, B=Not Service Ready) : B

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	3		FY 2016			FY 2017		FY	′ 2018 Ba	se	F	Y 2018 OC	ю.	F	<b> 2018 To</b> 1	tal
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Program Support	-	-	0.913	-	-	3.986	-	-	1.034	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	0.913	-	-	3.986	-	-	1.034	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	393.487	39	15.346	798.923	13	10.386	419.667	36	15.108	484.906	32	15.517	-	-	-	484.906	32	15.517

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	6	18	32	-	32
	Total Obligation Authority	4.793	6.359	15.517	-	15.517
ANG	Quantity	6	14	-	-	-
	Total Obligation Authority	4.793	6.921	-	-	-
AR	Quantity	1	4	-	-	-
	Total Obligation Authority	0.800	1.828	-	-	-
Total:	Quantity	13	36	32	=	32
Secondary Distribution	Total Obligation Authority	10.386	15.108	15.517	-	15.517

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: G05330 / ARMAMENT REPAIR SHOP SET (ARSS)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
ARSS Hardware <sup>(†)</sup>		2016	Tobyhanna Army Depot / Tobyhanna	MIPR	TOBYHANNA ARMY DEPOT, PA	Nov 2015	Feb 2016	13	350.000			
ARSS Hardware <sup>(†)</sup>		2017	Tobyhanna Army Depot / Tobyhanna	MIPR	TOBYHANNA ARMY DEPOT, PA	Nov 2016	Feb 2017	36	373.330			
ARSS Hardware <sup>(†)</sup>		2018	Tobyhanna Army Depot / Tobyhanna	MIPR	TOBYHANNA ARMY DEPOT, PA	Nov 2017	Feb 2018	32	454.340			

<sup>&</sup>lt;sup>(†)</sup> indicates the presence of a P-21

P-1 Line #151

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Exl	hib	oit P	-21, Pro	duct	ion Sc	hedu	le: F`	Y 201	8 Arm	าy														Date	: May	y 2017	7				
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Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: G05330 / ARMAMENT REPAIR SHOP SET (ARSS)

		Produc	tion Rates (Each /	Month)			•	Procurement Le	adtime (Months)			
MFR						Ir	nitial			Red	order	
Ref	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
#	Name - Location	WISK FOR 2016	1-0-5 FUI 2016	WAX FOR 2016	Prior to Oct 1	After Oct 1	PLI	After Oct 1	Prior to Oct 1	After Oct 1	PLI	After Oct 1
1	Tobyhanna Army Depot - Tobyhanna	1	10	18	0	:	5	7	0	2	5	7

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 45

P-1 Line Item Number / Title:
G05301 / Mobile Maintenance Equipment Systems

G39200 / Hydraulic Systems Test and Repair Unit (HSTRU)

ID Code (A=Service Ready, B=Not Service Ready): A		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	-	42	8	-	8
Gross/Weapon System Cost (\$ in Millions)	57.463	-	3.084	1.482	-	1.482
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	57.463	-	3.084	1.482	-	1.482
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	57.463	-	3.084	1.482	-	1.482
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reque	sts are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	73.429	185.250	-	185.250

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	5		FY 2016			FY 2017		F١	/ 2018 Ba	se	FY	′ 2018 OC	0	FY	2018 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)												
Flyaway Cost						,				,								
Recurring Cost																		
Engineering	-	-	3.230	-	-	-	-	-	0.050	-	-	0.048	-	-	-	-	-	0.04
Quality Assurance	-	-	2.010	-	-	-	-	-	0.050	-	-	0.025	-	-	-	-	-	0.02
Engineering Change Proposals	-	-	4.479	-	-	-	-	-	0.020	-	-	0.020	-	-	-	-	-	0.02
Transportation	-	-	2.586	-	-	-	-	-	0.094	-	-	0.006	-	-	-	-	-	0.00
Subtotal: Recurring Cost	-	-	12.305	-	-	-	-	-	0.214	-	-	0.099	-	-	-	-	-	0.09
Subtotal: Flyaway Cost	-	-	12.305	-	-	-	-	-	0.214	-	-	0.099	-	-	-	-	-	0.09
Hardware Cost								·										
Recurring Cost																		
Hydraulic Systems Test and Repair Unit <sup>(†)</sup>	107.697	310	33.386	-	-	-	62.380	42	2.620	161.500	8	1.292	-	-	-	161.500	8	1.2
Subtotal: Recurring Cost	-	-	33.386	-	-	-	-	-	2.620	-	-	1.292	-	-	-	-	-	1.2
Subtotal: Hardware Cost	-	-	33.386	-	-	-	-	-	2.620	-	-	1.292	-	-	-	-	-	1.29
Package Fielding Cost																		
Recurring Cost																		
Fielding Support	-	-	4.562	-	-	-	-	-	0.147	-	-	0.040	-	-	-	-	-	0.04
Subtotal: Recurring Cost	-	-	4.562	-	-	-	-	-	0.147	-	-	0.040	-	-	-	-	-	0.04
Subtotal: Package Fielding Cost	-	-	4.562	-	-	-	-	-	0.147	-	-	0.040	-	-	-	-	-	0.04
Support Cost																		

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Exhibit P-5, Cost Analysis: FY 2018 Army
Appropriation / Budget Activity / Budget Sub Activity:
P-1 Line Item

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

2035A / 03 / 45

G05301 / Mobile Maintenance Equipment Systems

G39200 / Hydraulic Systems Test and

Repair Unit (HSTRU)

**Date:** May 2017

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	S		FY 2016			FY 2017		FY	2018 Ba	se	F`	Y 2018 OC	0	F	/ 2018 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Program Support	-	-	7.210	-	-	-	-	-	0.103	-	-	0.051	-	-	-	-	-	0.051
Subtotal: Support Cost	-	-	7.210	-	-	-	-	-	0.103	-	-	0.051	-	-	-	-	-	0.051
Gross/Weapon System Cost	-	-	57.463	-	-	-	73.429	42	3.084	185.250	8	1.482	-	-	-	185.250	8	1.482

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	35	8	-	8
	Total Obligation Authority	-	1.989	1.482	-	1.482
ANG	Quantity	-	4	-	-	-
	Total Obligation Authority	-	0.690	-	-	-
AR	Quantity	-	3	-	-	-
	Total Obligation Authority	-	0.405	-	-	-
Total:	Quantity	=	42	8	=	8
Secondary Distribution	Total Obligation Authority	-	3.084	1.482	-	1.482

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	rmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: G39200 / Hydraulic Systems Test and Repair Unit (HSTRU)

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	 RFP Issue Date	
Hydraulic Systems Test and Repair Unit		2017	Mandus / Rock Island, IL	SS / FFP	TACOM, Warren, MI	Feb 2017	Apr 2017	42	62.380	Y		
Hydraulic Systems Test and Repair Unit		2018	TBD / TBD	C / FFP	TACOM, Warren, MI	Oct 2017	Dec 2017	8	161.500	Y		

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: M62700 / Shop Equipment, Welding (SEW)
ID Code (A-Sonico Poody, R-Not Sonico Poody)	MDAP/MAIS Code:	

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Procurement Quantity (Units in Each)	-	-	6	6	-	6			
Gross/Weapon System Cost (\$ in Millions)	217.559	-	1.299	1.304	-	1.304			
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-			
Net Procurement (P-1) (\$ in Millions)	217.559	-	1.299	1.304	-	1.304			
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-			
Total Obligation Authority (\$ in Millions)	217.559	-	1.299	1.304	-	1.304			
(The following Resource Summary rows are for informat	ional purposes only. The cor	responding budget request	s are documented elsewher	re.)					
Initial Spares (\$ in Millions)	-	-	-	-	-	-			
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	216.500	217.333	-	217.333			

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	•		FY 2016			FY 2017		FY	′ 2018 Bas	se	FY	/ 2018 OC	0	F	/ 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Hardware Cost	'	'		'						'			'			'	'	
Recurring Cost																		
Shop Equipment Welding <sup>(†)</sup>	227.410	879	199.893	-	-	-	125.000	6	0.750	125.000	6	0.750	-	-	-	125.000	6	0.75
Subtotal: Recurring Cost	-	-	199.893	-	-	-	-	-	0.750	-	-	0.750	-	-	-	-	-	0.75
Subtotal: Hardware Cost	-	-	199.893	-	-	-	-	-	0.750	-	-	0.750	-	-	-	-	-	0.75
Package Fielding Cost																		
Recurring Cost																		
Fielding	-	-	1.350	-	-	-	-	-	0.150	-	-	0.042	-	-	-	-	-	0.04
Transportation	-	-	-	-	-	-	-	-	0.060	-	-	0.100	-	-	-	-	-	0.10
Subtotal: Recurring Cost	-	-	1.350	-	-	-	-	-	0.210	-	-	0.142	-	-	-	-	-	0.14
Subtotal: Package Fielding Cost	-	-	1.350	-	-	-	-	-	0.210	-	-	0.142	-	-	-	-	-	0.14
Support - Engineering Chang	e Proposals Co	st				,				,			,					
Engineering Change Proposals	-	-	3.263	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-
Subtotal: Support - Engineering Change Proposals Cost	-	-	3.263	-	-	-	-	-	0.020	-	-	-	-	-	-	-	-	-
Support - Production Enginee	ering Cost							·										
Production Engineering	-	-	-	-	-	-	-	-	0.160	-	-	0.160	-	-	-	-	-	0.16
Subtotal: Support - Production Engineering Cost	-	-	-	-	-	-	-	-	0.160	-	-	0.160	-	-	-	-	-	0.16

LI G05301 - Mobile Maintenance Equipment Systems Army

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P-1 Line #151

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 45

P-1 Line Item Number / Title:
G05301 / Mobile Maintenance Equipment Systems

Date: May 2017

Item Number / Title [DODIC]:
M62700 / Shop Equipment, Welding (SEW)

ID Code (A=Service Ready, B=Not Service Ready):

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

MDAP/MAIS Code:

	Prior Years				FY 2016			FY 2017		F	/ 2018 Ba	se	F	Y 2018 OC	:0	F	Y 2018 To	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Support - Program Manageme	ent Cost																	
Government Management	-	-	13.053	-	-	-	-	-	0.119	-	-	0.112	-	-	-	-	-	0.112
Subtotal: Support - Program Management Cost	-	-	13.053	-	-	-	-	-	0.119	-	-	0.112	-	-	-	_	-	0.112
Support - Quality Assurance (	Cost																	
Quality Assurance	-	-	-	-	-	-	-	-	0.040	-	-	0.140	-	-	-	-	-	0.140
Subtotal: Support - Quality Assurance Cost	-	-	-	-	-	-	-	-	0.040	-	-	0.140	-	-	-	_	-	0.140
Gross/Weapon System Cost	-	-	217.559	-	-	-	216.500	6	1.299	217.333	6	1.304	-	-	-	217.333	6	1.304

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	2	6	-	6
	Total Obligation Authority	-	0.625	1.304	-	1.304
ANG	Quantity	-	3	-	-	-
	Total Obligation Authority	-	0.564	-	-	-
AR	Quantity	•	1	-	-	-
	Total Obligation Authority	-	0.110	-	-	-
Total:	Quantity	=	6	6	=	6
Secondary Distribution	Total Obligation Authority	-	1.299	1.304	-	1.304

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	Date: May 2017	
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 45	P-1 Line Item Number / Title: G05301 / Mobile Maintenance Equipment Systems	Item Number / Title [DODIC]: M62700 / Shop Equipment, Welding (SEW)

	0			Method/Type			Date			Specs	Date		
	C			or		Award	of First	Qty	Unit Cost	Avail	Revision	RFP Issue	
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date	
Shop Equipment Welding		2017	JMTC / Rock Island, IL	MIPR	Rock Island, IL	Oct 2016	Apr 2017	6	125.000				
Shop Equipment Welding		2018	JMTC / Rock Island, IL	MIPR	Rock Island, IL	Oct 2017	Apr 2018	6	125.000				

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 45:

ML5345 / Items Less Than \$5.0M (Maint Eq)

Maintenance Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	541	245	669	409	-	409	412	525	517	734	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	114.384	2.760	2.861	2.728	-	2.728	2.743	4.730	4.576	4.642	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	114.384	2.760	2.861	2.728	-	2.728	2.743	4.730	4.576	4.642	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	114.384	2.760	2.861	2.728	-	2.728	2.743	4.730	4.576	4.642	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	n budget request	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	211.431	11.265	4.277	6.670	-	6.670	6.658	9.010	8.851	6.324	Continuing	Continuing

#### **Description:**

Items Less Than \$5 Million (Maintenance Equipment): Acquire and field maintenance support equipment, such as the Machinist Measuring Tool Set (MMTS), Load Bank System Tactical Electric Power (TEP), Refrigeration Tool Kit Type I and Type II with improved, modernized, standardized, and centralized maintenance Sets, Kits, Outfits, and Tools (SKOT).

The Machinist Measuring Tool Set (MMTS) provides necessary components for general machinist's use. The MMTS facilitates fabrication, repair, and modifications of metallic and nonmetallic parts, and supports metalworking shop activities. The MMTS supplements the Metal Working & Machining Shop Set (MWMSS) by providing an authorized set of hand tools and personal protective equipment necessary for the 91E Soldier to conduct welding and machining operations. The set consists of a tool box and 73 components (i.e. gauges, calipers, rulers, hammer, punches, etc.). Army Acquisition Objective (AAO) for MMTS is 2511.

The Load Bank System Tactical Electric Power (TEP) maintenance equipment enables units to properly maintain equipment and perform the mandatory maintenance operations as well as perform diagnostics and post-verification testing on all small and medium tactical generators (2 to 60 kw) which enable readiness of weapons systems. This equipment allows Soldiers to properly and adequately maintain reliable systems that meet Soldier safety, supportability, and mobility requirements, thereby reducing the risk to the warfighter.

The Load Bank System is a key maintenance enabler for the Tactical Electric Power (TEP) generator sets. TEP generator sets provide power to critical life saving operations such as field hospitals that provide medical support to combat wounded soldiers, satellite and land communication systems to communicate with Soldiers in convoys and foot patrols, Tactical Operation Centers and various Soldier life support operations. The Load Bank is a critical maintenance tool for TEP generators. It is a Soldier-portable system required for performing diagnostics, repairs and post verification testing on all small and medium tactical generators of the Army's tactical fleet. Load Banks are required to: verify the generator can provide clean uninterrupted power output without electrical fluctuations which can injure soldiers and damage Army equipment, perform accurate diagnostic, repair, scheduled maintenance, troubleshooting and post repair performance verification testing; verify that small and medium generator sets can provide 100% of rated power output; allows maintainers to 'burn out' fuel/carbon accumulations due to under-loading the generator set for extended periods. The capability that Load Banks provide to load test generator sets is an essential function that Army maintenance units require to support combat and peacetime operations. This is an Army requirement expressed in generator set field level maintenance technical manuals. There is a recognized Table of Equipment (TOE)/Modified TOE (MTOE) requirement for TEP generator sets. Army Acquisition Objective (AAO) for Load Bank System Tactical Electric Power (TEP) is 1270.

The Refrigeration Tool Kit (RTK) consists of two kits, the individual Soldier kit (Type I) and the base kit (Type II). These kits provide the Military Occupational Specialty (MOS) 91C Utilities Equipment Repairer Soldiers all the tools and equipment required to test, maintain and repair every environmental Control Unit (ECU) on and off the battlefield. Proper functioning ECUs facilitate hospital/medical activities such as laboratory operations, blood banks, aiding mortuary affairs, safe transportation and storage of perishable foods; providing environmentally-controlled conditions for troops, signal, and command/control equipment; and Humanitarian Support, Disaster Relief and homeland Support Security deployments. The RTK operates in all environments where United States Armed Forces deploy. The RTK provides field

LI ML5345 - Items Less Than \$5.0M (Maint Eq) Army

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P-1 Line #152

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 45:

ML5345 / Items Less Than \$5.0M (Maint Eq)

Maintenance Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #152

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

level maintenance for all Army equipment that requires an Environmental Control Unit (ECU). The RTK provides the capability to support maintenance operations as far forward as possible on the battlefield by providing on-system maintenance repairs to Army equipment and/or components, which allows major combat systems to return to the fight rapidly. RTK Type I Army Acquisition Objective (AAO) 4762 and Type II 2655

				FY 2018	FY 2018	FY 2018				
Secondar	y Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	245	454	409	-	409	412	525	517	734
	Total Obligation Authority	2.760	1.542	2.728	-	2.728	2.743	4.730	4.576	4.642
ANG	Quantity	-	209	-	-	-	-	-	-	-
	Total Obligation Authority	-	1.288	-	-	-	-	-	-	-
AR	Quantity	-	6	-	-	-	-	-	-	-
	Total Obligation Authority	-	0.031	-	-	-	-	-	-	-
Total:	Quantity	245	669	409	-	409	412	525	517	734
Secondary Distribution	Total Obligation Authority	2.760	2.861	2.728	-	2.728	2.743	4.730	4.576	4.642

#### Justification:

FY18 Base funding in the amount of \$1.015 million will procure 175 Machinist Measuring Tool Sets, \$1.273 million will procure 202 Load Bank System Tactical Electric Power (TEP), \$.260 million will procure 26 RTK - Individual Soldier Kit, and \$.180 million will procure 6 RTK - Base Kit.

The maintenance equipment is essential for units to properly maintain equipment, perform the mandatory maintenance operations and perform diagnostic testing which maintains the readiness of weapons systems. This equipment allows Soldiers to properly and adequately maintain vehicles and systems. Properly maintained systems perform at maximum capability, with improved safety and reduced risk to the warfighter. This equipment supports combat operations, Army Forces and unit Mission Essential Task List (METL) requirements. The Army requires reliable systems that support Soldier safety, supportability, and mobility requirements. SKOT systems require continuous review, revision, and upgrades to support Army requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these item are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R03800 / Grader, Road Mtzd, Hvy, 6X4 (CCE)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	22	21	14	2	-	2	-	-	-	-	-	59
Gross/Weapon System Cost (\$ in Millions)	320.708	5.903	4.789	0.989	-	0.989	-	-	-	-	-	332.389
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	320.708	5.903	4.789	0.989	-	0.989	-	-	-	-	-	332.389
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	320.708	5.903	4.789	0.989	-	0.989	-	-	-	-	-	332.389
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget requests	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	14,577.636	281.095	342.071	494.500	-	494.500	-	-	-	-	-	5,633.712

## **Description:**

Graders are used by Horizontal & Vertical Companies, Engineer Support Companies, Clearance Companies, Asphalt Teams and Quarry Platoons in support of engineer requirements. The Grader is dieselengine driven, pneumatic tired, with articulated frame steering. It is equipped with a power shift transmission, fully enclosed cab, hydraulically operated blade and scarifier. The Grader may be driven from one work site to another and is used for grading, shaping, bank sloping, ditching, scarifying, general construction and maintenance of roads and airfields. A Basis of Issue Plan (BOIP) increase was approved in FY16 increasing the Army Acquisition Objective (AAO) to 881 (861 Type I & 20 Type IA). The Grader program includes the Type I and the Type IA Air Dropable variant. The Grader is a commercial off the shelf (COTS) program that is considered a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations.

				FY 2018	FY 2018	FY 2018				
Secondary	y Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	17	13	2	-	2	-	-	-	-
	Total Obligation Authority	4.840	4.205	0.989	-	0.989	-	-	-	-
ANG	Quantity	4	1	-	-	-	-	-	-	-
	Total Obligation Authority	1.063	0.584	-	-	-	-	-	-	-
Total:	Quantity	21	14	2	-	2	-	-	-	-
Secondary Distribution	Total Obligation Authority	5.903	4.789	0.989	-	0.989	-	-	-	-

#### Justification:

FY18 Base funding in the amount of \$.989 million procures 2 Type I Graders in support of the Active Army, National Guards and Reserve units. The Grader provides the Army forces improved mobility and deployability to meet Army requirements. New Graders will provide updated technology, electronics, and hydraulics which will increase the current readiness and reduce the logistics footprint.

This program is considered a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations.

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xhibit P-40, Budget Line Item Justification: FY 2018 Army  Date: May 2017  Date: May 2017										
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Construction Equipment		P-1 Line Item Number / Title: R03800 / Grader, Road Mtzd, Hvy, 6X4 (CCE)								
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code I	Items: N/A	Other Related Program Elements: N/A							
Line Item MDAP/MAIS Code: N/A	-									
IAW Section 1815 of the FY 2008 NDAA this item is necesand providing military support to civil authorities.	ssary for use by the active components and	reserve components of the	e Armed Forces for homeland defense missions, domestic emergency respons	ses,						

LI R03800 - Grader, Road Mtzd, Hvy, 6X4 (CCE) Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

RA0100 / Scrapers, Earthmoving

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	22	46	36	15	-	15	11	-	-	-	-	130
Gross/Weapon System Cost (\$ in Millions)	226.851	29.460	26.233	11.180	-	11.180	8.400	-	-	-	-	302.124
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	
Net Procurement (P-1) (\$ in Millions)	226.851	29.460	26.233	11.180	-	11.180	8.400	-	-	-	-	302.124
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	226.851	29.460	26.233	11.180	-	11.180	8.400	-	-	-	-	302.124
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request:	s are documente	d elsewhere.)	1			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	10,311.409	640.435	728.694	745.333	-	745.333	763.636	-	-	-	-	2,324.031

## **Description:**

The 14-18 Cubic Yard, Earthmoving Heavy Scraper is used by Horizontal Construction Companies, Vertical Construction Companies and Engineering Companies. It is a self-propelled and articulated framed steering vehicle with an open bowl, two axles, a single diesel engine and pneumatic tires. The 14-18 Cubic Yard, Earthmoving Heavy Scraper has the ability to self-load at a reduced production capacity. The 14-18 Cubic Yard, Earthmoving Heavy Scraper provides a hauling and dumping capability to perform efficient tasks in support of earthmoving projects. The 14-18 Cubic Yard, Earthmoving Heavy Scraper is a commercial off the shelf (COTS) program that provides Army Engineers with essential equipment to perform their road and airfield construction and site preparation missions. The Army Acquisition Objective (AAO) is 666.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	14	4	15	-	15	-	-	-	-
	Total Obligation Authority	8.966	2.629	11.180	-	11.180	-	-	-	-
ANG	Quantity	22	16	-	-	-	-	-	-	-
	Total Obligation Authority	14.089	11.802	-	-	-	-	-	-	-
AR	Quantity	10	16	-	-	-	11	-	-	-
	Total Obligation Authority	6.405	11.802	-	-	-	8.400	-	-	-
Total:	Quantity	46	36	15	-	15	11	-	-	-
Secondary Distribution	Total Obligation Authority	29.460	26.233	11.180	-	11.180	8.400	-	-	-

#### Justification:

FY 2018 Base funding in the amount of \$11.180 million procures 15 Heavy Scrapers in support of the Active Army, National Guard and Reserve Units. The Scraper provides the Army's forces improved mobility and deployability to meet Army requirements. New Scrapers will provide updated technology, electronics, and hydraulics which will increase the current readiness and reduce the logistics footprint.

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Exhibit P-40, Budget Line Item Justification: F	Y 2018 Army		<b>Date:</b> May 2017						
Appropriation / Budget Activity / Budget Sub / 2035A: Other Procurement, Army / BA 03: Other Construction Equipment		P-1 Line Item Number / Title: RA0100 / Scrapers, Earthmoving							
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A						
Line Item MDAP/MAIS Code: N/A									
This program is considered a Critical Dual Use (CDU) system	n enabling and supporting Defense Suppo	ort to Civil Authorities (D	DSCA) operations.						
In accordance with Section 1815 of the FY 2008 National De defense missions, domestic emergency responses, and prov		is item is necessary for	or use by the active and reserve components of the Armed Forces for homeland						

LI RA0100 - Scrapers, Earthmoving Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

**Date:** May 2017

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

X01500 / Hydraulic Excavator

Construction Equipment

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

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	ОСО	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	31	-	2	-	5	5	-	11	28	26	-	103
Gross/Weapon System Cost (\$ in Millions)	118.187	-	1.123	-	3.850	3.850	-	4.068	8.663	7.805	-	143.696
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	118.187	-	1.123	-	3.850	3.850	-	4.068	8.663	7.805	-	143.696
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	118.187	-	1.123	-	3.850	3.850	-	4.068	8.663	7.805	-	143.696
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget requests	are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	3,812.484	-	561.500	-	770.000	770.000	-	369.818	309.393	300.192	-	1,395.107

## Description:

The Hydraulic Excavator Type I (HYEX-I) is a commercial off-the-shelf (COTS) vehicle with minor military modifications. It is diesel engine driven, self-propelled, track mounted, hydraulically controlled system, equipped with a hydraulic guick coupler system for use with a wide variety of attachments. The support equipment include a hydraulic impact breaker, plate compactor, crushing unit, barrier grapple, arm extension for dredging, and a variety of buckets for digging, dredging, and trenching. The HYEX-I provides engineer units a multi-functional construction capability that can dig, trench, dredge, scoop, lift, dump, and perform demolition to structures. The HYEX-I also has the capability to accept a Crew Protection Kit in the form of a replaceable armor C-Kit cab for contingency operations. The HYEX is fielded to Horizontal Construction Companies, VERT Companies, Multi-Role Bridge Companies, and the TRADOC training base. The minimum monthly sustaining rate for the HYEX is 5 systems per month. The HYEX Type I Army Acquisition Objective (AAO) is 463.

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	1	-	5	5	-	-	-	-
	Total Obligation Authority	-	0.555	-	3.850	3.850	-	-	-	-
ANG	Quantity	-	-	-	-	-	-	8	18	16
	Total Obligation Authority	-	-	-	-	-	-	2.958	4.962	4.034
AR	Quantity	-	1	-	-	-	-	3	10	10
	Total Obligation Authority	-	0.568	-	-	-	-	1.110	3.701	3.771
Total:	Quantity	-	2	-	5	5	-	11	28	26
Secondary Distribution	<b>Total Obligation Authority</b>	-	1.123	-	3.850	3.850	-	4.068	8.663	7.805

#### Justification:

FY18 OCO procurement dollars in the amount of \$3.850 million will procure HYEX vehicles to support the Combatant Command (COCOM) requirement to replace battlefield loss for Operation Freedom Sentinel.

UNCLASSIFIED LI X01500 - Hydraulic Excavator Army

P-1 Line #155

Exhibit P-40, Budget Line Item Justification: FY 2018 Army  Appropriation / Budget Activity / Budget Sub Activity:  2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:  Construction Equipment  ID Code (A=Service Ready): A  P-1 Line Item Number / Title:  X01500 / Hydraulic Excavator  Other Related Program Elements: N/A  Line Item MDAP/MAIS Code: N/A									
2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:  Construction Equipment  ID Code (A=Service Ready): A Program Elements for Code B Items: N/A  Other Related Program Elements: N/A									
Line Item MDAP/MAIS Code: N/A									
This program is considered a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations.									
In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.	neland								

LI X01500 - Hydraulic Excavator Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Other Related Program Elements: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

M05800 / Tractor, Full Tracked

Construction Equipment

Program Elements for Code B Items: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	103	78	17	-	-	-	-	-	-	-	-	198
Gross/Weapon System Cost (\$ in Millions)	577.578	27.156	4.426	-	-	-	-	-	-	-	-	609.160
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	577.578	27.156	4.426	-	-	-	-	-	-	-	-	609.160
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	577.578	27.156	4.426	-	-	-	-	-	-	-	-	609.160
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. T	he corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost /\$ in Thousands	5 607 553	348 154	260 353	_	_	_	_	_	_	_	_	3 076 566

## Description:

This line covers both the T9 Medium Tractor, Full Tracked and the T5 Light Tractor, Full Tracked. These Bulldozers are used to perform dozing, rough grading, cutting and filling, and ripping in support of general engineer construction tasks; to build and maintain roads and airfields; and to build and support tactical missions. When equipped with armor protection, they fulfill the military requirements for mine clearing and military specific operations in a hostile environment. These Bulldozers are equipped with a power shift transmission and hydraulically operated semi-U type Bulldozer blade. The Bulldozers have either a winch or a ripper. Due to the low ground bearing pressure, the Bulldozer possesses the capability to work in adverse underfoot conditions and is normally one of the first pieces of construction equipment on a job site. The T9 Medium Tractor, Full Tracked is a low speed, medium draw bar pull bulldozer with a blade and is a basic item of earthmoving equipment used for heavy dozing and clearing. The T5 Light Tractor, Full Tracked is a smaller, air mobile, air droppable Bulldozer used in airborne operations for construction and maintenance emplacements, roads and airfields. The Army Acquisition Objective (AAO) is 1,600 (T-9: 1,296/T-5: 304), in addition, the Armor Kit requirement is 366 (T-9: 318/T-5: 48). This is a commercial off the shelf (COTS) program.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	11	17	-	-	-	-	-	-	-
	Total Obligation Authority	3.830	4.426	-	-	-	-	-	-	-
ANG	Quantity	38	-	-	-	-	-	-	-	-
	Total Obligation Authority	13.230	-	-	-	-	-	-	-	-
AR	Quantity	29	-	-	-	-	-	-	-	-
	Total Obligation Authority	10.096	-	-	-	-	-	-	-	-
Total:	Quantity	78	17	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	27.156	4.426	-	-	-	-	-	-	-

#### Justification:

This program has no FY18 Base procurement requirements.

LI M05800 - Tractor, Full Tracked Page 1 of 2 Army

UNCLASSIFIED

P-1 Line #156

	UNCL	ASSIFIED						
Exhibit P-40, Budget Line Item Justification:	FY 2018 Army		<b>Date:</b> May 2017					
Appropriation / Budget Activity / Budget Sub 2035A: Other Procurement, Army / BA 03: Othe Construction Equipment		P-1 Line Item Number / Title: M05800 / Tractor, Full Tracked						
D Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	3 Items: N/A	Other Related Program Elements: N/A					
Line Item MDAP/MAIS Code: N/A								
This program is considered a Critical Dual Use (CDU) syste	em enabling and supporting Defense Suppo	ort to Civil Authorities (DS	SCA) operations.					
In accordance with Section 1815 of the FY 2008 National D missions, domestic emergency responses, and providing m	refense Authorization Act (P.L. 110-81), this illitary support to civil authorities.	sitem is necessary for us	se by the active and reserve components of the Armed Forces for homeland defense					

LI M05800 - Tractor, Full Tracked Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R06701 / All Terrain Cranes

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

				1			1		1	1		
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	4	1	9	6	-	6	7	12	19	20	-	78
Gross/Weapon System Cost (\$ in Millions)	11.049	13.415	65.285	8.935	-	8.935	10.535	17.790	32.900	32.685	-	192.594
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	11.049	13.415	65.285	8.935	-	8.935	10.535	17.790	32.900	32.685	-	192.594
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	11.049	13.415	65.285	8.935	-	8.935	10.535	17.790	32.900	32.685	-	192.594
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,762.250	13,415.000	7,253.889	1,489.167	-	1,489.167	1,505.000	1,482.500	1,731.579	1,634.250	-	2,469.154

## **Description:**

The All Terrain Cranes (ATC) Type I/II are self deployable systems capable of traveling on both primary and secondary roads with off-road maneuverability. The ATC Type I provides light to medium lift capabilities at a capacity of up to 25 tons. The ATC Type II provides heavy lift capabilities required by the Engineer force at a capacity of up to 50 tons. The ATC Type II provides mobility, survivability, and counter-mobility support across the entire range of theater operations supporting Route Remediation Units, Maneuver Brigade Combat Teams, and/or Expeditionary Engineer Brigades. The ATC Type II supports Joint Force capabilities to repair and expand operating capacities of Ports of Embarkation (POE), Intermediate Staging Bases/Forward Operating Bases, Ports of Debarkation (POD), entry points and bridging in and around the battle space. The ATC Type II provides capability to load and unload containers; to support base camp construction, force protection, and overhead lift operations; to assist in the loading of earth, sand, gravel, rock, and bulk-type materials; to drive steel, concrete, and timber piles; to perform tasks supporting construction rehabilitation and maintenance of mooring systems, jetties, breakwaters, and other structures; to participate in tasks that support the construction of piers, wharves, ramps and related structures required for cargo loading and off-loading; and to assist in the preparation and construction of facilities for Roll On Roll Off (RORO). The ATC Army Acquisition Objective (AAO) is 393 Systems (Type II: 214 Systems). This is a Commercial-off-the Shelf (COTS) program.

	'			FY 2018	FY 2018	FY 2018				
Second	dary Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1	3	2	-	2	2	4	5	7
	Total Obligation Authority	13.415	55.844	2.979	-	2.979	2.979	5.930	12.420	13.640
ANG	Quantity	-	3	2	=	2	2	4	7	7
	Total Obligation Authority	-	4.721	2.978	-	2.978	2.978	5.930	10.240	10.255
AR	Quantity	-	3	2	-	2	3	4	7	6
	Total Obligation Authority	-	4.720	2.978	-	2.978	4.578	5.930	10.240	8.790
Total:	Quantity	1	9	6	-	6	7	12	19	20
Secondary Distribution	Total Obligation Authority	13.415	65.285	8.935	-	8.935	10.535	17.790	32.900	32.685

Justification:

UNCLASSIFIED
Page 1 of 2

	ONOL	AUUII ILD					
Exhibit P-40, Budget Line Item Justification	ı: FY 2018 Army		<b>Date:</b> May 2017				
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Construction Equipment		P-1 Line Item Number / Title: R06701 / All Terrain Cranes					
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Elements: N/A				
Line Item MDAP/MAIS Code: N/A							
FY 2018 Base procurement funding in the amount of \$8.9	935 million procures and fields 6 qty ea Type I	I cranes.					
The ATC Type II system is considered a Critical Dual Use	e (CDU) system, enabling and supporting Def	ense Support to Civil Au	thorities (DSCA) operations (i.e. Disaster Relief).				
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions.		s item is necessary for u	use by the active and reserve components of the Armed Forces for homeland				

LI R06701 - All Terrain Cranes Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

M08100 / Plant, Asphalt Mixing

Construction Equipment

Program Elements for Code B Items: N/A Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready): A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	41.116	0.984	-	-	-	-	-	-	-	-	-	42.100
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	41.116	0.984	-	-	-	-	-	-	-	-	-	42.100
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	41.116	0.984	-	-	-	-	-	-	-	-	-	42.100
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	1			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

## Description:

The Asphalt Mixing Plant (AMP) is a commercial off the shelf (COTS) system capable of producing a minimum of 150 tons per hour of asphalt for use in the construction of roads, airfields, helicopter pads, parking lots and storage areas. The AMP is fielded to long-term storage and Army training base. The AMP is a portable drum-type, electric-motor-driven facility capable of self-erection (major components) and operation without permanent type footings. The AMP consists of major components and accessories required to assemble a complete plant. The AMP components consist of a plant control trailer, de-drummer, asphalt storage tank. 4-bin aggregate feeder, conveyor, surge bin feeder, mixing drum, power generators, and baghouse (filtration system). The Army Acquisition Objective (AAO) is 2.

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.984	-	-	-	-	-	-	-	-
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	0.984	-	-	-	-	-	-	-	-

#### Justification:

Army

This program has no FY 2018 Base or OCO Procurement requirements.

In accordance with Section 1815 of the FY 2008 NDAA this item is necessary for use by the active components and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R05901 / High Mobility Engineer Excavator (HMEE)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	103	6	15	127	4	131	91	53	6	6	-	411
Gross/Weapon System Cost (\$ in Millions)	296.807	2.656	4.643	64.339	1.932	66.271	47.297	28.219	3.600	3.600	-	453.093
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	=	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	296.807	2.656	4.643	64.339	1.932	66.271	47.297	28.219	3.600	3.600	-	453.093
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	296.807	2.656	4.643	64.339	1.932	66.271	47.297	28.219	3.600	3.600	-	453.093
(The following	Resource Sumr	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)			<u> </u>	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,881.621	442.667	309.533	506.606	483.000	505.886	519.747	532.434	600.000	600.000	-	1,102.416

## **Description:**

The High Mobility Engineer Excavator Type I (HMEE-I) is a non-developmental item uniquely developed for the military. It is used to clear rubble and debris from routes, roads, airfields, and the construction of these elements to include providing survivability positions for the maneuver forces. It is all-wheeled drive, diesel engine driven, highly mobile, equipped with a front bucket and a rear excavation bucket, and capable of using forklift, sweeper, and auger attachments. It is self-deployable, does not require a truck/trailer combination for transport, and can reach speeds up to 60 MPH. It is transported on C-130 (w/o armor), C-5, and C-17 aircraft. The HMEE-I also has the capability to accept a Crew Protection Kit in the form of an armored cab for contingency operations. The HMEE-I provides the capability of maintaining pace with the rapid movement of forces between engagements. The HMEE-I is fielded to Heavy, Light, and Stryker Brigade Combat Teams, Engineer Support Companies, Multi-Roll Bridge Companies, Route Clearance Companies, Petroleum Pipeline Companies and the Army training base. A quantity of 266 HMEE-I vehicles may be converted into semi-autonomous Route Clearance Interrogation System (RCIS)-capable vehicles, which requires a revision of the Interactive Technical Manual (IETM) to incorporate fleet retrofits of the Engineering Change Proposals (ECP). The minimum monthly sustaining rate for the HMEE-I is 3 systems per month.

The High Mobility Engineer Excavator (Airborne) (HMEE (A)) is an armored, slightly modified HMEE-I that is air-droppable from a C-17 aircraft. The HMEE (A) provides the same excavation and high travel speed (60 mph) capabilities as the HMEE I. The HMEE (A) will be fielded to Engineer Support Companies and Infantry Brigade Combat Teams (IBCTs) in Airborne units.

The High Mobility Engineer Excavator Type III (HMEE-III) is a Backhoe Loader (BHL) which is a Commercial Off-the-Shelf (COTS) backhoe loader with minor military modifications. The BHL provides the capability to execute general construction missions in the areas of road building, airfield construction, repair and improve road systems, trails and bridges. The BHL also has the capability to accept a Crew Protection Kit in the form of a replaceable armored cab for contingency operations. The BHL is capable of driving up to 25 MPH on improved roads and 7 MPH off-road. The BHL is transported in the air via C-130, C-5, or C-17 aircraft, or across the highway with M916/M870 and M915/M172 truck/trailer combination organic to the unit. The BHL is fielded to Horizontal and Vertical Construction Companies, the Army training base, and other Non-Engineer Units.

The Army Acquisition Objective is: 1,763 (HMEE-I: 1,081/HMEE-III: 682).

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	2	13	11	4	15	13	10	6	6
	Total Obligation Authority	0.886	3.467	6.132	1.932	8.064	8.566	6.566	3.600	3.600

LI R05901 - High Mobility Engineer Excavator (HMEE)
Army

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P-1 Line #159

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R05901 / High Mobility Engineer Excavator (HMEE)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
ANG	Quantity	2	1	58	-	58	60	37	-	-
	Total Obligation Authority	0.885	0.588	29.104	-	29.104	28.000	18.500	-	-
AR	Quantity	2	1	58	-	58	18	6	-	-
	Total Obligation Authority	0.885	0.588	29.103	-	29.103	10.731	3.153	-	-
Total:	Quantity	6	15	127	4	131	91	53	6	6
Secondary Distribution	Total Obligation Authority	2.656	4.643	64.339	1.932	66.271	47.297	28.219	3.600	3.600

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R05901 / High Mobility Engineer Excavator (HMEE)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	R05900 / High Mobility Engineer Excavator (HMEE) Type I	P-5a, P-21	В		103 / 296.807	6 / 2.656	15 / 4.643	127 / 64.339	4 / 1.932	131 / 66.271
P-40	Total Gross/Weapon System Cost				103 / 296.807	6 / 2.656	15 / 4.643	127 / 64.339	4 / 1.932	131 / 66.271

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 Base procurement dollars in the amount of \$64.339 million will procure 127 HMEE-I vehicles and programmatic system support, and the revision of the Interactive Electronic Technical Manuals (IETM) for the base HMEE-I vehicles to incorporate fleet retrofits of Engineering Change Proposals related to the 266 HMEE-I vehicles being converted into semi-autonomous Route Clearance Interrogation System (RCIS)-capable vehicles.

FY18 OCO procurement dollars in the amount of \$1.932 million will procure 4 HMEE-I vehicles to support the Combatant Command (COCOM) requirement to replace battlefield loss for Operation Freedom Sentinel.

This program is considered a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: N	/lay 2017				
<b>Appropriation / B</b> 2035A / 03 / 50	udget Ad	ctivity / I	Budget S	Sub Act	ivity:	P-1 Line Item Number / Title: R05901 / High Mobility Engineer Excavator (HMEE)								Item Number / Title [DODIC]: R05900 / High Mobility Engineer Excavator (HMEE) Type I					
ID Code (A=Service Read	ly, B=Not Servi	ce Ready) : <b>E</b>	3					_	М	DAP/MAIS	S Code:								
F	Resource	Summa	ary		F	Prior Yea	ars	FY 20	16	FY	2017	FY	2018 Bas	se F	Y 2018 (	ОСО	FY 2018	Total	
Procurement Quantity (Uni	ts in Each)						103		6			15		127		4		13	
Gross/Weapon System Co	ost (\$ in Million	s)					296.807		2.656		4.	643	64	4.339		1.932		66.27	
Less PY Advance Procure	ment (\$ in Mill	lions)					-		-			-		-		-		-	
Net Procurement (P-1) (\$ i	n Millions)						296.807		2.656		4.	643	64	4.339		1.932		66.27	
Plus CY Advance Procure	ment (\$ in Mill	ions)					-		-			-		-		-		-	
Total Obligation Authorit	y (\$ in Millions	)					296.807		2.656		4.	643	64	4.339		1.932		66.27	
(TI	ne following F	Resource Su	ımmary rows	are for info	ormational pu	ırposes only	y. The corres	ponding bud	get request	s are docum	ented else	where.)				-			
Initial Spares (\$ in Millions)							-		-			-		-		-		-	
Gross/Weapon System Ur	nit Cost (\$ in T	housands)				2	,881.621		442.667		309.	533	506	6.606		483.000		505.88	
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact or	sum exact	ly due to rou	nding.									"				
	Р	rior Years	;		FY 2016			FY 2017		F	′ 2018 Ba	ase	F	Y 2018 O	СО	F	Y 2018 Tot	al	
Cost Elements	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	
Flyaway Cost	(\$10)	(Lacii)	(ψ ινι)	(Ψ1)	(Lacii)	(Ψ 101)	(\$70)	(Lacii)	(ψ 101)	(\$10)	(Lacii)	(ψ 101)	(ψ10)	(Lacii)	(ψ W)	(ψ10)	(Lacii)	(Ψ W)	
Recurring Cost																			
Hardware - HMEE (I) System <sup>(†)</sup>	2,519.282	103	259.486	337.667	6	2.026	285.000	15	4.275	461.000	127	7 58.54	7 417.500		4 1.670	459.672	131	60.21	
Engineering Changes	-	-	1.367	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Support Equipment - Special Tools	26.461	178	4.710	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
System Engineering/ Program Management	-	-	8.069	-	-	0.487	-	-	0.208	-	-	2.89	6 -	-	-	-	-	2.89	
Fielding	-	-	23.175	-	-	0.143	-	-	0.160	-	-	2.89		-	0.262	-	-	3.15	
Subtotal: Recurring Cost	-	-	296.807	-	-	2.656	-	-	4.643	-	-	64.33		-	1.932		-	66.27	
Subtotal: Flyaway Cost	-	-	296.807	-	-	2.656	-	-	4.643	-	-	64.33	9 -	-	1.932	-	-	66.27	
Gross/Weapon System Cost	2,881.621	103	296.807	442.667	6	2.656	309.533	15	4.643	506.606	12	64.33	9 483.000		4 1.932	505.886	131	66.27	
	Seco	ondary Dis	stribution				FY:	2016		FY 2017			2018 ase		FY 2018 OCO		FY 201 Total	-	
Army		Quar	ntity						2		13		1	1		4		1	
		Total	Obligation Au	thority				0.8	86		3.467		6.13		_	1.932		8.06	
ANG		Quar							2		1		58	-		-		5	
4.0			Obligation Au	thority				0.8			0.588		29.10			-		29.10	
AR		Quar	ntity						2		1		58	8		-		5	

LI R05901 - High Mobility Engineer Excavator (HMEE) Army

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P-1 Line #159

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 50	P-1 Line Item Number / Title: R05901 / High Mobility Engineer Excavator (HMEE)	Item Number / Title [DODIC]: R05900 / High Mobility Engineer Excavator (HMEE) Type I

ID Code (A=Service Ready, B=Not Service Rea	ndy): B		MDAP/MAIS Code	MDAP/MAIS Code:							
Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total					
	Total Obligation Authority	0.885	0.588	29.103	-	29.103					
Total:	Quantity	6	15	127	4	131					
Secondary Distribution	Total Obligation Authority	2.656	4.643	64.339	1.932	66.271					

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 50	P-1 Line Item Number / Title: R05901 / High Mobility Engineer Excavator (HMEE)	Item Number / Title [DODIC]: R05900 / High Mobility Engineer
		Excavator (HMEE) Type I

Cost Elements	0 C 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Hardware - HMEE (I) System <sup>(†)</sup>		2016	JCB / Pooler, GA	C / FFP	TACOM	Jan 2016	Mar 2016	6	337.670	Y		
Hardware - HMEE (I) System <sup>(†)</sup>		2017	JCB / Pooler, GA	C / FFP	TACOM	Feb 2017	Jun 2017	15	285.000	N		
Hardware - HMEE (I) System <sup>(†)</sup>		2018	TBD / TBD	C / FFP	TACOM	Feb 2018	Jul 2018	131	459.670	N		

<sup>(†)</sup> indicates the presence of a P-21

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Ex	hil	bit	P-21, P	roduct	ion Sc	hedu	le: F\	/ 201	8 Arm	าy															Dat	e: Ma	y 201	7				
			oriation / 03 / 50		et Act	ivity /	Budg	get S	ub Ac	ctivity	<b>'</b> :						e <b>r / Tit</b> y Engi		er Exc	cavat	or (H	MEE)	ı		R05	5900 <i>l</i>	High	Mobi	<b>[DOI</b> ility Er Type I	ngine	∍r	
				Elements ts in Each)								Fiscal '	Year 201	6											Fiscal	Year 2017	7					В
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На	rdwa	are -	HMEE (I) Sy	stem								I					l						1	1			1					
Pri	or Ye	ears	Deliveries: 1	03																												
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	1	201	7 ARMY	15																				Α -	-	-	-	10	5			(
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		opr A / (			Budge	et Acti	vity /	Budg	get S	ub Ao	ctivity	<b>/</b> :	1				nber / pility E		er Ex	cavato	or (HN	ИЕЕ)			R059	900 /	High	Mobil	[DOI lity En ype I	gine	er	
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На	rdwa	are - Hi	MEE (	(I) System	1									1													,					
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		2017	-		15				-		_		_		1												4.1	- 10	1			
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Exhibit P-21, Production Schedule: FY 2018 Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 50	Item Number / Title [DODIC]: R05900 / High Mobility Engineer
	 Excavator (HMEE) Type I

			Produc	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MF	R						lni	tial			Reo	rder	
Re		Manufacturer				ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total
#		Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
	1 JCB -	Pooler, GA	6	10	20	0	19	4	23	0	7	4	11
	2 TBD	- TBD	6	10	20	0	19	4	23	0	7	4	11

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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P-1 Line #159

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R07001 / Enhanced Rapid Airfield Construction Capap

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	154	24	20	23	-	23	9	8	8	30	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	16.106	2.531	2.779	2.563	-	2.563	0.992	0.991	0.991	3.358	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	16.106	2.531	2.779	2.563	-	2.563	0.992	0.991	0.991	3.358	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	16.106	2.531	2.779	2.563	-	2.563	0.992	0.991	0.991	3.358	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	104.584	105.458	138.950	111.435	-	111.435	110.222	123.875	123.875	111.933	Continuing	Continuing

## **Description:**

The Engineer Rapid Airfield Construction Capabilities (ERACC) consists of four (4) independent products that enhance the joint commander's capability for Enable Theater Access (ETA) operations. ERACC provides the joint commander the capability enhancement to rapidly construct new airfields, runways and to upgrade existing facilities to meet joint task force needs. This expands operating capacities of Aerial ports Embarkation/Debarkation (APOE/APOD). ERACC Type I, Type II, Type III and Type IV are commercial off the shelf (COTS) programs. Joint U.S. Forces will employ ERACC types (I-IV) individually or as a combined mission based on engineer requirements.

ERACC Type I, Site Selection and Assessment. This capability package is a software centric capability used to rapidly assess potential sites for airfield operations. This capability provides geospatial information, site analysis, terrain visualization, airfield performance predictions, constructability estimations, on-site material characterization, and site design capabilities. The fielding of the ERACC Type I software will be to users of the ENFIRE engineer reconnaissance system as part of the ENFIRE 7.0 software baseline, and will be included in all subsequent baselines. The users include construction engineer platoon leaders, engineer liaison teams, facilities managers, and contracting personnel within Engineer organizations for construction project management, reconnaissance, facilities and inventory management, Tele-engineering, site layout, rudimentary surveying, mapping, and associated reporting. The ERACC Type I system is a software application on the ENFIRE system. The Army Acquisition Objective (AAO) for the Type I is 41 and will be procured by Product Director Combat Terrain Information Systems (PD CTIS).

ERACC Type II, Enhanced Earthmoving. This system is a Grade Control System that includes a global positioning system (GPS) and laser leveling system that is installed on a dozer, grader, scraper and Deployable Universal Combat Earthmover (DEUCE). The Grade Control System with automatic blade control significantly increases operating productivity and training efficiencies by reducing construction times and fuel consumption. A project design can be loaded into the blade leveling display box allowing the operator to have 3-D view of where he is in relation to the project end state. This allows the operator to instantly know where to fill and cut and thus eliminates the requirement for the survey team to repetitively verify the project. The fielding of the Enhanced Earthmoving will be within Engineer Support Company, Engineer Support Teams, and to Rapidly Deployable Earthmoving-Light (RDE-L) Platoons, an integral asset of the Engineer Support Companies. The AAO for the Type II 342 will be procured by PM Combat Engineer/Material Handling Equipment (CE/MHE).

ERACC Type III, Mobile Technical Engineer Lab (MTEL) is an integration of commercially available non-developmental items. MTEL effort is a C130 airplane Low Velocity Air Droppable (LVAD)/CH-47 helicopter sling transportable package enhancing a modularly designed capability to rapidly open new airfields and runways, and/or upgrade existing facilities to meet joint task force needs. The MTEL provides a soil test and survey capability utilizing a utility vehicle. This allows the ERACC Team to quickly understand the composition of the soil to determine feasibility for construction of an airfield. The MTEL can also be used for recon and scouting once the lab package is removed. The fielding of the MTEL will be within Engineer Support Company and Engineer Support Teams. The ERACC Type III AAO is 86 and will be procured by PM CF/MHF

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R07001 / Enhanced Rapid Airfield Construction Capap

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

ERACC Type IV, Soil Stabilization. This system is essential to mix soil stabilization products with soil to produce desired stabilized base layers suitable for aircraft traffic operations. This system supports rapid construction and or expansion of airfield operation capacities. It will also be employed during the construction/upgrading of helipads as a means to prevent brownout conditions from occurring during helicopter landing and takeoff operations. The machine is equipped with an onboard automated liquid distribution system that matches the desired liquid polymer application rate to the machines ground speed. It has the capability to continuously operate for a period of 10 hours. The Soil Reclaimer Stabilizer will be fielded to the Rapidly Deployable Earthmoving-Light (RDE-L) Platoon within the Engineer Support Company (ESC), Engineer Survey and Design Sections, Engineer Geospatial Cells, Forward Engineer Support Teams, and Technical Engineer Sections. The ERACC Type IV AAO is 31 and will be procured by PM CE/MHE.

				FY 2018	FY 2018	FY 2018				
Seconda	ry Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	3	6	10	-	10	-	-	-	14
	Total Obligation Authority	0.638	0.810	1.120	-	1.120	-	-	-	1.568
ANG	Quantity	18	8	11	-	11	7	6	7	15
	Total Obligation Authority	1.255	1.125	1.221	-	1.221	0.770	0.769	0.880	1.679
AR	Quantity	3	6	2	-	2	2	2	1	1
	Total Obligation Authority	0.638	0.844	0.222	-	0.222	0.222	0.222	0.111	0.111
Total:	Quantity	24	20	23	-	23	9	8	8	30
Secondary Distribution	<b>Total Obligation Authority</b>	2.531	2.779	2.563	-	2.563	0.992	0.991	0.991	3.358

#### Justification:

FY 2018 Base funding in the amount of \$2.563 million procures 23 ERACC Type II packages. This will support rapid construction and/or expansion of airfield operating capacities in support of mission requirements. FY 2018 procurement supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active components and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Page 2 of 2

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

R07005 / Family of Diver Support Equipment

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	1	-	-	-	-	-	-	-	-	-	1
Gross/Weapon System Cost (\$ in Millions)	-	0.446	-	-	-	-	-	-	-	-	-	0.446
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	0.446	-	-	-	-	-	-	-	-	-	0.446
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	0.446		-	-	-	-	-	-	-	-	0.446
(The following	Resource Sum	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)	N .	*		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	446.000	-	_	_	_	_	_	-	-	-	446.000

## **Description:**

The Family of Diver Support Equipment includes critical life support and safety related sets such as Diver's Supplemental Issue Set (DSIS), Underwater Photo Set; Supervisor, Propulsion, Emergency and Recovery Set (SPEARS) Set; Surface Swimmer Support Set; Individual Swimmer Support Set; Deep Sea Set; and Closed & Open Circuit Set. Engineer divers support Corps/Theater level operations as a force multiplier by performing current diving missions in South West Asia to include debris removal, bridge construction, salvage operations, underwater mine and explosive detection, and personnel recovery operations. Special operations dive teams use the sets for clandestine combat waterborne infiltration/ex-filtration and to aid in search and recovery operations.

Deep Sea Set (DSS): The Deep Sea Set provides diver-worn critical life support and safety related equipment required to conduct surface supplied diving operations in accordance with all commercial and military safety standards. It includes a full helmet diving assembly that provides air, and protection from pollution, falling debris, and other hazards. It allows for communications with the surface in a dry environment, and is required equipment for construction, cutting and welding, and salvage operations. The set also includes an umbilical assembly that supplies breathing air, depth monitoring and a communications/strength member capable of supporting the diver's weight. The communications assembly allows three divers and the diving supervisor to communicate. The set can be used to a depth of 250 feet and is the only system that protects the diver while conducting heavy construction and salvage operations. Army Acquisition Objective (AAO) for DSS is 6.

Funds in this program are a realignment of funds from program Items Less Than \$5 million, SSN ML5301 for more efficient, effective program management.

Secondary	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1	-	-	-	-	-	-	-	-
	Total Obligation Authority	0.446	-	-	-	-	-	-	-	-
Total:	Quantity	1	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	0.446	-	-	-	-	-	-	-	-

Justification:

There are no FY18 requirements.

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P-1 Line #161

	UNCL	ASSIFIED	
Exhibit P-40, Budget Line Item Justification	ı: FY 2018 Army		<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Construction Equipment		P-1 Line Item N R07005 / Family	Number / Title: y of Diver Support Equipment
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section 1815 of the FY 2008 National defense missions and provided the section 1815 of the FY 2008 National defense missions and provided the section 1815 of the FY 2008 National defense missions and provided the section 1815 of the FY 2008 National defense missions and provided the section 1815 of the FY 2008 National defense missions are provided to the section 1815 of the FY 2008 National defense missions are provided to the section 1815 of the FY 2008 National defense missions are provided to the section 1815 of the FY 2008 National defense mission 1815 of the FY 2008 National defen	Defense Authorization Act (P.L. 110-181), the providing military support to civil authorities.	ese items are necessary	y for use by the active and reserve components of the Armed Forces for homeland

LI R07005 - Family of Diver Support Equipment Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

M05500 / Const Equip ESP

Construction Equipment

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

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	175	92	125	86	-	86	133	107	61	34	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	354.997	19.240	26.712	19.032	-	19.032	44.508	37.768	24.313	24.250	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	354.997	19.240	26.712	19.032	-	19.032	44.508	37.768	24.313	24.250	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	354.997	19.240	26.712	19.032	-	19.032	44.508	37.768	24.313	24.250	Continuing	Continuing
(The following	Resource Sumi	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request:	s are documente	d elsewhere.)	•			1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,028.554	209.130	213.696	221.302	-	221.302	334.647	352.972	398.574	713.235	Continuing	Continuing

## **Description:**

The Construction Equipment (CE ESP) budget line funds the Service Life Extension Program (SLEP) across the Construction Equipment/Combat Engineer portfolio and supports the Engineer Strategy by extending current construction capability to bridge the gap until new procurements. The SLEP candidates include the Deployable Universal Combat Earthmover (DEUCE), Dual Steel Wheel Roller (DSWR), High Speed Compactors (HSC), Vibratory Rollers, All Terrain Crane (ATEC), Hydraulic Excavator (HYEX), Scraper 613C, 7.5T Crane, Engineer Mission Module (EMM) and select components of the asphalt mixing plant (AMP). The CE SLEP is a commercial off the shelf program (COTS).

The DEUCE is a rubber-tracked dozer used in clearing, leveling, and excavation operations. It is C-130 airplane transportable and can be dropped by parachute at low velocity. It can travel at speeds up to 30 miles per hour (MPH) eliminating the typical construction equipment requirement of trailers and additional haul assets. The DEUCE rubber tracks allow construction, loading, and off-loading on airfields and paved roads without damage. No replacement solution provides these capabilities at this time. The SLEP Army Acquisition Objective (AAO) for DEUCE is 214 systems.

The Dual Steel Wheel Roller (DSWR) is a self-propelled vehicle consisting of two steel drums, a diesel engine, and a hydrostatic drive. It is a commercial system used to compact bituminous material in paving operations. The SLEP AAO for DSWR is 30 systems.

The High Speed Compactor (HSC) is equipped with articulated steering, a dozer blade, a diesel engine, and has segmented impact pads on each of the four drums. It is capable of compacting various soil types in forward or reverse at speeds up to 12 MPH. The SLEP AAO for HSC is 152 systems.

The Vibratory Rollers Type I, Type II, and Type III are self-propelled single drum rollers equipped with vibratory action, and are used to level and compact all soil types. The combined AAO for Vibratory Rollers Type I and Type III is 88. The SLEP AAO for Vibratory Rollers Type II is 394 systems.

The All Terrain Crane (ATEC) is a hydraulic, all terrain crane capable of traveling over primary, secondary and off road surfaces at the tactical support level. Technical characteristics include: diesel engine, power shift transmission, three mode steering, independently controlled hydraulic outriggers and a 70 foot telescoping boom. The ATEC supports construction, maintenance bridging and resupply activities. The SLEP AAO for ATEC is 215 systems; in addition the Armor Kit requirement is 29.

The Hydraulic Excavator (HYEX) Type I, II and III is a commercial item of construction equipment with minor military modifications. It is a diesel-driven, self-propelled, track mounted, hydraulically controlled system equipped with a hydraulic quick disconnect coupler for use with a wide variety of attachments. The SLEP AAO for HYEX Type I is 189 systems.

LI M05500 - Const Equip ESP

Army

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P-1 Line #162

Exhibit P-40, Budget Line Item Justification: FY 2018 Army Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

M05500 / Const Equip ESP

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

The Scraper (613C) is a non-sectionalized/sectionalized scraper used by Engineer Support Companies for earthmoving maintenance and construction of roads and airfields. The sectionalized scraper can be sectionalized into two sections for transport by helicopter. The SLEP AAO for Scraper (613C) is 210 systems.

The 7.5T Crane is used primarily in light cargo handling units where mobility is required. It is capable of safe operation in explosive environments at Ammunition and Petroleum, Oil, and Lubricant supply points and can be used by ordnance companies, petroleum platoons and maintenance battalions. The SLEP AAO for 7.5T Crane SLEP is 232 systems and is only to fulfill PEO Aviation requirements.

The Engineer Mission Module (EMM), Water Distributor is one of four Engineer Mission Modules which are demountable, systems capable of repeated transport, operation and use with Load Handling systems (LHS) type trucks and associated trailers. The four EMMs are the EMM-Dump Body (DB), EMM-Concrete Module (CM), EMM-Bituminous Distributor (BD) and EMM-Water Distributor (WD). The SLEP AAO for EMM is 302 systems.

The Asphalt Mixing Plant (AMP) is a portable drum type, electric motor driven facility, capable of self erection (major components), and satisfactory operation without requiring permanent type footings. It consists of major units, components and accessories as required to assemble a complete plant capable of producing 150 tons per hour of graded asphalt paving mix. These units are trailer mounted and can be interconnected mechanically and electrically, and operated to rated capacity. The SLEP AAO for AMP is 2 systems.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	23	62	26	-	26	42	34	19	11
	Total Obligation Authority	4.810	6.499	5.916	-	5.916	18.366	13.440	9.603	8.083
ANG	Quantity	44	28	30	-	30	47	37	21	12
	Total Obligation Authority	9.235	7.890	6.798	-	6.798	13.071	12.164	7.356	8.084
AR	Quantity	25	35	30	-	30	44	36	21	11
	Total Obligation Authority	5.195	12.323	6.318	-	6.318	13.071	12.164	7.354	8.083
Total:	Quantity	92	125	86	-	86	133	107	61	34
Secondary Distribution	Total Obligation Authority	19.240	26.712	19.032	-	19.032	44.508	37.768	24.313	24.250

#### Justification:

FY 2018 Base procurement dollars in the amount of \$19.032 million provides refurbishment of approximately 86 vehicles consisting of the ATEC Crane, DEUCE, Vibratory Rollers I/III and II, 7.5 Ton Crane and Compaction Equipment. The Construction Equipment (CE) Service Life Extension Program (SLEP) is the engineer's lifeline to sustain the current force. The SLEP is critical to maintaining engineer unit's operational readiness standards by extending the life of many different CE vehicles by 10-15 years. It returns vehicles to the field with zero hours and zero miles with a manufacturer new vehicle warranty of 18 months. This program lowers the Army's operation and support costs normally associated with aged equipment. The SLEP is conducted at government and contractor facilities worldwide to include Germany, Italy, Korea, Kuwait, and the USA.

This program is considered a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI M05500 - Const Equip ESP

Army

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Page 2 of 2

P-1 Line #162

Exhibit P-40, Budget Line Item Justification: FY 2018 Army Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

ML5350 / Items Less Than \$5.0M (Const Equip)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

Life tell wide odde. IVA												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	OCO	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	4	23	34	-	34	23	29	88	70	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	124.575	5.087	6.745	6.899	-	6.899	7.546	4.957	15.179	11.000	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	124.575	5.087	6.745	6.899	-	6.899	7.546	4.957	15.179	11.000	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	124.575	5.087	6.745	6.899	-	6.899	7.546	4.957	15.179	11.000	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1,271.750	293.261	202.912	-	202.912	328.087	170.931	172.489	157.143	Continuing	Continuing

## **Description:**

This program covers various types of Construction Equipment (CE) where the acquisition cost for each line item is below \$5.0 million. These programs provide the enhanced capabilities to the current force enabling them to execute their expeditionary mission to include:

- 1. Route Remediation is a system of systems that provide engineer units the capability to quickly repair damaged or improve worn routes throughout unit assigned areas of responsibility. This system consists of:
- --The Portable Asphalt Patcher (PAP) is a highly mobile, self-contained, spray injection asphalt patcher built on an M1077 flat rack. It mixes aggregate with asphalt emulsion and dispenses the mixture into a repair area for a patch that is traffic ready within 20 minutes. The Army Acquisition Objective (AAO) is 7 systems.
- --The Self Propelled Concrete Saw (SPCS) is fully operational and controlled by one person. The SPCS fills capability gaps for engineer teams to effectively conduct rapid, expedient, route repair in support of assured mobility. The Army Acquisition Objective (AAO) is 62 systems.
- --The Portable Concrete Mixer (PCM) is a towable, fully functional, and independently powered volumetric concrete mixer. It provides continuous operation with a minimum concrete production capacity of 2 cubic yards and has a 250 gallon minimum on-board pressurized water system. The Army Acquisition Objective (AAO) is 268 systems.
- --The Machine Powered Mowing System (MPMS) is a commercial front mounted boom attachment for the 966H, Wheeled Loader. The MPMS is a telescoping, high-powered mowing attachment used to rapidly remove ground cover, foliage, grass, weeds, and underbrush. The MPMS is interoperable with the armored and non-armored polycarbonate windowed variants of the 966H loader, and is transported via M916 and M870 while attached to the machine. Each system is fielded with the following three attachments: one 60-inch mower head attachment, one 4-blade saw, and one ditching attachment. The Army Acquisition Objective (AAO) is 66 systems.
- 2. The Water Well Drilling Rig (WWDR) is a four piece system consisting of a self-propelled drilling rig, support/tender truck, a mud trailer and an air compressor trailer. The system will be used to produce water where surface or commercial sources do not exist. The drilling rig is a hydraulic, top-head driven unit with a telescoping mast capable of employing a standard 20 feet 8 inch drill steel string to a depth of 2000 feet. The rig carries the initial 500 feet of drill steel. The support/tender truck has a 2500-gallon water tank, an auxiliary 500-gallon fuel tank, a crane, and the capacity to carry 1500 feet in additional drill steel. The air compressor trailer is utilized for drilling and retrieving drill steel based upon geographical situations. The mud trailer contains a mixing/cleaning system. The Army Acquisition Objective (AAO) is 8 systems.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 50:

ML5350 / Items Less Than \$5.0M (Const Equip)

Construction Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	3	14	-	-	-	-	-	-	10
	Total Obligation Authority	1.087	3.079	-	-	-	-	-	-	1.000
ANG	Quantity	1	6	21	-	21	6	15	44	47
	Total Obligation Authority	4.000	2.435	5.200	-	5.200	4.043	2.479	7.589	7.822
AR	Quantity	-	3	13	-	13	17	14	44	13
	Total Obligation Authority	-	1.231	1.699	-	1.699	3.503	2.478	7.590	2.178
Total:	Quantity	4	23	34	-	34	23	29	88	70
Secondary Distribution	Total Obligation Authority	5.087	6.745	6.899	-	6.899	7.546	4.957	15.179	11.000

#### Justification:

FY 2018 Base procurement dollars in the amount of \$6.899 million procures 33 Route Remediation systems and 1 Water Well Drilling System. This equipment allows Engineer Construction units to meet Operational Tempo (OPTEMPO) and Stability Reconstruction Operation (S&RO) requirements. Funding supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements. Funding activities also include Engineering Change Proposals (ECPs), Technical Manuals, Support Equipment, Fielding and Program Management Support costs.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 55: Rail

M11101 / Army Watercraft Esp

Float Containerization Equipment

ID Code (A=Service Ready). B=Not Service Ready):

Line Item MDAP/MAIS Code: N/A

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

Line Item MDAP/MAIS Code: N/A												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	2	2	2	-	2	4	4	6	4	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	3.509	39.772	21.860	20.110	-	20.110	41.465	42.237	63.130	43.630	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	3.509	39.772	21.860	20.110	-	20.110	41.465	42.237	63.130	43.630	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	3.509	39.772	21.860	20.110	-	20.110	41.465	42.237	63.130	43.630	Continuing	Continuing
(The following	Resource Sumr	nary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	d elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	19,886.000	10,930.000	10,055.000	-	10,055.000	10,366.250	10,559.250	10,521.667	10,907.500	Continuing	Continuing

## **Description:**

The Army Watercraft Extended Service Program (ESP) budget line funds the Service Life Extension Programs (SLEP) across the Army Watercraft Systems portfolio. During FY 2016 - FY 2025 specifically, the Army Watercraft ESP budget line will fund the Army Landing Craft Utility 2000 (LCU-2000), a globally dispersed fleet of 34 vessels, and will serve to extend the current Economic Useful Life (EUL) of this platform by 10 years; bridging the gap until the procurement of a replacement vessel. The LCU-2000 provides intra-theater movement of combat vehicles, equipment, and sustainment cargo, to include containerized, break-bulk, and roll-on roll-off (RO/RO) cargo, to improved and/or degraded ports, bare and austere beaches, and inland water terminals. The vessel is ideally suited for the discharge and back load of sea lift; the shallow draft, bow ramp, and associated systems providing for beaching and extraction. The vessel supports Joint Logistics Over the Shore (JLOTS), seaport opening, and delivers combat-configured elements or sustainment cargo during all phases of the campaign. The LCU-2000 was fielded from 1990-1993 and was designed and built specifically to the objective of a 25 year EUL. While new capability is not being added, some capabilities will be improved and modernized through the application of 11 Engineering Change Proposals (ECPs), such as Engine Repower, power generation, force protection and habitability. The LCU-2000 Technical Manuals and provisioning data effort covers development, re-write and publishing of the critical repower requirement along with all other subsystems effected by SLEP.

The Army Watercraft ESP budget line will also support future efforts to include the start of SLEP for the Modular Causeway System (MCS), specifically the Modular Warping Tug (MWT), one of four end items of the MCS. This line will include the future SLEP activities of fleet wide modifications consisting of: Landing Craft consist of 8 Logistic Support Vessels (LSV), 34 Landing Craft Utility 2000 (LCU-2000), 30 Landing Craft Mechanized 8 (LCM-8) MOD 1, and 6 LCM-8 MOD 2 (Watercraft Operations Support). Towing and Terminal Operations consist of 6 Large Tug 800 (LT-800), 16 Small Tug 900 (ST-900), and 4 Barge Derrick Crane 115-ton (BD-115). Ship-to-Shore Enablers consist of 3 Modular Causeway Systems (MCS) [each MCS includes 2 Roll-On/Roll-Off Discharge Facilities (RRDF), 5 Modular Warping Tugs (MWT), 1 Causeway Ferry (CF), 1 Floating Causeway (FC)]. Landing Craft discharge combat equipment or troops to austere beaches, undeveloped coastlines and operate in a non-permissive environment. Towing and Terminal Operations and Ship-to-Shore Enablers support ocean and port/harbor towing/salvage operations. Both are critical in denied/degraded ports, Joint Logistics Over-the-Shore (JLOTS) operations, and operations throughout the littorals.

Comments: In accordance with section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestics emergency responses, and providing military support to civil authorities.

Secondary	Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1	1	2	-	2	4	4	6	4
	Total Obligation Authority	19.886	10.930	20.110	-	20.110	41.465	42.237	63.130	43.630

LI M11101 - Army Watercraft Esp Army Page 1 of 10

P-1 Line #164

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 55: Rail M11101 / Army Watercraft Esp

Float Containerization Equipment ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
AR	Quantity	1	1	-	-	-	-	-	-	-
	Total Obligation Authority	19.886	10.930	-	-	-	-	-	-	-
Total:	Quantity	2	2	2	-	2	4	4	6	4
Secondary Distribution	Total Obligation Authority	39.772	21.860	20.110	-	20.110	41.465	42.237	63.130	43.630

LI M11101 - Army Watercraft Esp Army

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P-1 Line #164

Exhibit P-40, Budget Line Item Justification: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	
2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 55: Rail	M11101 / Army Watercraft Esp	

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Float Containerization Equipment

	Exhibits Schedule		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total		
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	M11101 / Army Watercraft Esp	P-5a, P-21			- /3.509	2 / 39.772	2 / 21.860	2 / 20.110	- / -	2 / 20.110
P-40	Total Gross/Weapon System Cost				- / 3.509	2 / 39.772	2 / 21.860	2 / 20.110	- 1 -	2 / 20.110

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$20.110 million supports the Landing Craft Utility 2000 (LCU-2000) Service Life Extension Programs (SLEP) vessels and Program Management/Matrix Support for the fiscal year. The SLEP modification package will make improvements to all engines, power generators and the application of 11 select Engineering Change Proposals (ECPs) which focus on modernization and technology insertion; these efforts are not covered under the Modification of In-Service Equipment appropriation. Furthermore, the LCU-2000 Technical Manuals and provisioning data effort covers development, re-write and publishing of the critical repower requirement along with all other subsystems effected by SLEP. Program Management/Matrix Support includes the Program Management, Logistics and System Engineering oversight required to manage the program and provide contractor oversight. Salaries, benefits, travel, personnel training and other Government costs are included for retaining a professional acquisition workforce.

The LCU-2000 SLEP is performed in conjunction with the vessels' statutorily required On-Condition Cyclic Maintenance (OCCM), which is funded with Operations and Maintenance, Army (OMA) dollars.

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P-1 Line #164

							UI	NCLASS	SIFIED	)								
Exhibit P-5, Cost	Analysi	s: FY 20	18 Army	,										Date: M	1ay 2017			
<b>Appropriation / B</b> 2035A / 03 / 55	Sudget A	ctivity /	Budget	Sub Acti	ivity:			<b>Number</b> ny Watero							umber / 1			
ID Code (A=Service Read	dy, B=Not Serv	ice Ready):							М	DAP/MAIS	Code:						<del>-</del>	
	Resource		ary		F	Prior Yea	ars	FY 20	16	FY 2017 FY			FY 2018 Base		FY 2018 OCO		CO FY 2018 Tot	
Procurement Quantity (Uni							-		2			2		2		-		
Gross/Weapon System Co		ns)					3.509		39.772		21.8	360	2	0.110		-		20.11
Less PY Advance Procure		·					-		_			-		-		-		_
Net Procurement (P-1) (\$ i	in Millions)						3.509		39.772		21.8	360	2	0.110		-		20.11
Plus CY Advance Procure	Advance Procurement (\$ in Millions)					-		-			-		-		-		-	
Total Obligation Authori	ty (\$ in Million:	s)					3.509		39.772		21.8	360	2	0.110		-		20.11
(Ti	he following	Resource St	ummary row	s are for info	rmational pu	irposes only	. The corres	ponding budg	et request	s are docume	ented elsev	where.)						
Initial Spares (\$ in Millions)							-		-			-		-		-		-
Gross/Weapon System Ur	nit Cost (\$ in	Thousands)					-	19	9,886.000		10,930.0	000	10,05	5.000		-	1	10,055.00
Note: Subtotals or Totals i	n this Evhibit	P 5 may no	at he exact o	or sum ovactl	v due te reu	nding												
Vote. Subtotals of Totals I		Prior Years		Sum exacti	FY 2016	nuing.		FY 2017		FY	2018 Ba		F	Y 2018 O	00	F	Y 2018 Tota	
Cost Elements	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Flyaway Cost	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Recurring Cost	_																_	
SLEP Vessels (LCU-2000) <sup>(†)</sup>	-	-	-	11,308.000	2	22.616	9,362.500	2	18.725	8,577.500	2	17.155	-	-	-	8,577.500	2	17.15
New Equipment Training (NET)	-	-	-	-	-	0.530	-	-	0.530	-	-	0.545	-	-	-	-	-	0.54
Technical Data Package	-	-	-	-	-	6.369	-	-	-	-	-	-	-	-	-	-	-	-
Technical Manuals	-	-	-	-	-	6.397	-	-	0.320	-	-	0.300	-	-	-	-	-	0.30
Program Management/Matrix Support	-	-	3.509	-	-	2.200	-	-	2.285	-	-	2.110	-	-	-	-	-	2.11
Training Assets	-	-	-	-	-	1.660	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	3.509	-	-	39.772	-	-	21.860	-	-	20.110	-	-	-	-	-	20.11
Subtotal: Flyaway Cost	-	-	3.509	-	-	39.772	-	-	21.860	-	-	20.110	-	-	-	-	-	20.11
Gross/Weapon System Cost	-	-	3.509	19,886.000	2	39.772	10,930.000	2	21.860	10,055.000	2	20.110	-	-	-	10,055.000	2	20.11
	0	anda::: D'	04uilo4!				FV	2046		EV 2047		FY 2			FY 2018		FY 201	8
Army	Sec	ondary Di					FY	2016	1	FY 2017	1	Bas		2	осо	-	Total	
Army		Qua	ntity al Obligation A	uthority				19.88	-		10.930		20.11			-		20.11
R Quantity							19.000		1	1 1		-				-		

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P-1 Line #164

Exhibit P-5, Cost Analysis: FY 2018 Army	Date: May 2017	
1,1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,		Item Number / Title [DODIC]: M11101 / Army Watercraft Esp
ID Code (A=Service Ready, R=Not Service Ready)	MDAP/MAIS Code:	

ID Code (A=Service Ready, B=Not Service Rea	ady).	IVIDAP/IVIAIS COUR	WIDAF/WAIS Code.						
Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Total:	Quantity	2	2	2	-	2			
Secondary Distribution	Total Obligation Authority	39.772	21.860	20.110	-	20.110			

<sup>(†)</sup> indicates the presence of a P-5a

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P-1 Line #164

Exhibit P-5a, Procurement History and Planning: FY 2018 A	Date: May 2017	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 55	M11101 / Army Watercraft Esp	M11101 / Army Watercraft Esp

				•	•			I	•		•	,
Cost Elements	000	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
SLEP Vessels (LCU-2000) <sup>(†)</sup>		2016	Alion Science and Technology / Burr Ridge, IL	C / FFP	WARREN, MI	Sep 2016	Sep 2017	2	11,308.000	Y		Sep 2015
SLEP Vessels (LCU-2000) <sup>(†)</sup>		2017	Alion Science and Technology / Burr Ridge, IL	C / FFP	WARREN, MI	Apr 2017	Oct 2017	2	9,362.500	Y		
SLEP Vessels (LCU-2000) <sup>(†)</sup>		2018	Alion Science and Technology / Burr Ridge, IL	C / FFP	WARREN, MI	Jan 2018	Jun 2018	1	8,577.500	N		
SLEP Vessels (LCU-2000) <sup>(†)</sup>		2018	TBD 2 / TBD	C / FFP	WARREN, MI	Jun 2019	Dec 2019	1	8,577.500	N		Oct 2018

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

Due to delay of LCU-2000 SLEP Phase I contract award to September 2016, TDP development to inform phase II has been delayed. As a result, the initial contract award for LCU-2000 SLEP Phase II is currently projected for 3rd quarter FY 2019. The Landing Craft Utility 2000 (LCU-2000) Service Life Extension Program (SLEP) is planned to be conducted in two phases. The first phase (Phase I) will consist of up to 2 Low Rate Initial Production (LRIP) vessels, and 2 option vessels. LRIP during FY 2016-2018 will be used for SLEP, Engineering Change Proposal (ECP), Technical Data Package (TDP), New Equipment Training (NET) development, Test, Evaluation, Technical Manual (TM) Validation, and TM Verification. The second phase (Phase II) will consist of Full Rate Production (FRP) of LCU-2000 vessels in FY 2019-2025. The SLEP activities will update Main Propulsion, Bow Thruster, and Ships Service and Emergency Diesel Generator engines; upgrade Force Protection Equipment (new gun mounts and ballistic protection), and upgrade various engineering systems (e.g. Air Conditioning System). Lead times are based on previous SLEP contracts for other vessels.

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E>	khi	bit I	P-21, Pr	oduct	ion Sc	hedu	le: F`	Y 201	8 Arm	ıy														Date	: Ma	y 201	7				
			riation / 03 / 55	Budg	et Act	ivity /	Bud	get S	ub Ac	tivity	:		Line 1101												<b>Num</b> 101 /				DIC]: t Esp		
				lements in Each)							,	Fiscal Y	/ear 2016											Fiscal Y	ear 2017						ВА
					ACCEPT									C	alendar	Year 20	16								Calen	dar Yea	2017				L
000	R	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	JUL	A U G	S E P	N C E
SL	EP \	Vessel	s (LCU-2000)																												
	1	2016	ARMY	2	C	2												Α -	-	-	-	-	-	-	-	-	-	-	-	1	
	1	2017	ARMY	2	C	2															,			,	Α -	-	-	-	-	-	
	1	2018	ARMY	1	C	1																									
	2	2018	ARMY	1	C	1																									
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

_		-	-21, FI	aucti	on Sc	hedul	le: FY	201	8 Arm	ıy														Date	e: Ma	y 201	7				
			iation / 1 03 / 55	Budge	et Acti	vity /	Budg	jet Si	ub Ac	tivity	:	1	<b>I Line</b> 1101												<b>Num</b> 101 /						
Cost Elements (Units in Each)											Fiscal Year 2018														Fiscal Year 2019						
					ACCEPT									C	Calendar	Year 20	8								Caler	dar Year	2019				] [
0 F C R O #	₹	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	1
SLEF	P Ve	essels	(LCU-2000)																		,										
1	1 2	2016	ARMY	2	1	1	-	-	1																						
1	_		ARMY	2		_	1	-	-	1						1															
1	_		ARMY	1	0				_	Α -	-	-	-	-	1																1
2	2   2	2018	ARMY	1	0	1			1				1	1		ĭ					1				1		A -	-	-	-	_
							O C T	N O V	E C	J A N	F E B	M A R	P R	M A Y	J U N	U L	U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	n n	A U G	S E P	

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Exh	ibit F	P-21, Pr	oduct	ion Sc	hedu	le: F	<b>/</b> 201	8 Arm	าy														Date	e: Ma	y 201	7				
		<b>iation</b> / 03 / 55	Budge	et Acti	ivity /	Bud	get Si	ub Ac	ctivity	<b>'</b> :		<b>1 Line</b> 1101															[DOI ercraf	DIC]: ft Esp		
			lements in Each)								Fiscal \	Year 2020	)										Fiscal Y	ear 2021						В
				ACCEPT				_		_				Calendar	Year 202	20				_				Caler	ndar Year	r 2021				L
0 F C R O #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2019	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	J L	A U G	S E P	N C E
SLEP	Vessels	(LCU-2000)																												
1	2016	ARMY	2	2	0																									
1	2017	ARMY	2	2	0																									
1	2018	ARMY	1	1	0	]																								
2	2018	ARMY	1	0	1	-	-	1																						
						O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 55	P-1 Line Item Number / Title: M11101 / Army Watercraft Esp	Item Number / Title [DODIC]: M11101 / Army Watercraft Esp

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MF	R					Ini	tial			Reo	rder	
Re #		MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	1 Alion Science and Technology - Burr Ridge, IL	1	1	1	0	12	12	24	0	7	6	13
	2 TBD 2 - TBD	1	1	1	0	21	6	27	0	7	6	13

#### Remarks:

Service Life Extension Program (SLEP) modifications are completed at commercial shipyards.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

LI M11101 - Army Watercraft Esp Page 10 of 10 Army

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 55: Rail ML5355 / Items Less Than \$5.0M (Float/Rail)

Float Containerization Equipment ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAR/MAIS Code: N/A

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	165.691	5.835	1.967	2.877	-	2.877	2.927	2.974	2.487	2.510	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	165.691	5.835	1.967	2.877	-	2.877	2.927	2.974	2.487	2.510	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	165.691	5.835	1.967	2.877	-	2.877	2.927	2.974	2.487	2.510	Continuing	Continuing
(The following	Resource Sumr	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### Description:

This budget line funds two separate programs. One program supports Float and the other program supports Rail.

The Float program funds hardware and material in support of Army Watercraft Systems. The principle capabilities of Army Watercraft Systems are 1) movement/maneuver and distribution of combat equipment and sustainment material: 2) access to degraded and/or austere ports: 3) seaport operations, to include docking/undocking, firefighting, towing and rescue; 4) ship to shore access to "no port" areas such as austere and remote, bare beaches; and 5) heavy lift in support of damaged seaport and/or vessel repair and salvage.

Army Watercraft Systems are categorized under Landing Craft, Towing and Terminal Operations, Ship-to-Shore Enablers and Watercraft Operations Support. Landing Craft consist of 8 Logistic Support Vessels (LSV), 34 Landing Craft Utility 2000 (LCU-2000), 30 Landing Craft Mechanized 8 (LCM-8) MOD 1, and 6 LCM-8 MOD 2 (Watercraft Operations Support). Towing and Terminal Operations consist of 6 Large Tug 800 (LT-800), 16 Small Tug 900 (ST-900), and 4 Barge Derrick Crane 115-ton (BD-115). Ship-to-Shore Enablers consist of 3 Modular Causeway Systems (MCS) [each MCS includes 2 Roll-On/Roll-Off Discharge Facilities (RRDF), 5 Modular Warping Tugs (MWT), 1 Causeway Ferry (CF), 1 Floating Causeway (FC)]. Landing Craft discharge combat equipment or troops to austere beaches, undeveloped coastlines and operate in a non-permissive environment. Towing and Terminal Operations and Ship-to-Shore Enablers support ocean and port/harbor towing/salvage operations. Both are critical in denied/ degraded ports, Joint Logistics Over-the-Shore (JLOTS) operations, and operations throughout the littorals. Rescue Boats with outboard engines to meet Safety-of-Life at Sea (SOLAS) requirements for the Watercraft LSV, LCU-2000, LT-800 and MCS fleet, including cranes, cradles, and davit assemblies (support assemblies).

For the Rail program, railroad equipment consists of locomotives, rolling stock, railway passenger cars, track maintenance equipment, etc., used to support Army ammunition plants, Army Materiel Command (AMC) depots, Installation Management Command (IMCOM), Forces Command (FORSCOM) and Training and Doctrine Command (TRADOC) installations in peacetime, training and mobilization missions. This Railway Equipment is procured for the replacement of logistically unsupportable assets where current items are in some cases already unserviceable and in other cases, either unsafe or not cleared for use under the Federal Railroad Administration (FRA).

Locomotive procurement consists of commercial off-the-shelf GENSET switcher locomotives in direct support of the Army Rail Modernization Program. The program mandates systematic replacement of an aging fleet, that for the respective installations are becoming increasingly more costly to maintain. The GENSET Locomotives are industry proven, state of the art technology that will position the Army to meet current EPA air quality restrictions, and future fuel economy mandates.

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Exhibit P-40, Budget Line Item Justification:	FY 2018 Army		<b>Date</b> : May 2017	
Appropriation / Budget Activity / Budget Sul 2035A: Other Procurement, Army / BA 03: Other Float Containerization Equipment		P-1 Line Item N ML5355 / Items	umber / Title: Less Than \$5.0M (Float/Rail)	
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B It	ems: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A				
Comments: In accordance with Section 1815 of the FY 200 homeland defense missions, domestics emergency response	· · · · · · · · · · · · · · · · · · ·		cessary for use by the active and reserve components of the Armed	Forces for
extend useful life, improve supportability, increase efficience	cy, meet new and changing statutory and regul oversight required to manage the program and	atory requirements. F	ware for modifications to correct safety discrepancies, increase inter Y 2018 Base procurement dollars also support Program Managementersight. Salaries, Benefits, Travel, Personnel Training and other gov	nt Support which

LI ML5355 - Items Less Than \$5.0M (Float/Rail) Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 60:

MA9800 / Generators And Associated Equip

Generators

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	1,013	2,308	4,474	3,714	13	3,727	5,617	7,047	6,442	10,926	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,019.732	97.154	145.027	115.635	0.569	116.204	128.610	127.262	127.148	130.781	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	4.200	-	-	-	-	-	-	-	-	-	Continuing	Continuing
Net Procurement (P-1) (\$ in Millions)	1,015.532	97.154	145.027	115.635	0.569	116.204	128.610	127.262	127.148	130.781	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	4.200	-	-	-	-	-	-	-	-	-	Continuing	Continuing
Total Obligation Authority (\$ in Millions)	1,019.732	97.154	145.027	115.635	0.569	116.204	128.610	127.262	127.148	130.781	Continuing	Continuing
(The following I	Resource Sumn	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System Unit Cost (\$ in Thousands)	1,006.646	42.094	32.416	31.135	43.769	31.179	22.897	18.059	19.737	11.970	Continuing	Continuing

### **Description:**

First generation of Mobile Electric Power Generating Sources (MEPGS) is the Military Standard (MIL-STD); the second generation of MEPGS is the Tactical Quiet Generators (TQG); the third generation of MEPGS is the Tactical Electric Power (TEP) program that consists of: Advanced Medium Mobile Power Sources (AMMPS), Large Advanced Mobile Power (LAMPS), and Small Tactical Electric Power (STEP). The TEP Program replaces and modernizes the first and second generation of DOD generator inventory to meet the Army's requirements. The TEP program is structured around Small (2-3kW), Medium (5-60kW), Large (up to 200kW) stand-alone generators, multiple configurations of Power Units/Power Plants (PU/PP) and associated distribution equipment (Power Distribution Illumination Systems Electrical (PDISE). These programs collectively provide a new, modern family of generators and distribution systems satisfying critical user requirements. The TEP CPD (rev 2 JUL 2014) will:

- 1. Reduce Acquisition Costs and Operations and Sustainment (O&S) costs by 15-20%.
- 2. Reduce weight by 25% across generator population, thereby reducing the Logistics footprint and improving deployability.
- 3. Significantly improve Reliability. Availability and Maintainability, to include Mean Time Between Failure improvements of 100-300%.
- 4. Eliminate gasoline from the generator inventory, thus complying with DOD guidance regarding single fuel on the battlefield (diesel/JP-8).
- 5. Reduce battlefield detectability by lowering noise levels by 50-75% across generator population.
- 6. Improve battlefield survivability by providing mission critical electric power to the digitized warfighting forces.

The Small Tactical Electric Power (STEP) program will provide the Warfighter with expeditionary power solutions designed for combat operations in the most austere environments. STEP will replace existing systems and is a modernization program that will provide improved tactical electric mobile power sources for replacement of the currently fielded 2kW (MTG) sets and 3kW (TQG) sets, initially procured in the 1990s. STEP models will be more mobile, reliable, and logistically supportable power sources than their predecessors for the Department of Defense's (DoD') 21st century digitized forces. STEP 2kW Army Acquisition Objective (AAO) is 5.000: STEP 3kW AAO is 20.000.

LAMPS is a modernization program that will provide more mobile, reliable, and logistically supportable tactical electric power sources for the Department of Defense's 21st century digitized forces. LAMPS will replace the currently fielded 100/200 kilowatt (kW) Military-Standard (Mil-Std) generator sets and Tactical Quiet Generator (TQG) sets. LAMPS will provide improved tactical electric power to combat, combat support, and combat service support units throughout the Army and the other military Services within the DoD. The LAMPS program completed its Milestone B (MS B) decision review on 25 March 2011. The LAMPS system is based on technology currently available from industry and being used in various industrial applications. They are used to provide power to Field Hospitals, Corps Support Commands, Homeland Defense, Military Intelligence, Special Operations Command and Forward Operating Bases. The LAMPS program will provide significant improvements over currently fielded systems in size, mobility,

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 60:

MA9800 / Generators And Associated Equip

Generators

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

transportability, diagnostics/prognostics, enhanced survivability and supportability. The LAMPS program includes four (4) 50/60 Hertz (Hz) configurations; two (2) skid-mounted configurations and two (2) trailer-mounted (5 ton M1061A1 trailer) configurations as Power Units; and the LAMPS Power Distribution Unit (PDU). The LAMPS PDU will replace the M-400 (100 Amp) power distribution panel.

Army Acquisition Objective (AAO): LAMPS = 794, LAMPS PDU = 459.

Power Distribution Illumination Systems Electrical (PDISE) provides reliable, quick to assemble, modular designed power distribution equipment that is critical to deploying power networks. The PDISE family consists of five different end items, including two feeder systems, two distribution systems and a utility assembly kit. PDISE is simple, reliable, and compatible with DoD generator sets from 5kW to 200kW. It is used to subdivide and distribute electricity from single power sources to multiple equipment users within shelters and various unit complexes, and thus is a critical element of the DoD power structure. PDISE is also critical to Army's transformation by reducing the logistics footprint through the use of centralized power configurations. M200 Army Acquisition Objective (AAO) = 247; M100 AAO = 2,188; M60 AAO = 5,763; M40 AAO = 4,155; M46 AAO = 11,399.

Management and Distribution Control (MDC), funded with the Improved Power Distribution Illumination Systems Electrical (IPDISE) program element, will provide reliable, quick to assemble, modular designed power distribution equipment that is critical to deploying power networks. Management and Distribution Control (MDC), formerly Improved PDISE, is the next generation program to establish a DoD family of electrical power feeder, distribution, management, and microgrid systems. MDC will be a force enabler yielding fuel saving efficiencies and will enhance power distribution between power generating and power consuming equipment to include greater intelligence to allow establishing a microgrid. It is used to subdivide and distribute electricity from single power sources to multiple equipment users within shelters and various unit complexes, and thus is a critical element of the DoD power structure. MDC will also be critical to the Army's transformation by reducing the logistics footprint through the use of centralized power configurations and microgrids.

MDC AAO is TBD (PDISE AAO is 23,747), Microgrid Kits (PDU) AAO is TBD, PPCK AAO is TBD, M20 AAO is TBD.

The Advanced Medium Mobile Power Sources (AMMPS) program provides mid-range power sources, including the 5 kilowatt (kW), 10kW, 15kW, 30kW, and 60kW Skid Mounted Advanced Medium Mobile Power Sources (AMMPS), which incorporates state-of-the-art commercial technologies that enhance the operational effectiveness and supportability of power sources. Operational effectiveness is improved through reduced noise (increasing survivability), and reduced weight (enhancing deployability, reduced footprint). The logistics footprint has been significantly reduced through improved fuel consumption (15-21% reduction), use of embedded diagnostics and improved maintainability.

5kW Army Acquisition Objective (AAO) = 6,434; 10kW AAO = 5,497; 15kW AAO = 1,465; 30kW AAO = 319; 60kW AAO = 878.

Power Units/Mounted (AMMPS): The integration of generator sets on trailers with the electronic components are defined as power units or power plants. Power Units (PUs) consist of one generator set mounted on a trailer. Power Plants (PPs) consist of two generator sets mounted on either one or two trailers (depending on size) with a switchbox installed and paralleling cables between sets. The generator sets are procured by competitive contracts through the Army Contracting Command –Aberdeen Proving Ground (APG), Belvoir. The trailers are procured by competitive contracts through the Army Contracting Command - Warren. Set sizes from 5 kilowatt (kW) thru 60kW are mounted in Power Unit/Power Plant (PU/PP) configurations to meet the requirements of DoD.

Power Units/Power Plants Army Acquisition Objective (AAO): 5kW PUPP = 3,681; 10kW PUPP = 4,649; 15kW PUPP = 4,283; 30kW PUPP = 1,649; 60kW PUPP = 978.

	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
	Secondary Distribution	F1 2010	F1 2017	Dase	000	IUlai	F1 2019	F1 2020	F1 2021	F1 2022
Army	Quantity	2,308	3,094	2,029	13	2,042	3,143	3,827	3,481	6,162
	Total Obligation Authority	97.154	93.398	64.589	0.569	65.158	73.615	67.778	65.685	70.519
ANG	Quantity	-	798	995	-	995	1,494	2,373	2,161	3,476
	Total Obligation Authority	-	28.026	26.776	-	26.776	29.091	38.780	37.751	40.617
AR	Quantity	-	582	690	-	690	980	847	800	1,288
	Total Obligation Authority	-	23.603	24.270	-	24.270	25.904	20.704	23.712	19.645
Total:	Quantity	2,308	4,474	3,714	13	3,727	5,617	7,047	6,442	10,926

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P-1 Line #166

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 60:

MA9800 / Generators And Associated Equip

Generators

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	-			FY 2018	FY 2018	FY 2018				
S	econdary Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Secondary Distrib	ution Total Obligation Authority	97.154	145.027	115.635	0.569	116.204	128.610	127.262	127.148	130.781

LI MA9800 - Generators And Associated Equip Army

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P-1 Line #166

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 60:

MA9800 / Generators And Associated Equip

Generators

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready): A

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	M50202 / Improved Power Distribution Illumination Systems E	P-5a			- / -	- / -	- /4.350	860 / 10.155	4 / 0.024	864 / 10.179
P-5	M53500 / MEDIUM SETS (5-60 KW)				1,013 / 941.315	- /1.299	- / -	- / -	- / -	- / -
P-5	R45400 / P-DISE 40-200 AMP				- / 78.417	164 / 11.010	282 / 2.856	- / -	- / -	- / -
P-5	R51050 / Advanced Medium Mobile Power Systems (AMMPS)	P-5a, P-21			- / -	1,300 / 35.105	3,366 / 85.400	2,121 / 52.062	- / -	2,121 / 52.062
P-5	R59210 / Power Units/Mounted (AMMPS)	P-5a			- / -	640 / 31.250	696 / 35.840	603 / 35.855	9 / 0.545	612 / 36.400
P-5	R61510 / Large Advanced Mobile Power	P-5a			- / -	204 / 14.822	130 / 15.328	130 / 16.278	- / -	130 / 16.278
P-5	R63510 / Small Tactical Electric Power		Α		- / -	- /3.668	- / 1.253	- / 1.285	- / -	- / 1.285
P-40	Total Gross/Weapon System Cost		•		1,013 / 1,019.732	2,308 / 97.154	4,474 / 145.027	3,714 / 115.635	13 / 0.569	3,727 / 116.204

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

LI MA9800 - Generators And Associated Equip

#### Justification:

Army

FY 2018 Base procurement dollars in the amount of \$115.635 million supports small, medium and large generator sets, assembly of power units and power plants, power feeder, distribution, management and microgrid systems. The program provides for the partial replacement of the current inventory of over aged, gasoline-fueled generators with modernized single fuel (diesel/JP-8) assets that will enhance the user's safety, survivability, reduce the logistics footprint and enhance reliability, availability and maintainability. These mobile generators provide tactical electric power to virtually every weapon, communication, medical and combat support system in the inventory including Missile/Air Defense Systems; Tactical Operations Centers; Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance systems; and Brigade Combat Teams (BCTs). Funding supports a balanced investment strategy for the Army's approved force structure and Army Force Generation (ARFORGEN) requirements.

STEP (R63510): FY 2018 Base Procurement dollars in the amount of \$1.285 million will continue engineering, and requirements analysis for the STEP 2kW and 3kW variants. STEP production is not scheduled to begin until FY 2025. Funds in this program are a realignment of funds from Small Sets (2-3kW), SSN M59400, as of FY 2017. Funds also support engineering, logistics, and program management efforts to establish and sustain the 2kW (MTG) and 3kW (TQG) Gap Filler efforts until STEP fielding (FY26 - FY30).

LAMPS (R61510): FY 2018 Base procurement dollars in the amount of \$16.278 million supports the acquisition of LAMPS production generator sets and power distribution units. Funds in this program are a realignment of funds from program Large Sets, SSN M54400, as of FY 2017.

IPDISE (M50202): FY 2018 Base procurement dollars in the amount of \$10.155 million is for Management and Distribution Control (MDC). All funding for this line has been moved from SSN R45400 Power Distribution Illumination Systems Electrical (PDISE) 40-200 Amp, SSN R45400, as of FY 2017. PDISE continues fielding to Corps/Division headquarters and Brigade Combat Teams (BCTs) in support of their combat support systems. MDC will begin production in FY 2018.

AMMPS (R51050): FY 2018 Base procurement dollars in the amount of \$52.062 million is for the Advanced Medium Mobile Power Sources (AMMPS) sets, which replace aging legacy systems, reduce total ownership costs and support modernization. This program continues fielding to Corps/Division headquarters and Brigade Combat Teams (BCTs) in support of their combat support systems. All funding for this line has been moved from Medium Sets. SSN M53500, as of FY 2017.

	UNCL	ASSIFIED		
Exhibit P-40, Budget Line Item Justification	n: FY 2018 Army		<b>Date</b> : May 2017	
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Generators		P-1 Line Item N MA9800 / Gener	lumber / Title: rators And Associated Equip	
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code E	Items: N/A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A	·			
Power Units/Mounted (AMMPS) (R59210): FY 2018 Bas fielding to Corps/Division headquarters and Brigade Comservice support mission. All funding for this line has been	nbat Teams (BCT) in support of their Comman	d, Control, Communicati	er units and power plants in sizes 5kW through 60kW. The program continue ions, Computers, Intelligence, Surveillance, Reconnaissance (C4ISR) and copy 2017.	s ombat
FY18 OCO procurement dollars in the amount of \$0.569	million supports the European Reassurance I	nitiative effort.		
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions, domestic emergency responses, and provided the section of the FY 2008 National defense missions.		is item is necessary for u	use by the active and reserve components of the Armed Forces for homeland	i

LI MA9800 - Generators And Associated Equip Army

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 60

P-1 Line Item Number / Title:
MA9800 / Generators And Associated Equip

Item Number / Title [DODIC]:
M50202 / Improved Power Distribution
Illumination Systems E

ID Code (A=Service Ready, B=Not Service Ready):		М	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	-	-	860	4	864
Gross/Weapon System Cost (\$ in Millions)	-	-	4.350	10.155	0.024	10.179
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	4.350	10.155	0.024	10.179
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	4.350	10.155	0.024	10.179
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	11.808	6.000	11.781

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2016			FY 2017		FY	' 2018 Bas	se	FY	′ 2018 OC	:0	FY	2018 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
lyaway Cost				'		'	'						'		'	'	'	
Recurring Cost																		
Engineering     Support	-	-	-	-	-	-	-	-	1.856	-	-	1.893	-	-	-	-	-	1
Engineering     Change Orders	-	-	-	-	-	-	-	-	0.106	-	-	0.108	-	-	-	-	-	0
3. Testing	-	-	-	-	-	-	-	-	0.106	-	-	0.108	-	-	-	-	-	C
System Fielding     Support	-	-	-	-	-	-	-	-	0.474	-	-	0.539	-	-	-	-	-	C
5. Systems Assessment	-	-	-	-	-	-	-	-	0.078	-	-	0.079	-	-	-	-	-	(
6. Logistics Support	-	-	-	-	-	-	-	-	0.735	-	-	0.749	-	-	-	-	-	(
7. Data	-	-	-	-	-	-	-	-	0.083	-	-	0.078	-	-	-	-	-	
8. PM Management Support	-	-	-	-	-	-	-	-	0.912	-	-	1.153	-	-	-	-	-	
Microgrid Kit (PDU) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	35.000	20	0.700	-	-	-	35.000	20	
M 40 (Distribution System) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	4.246	480	2.038	6.000	1	0.006	4.249	481	:
M60 (Distribution System) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	-	-	-	6.000	2	0.012	6.000	2	(
M100 (Feeder System) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	5.856	240	1.405	6.000	1	0.006	5.855	241	

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]:

2035A / 03 / 60

MA9800 / Generators And Associated Equip

M50202 / Improved Power Distribution Illumination Systems E

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	S	FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
M200 (Feeder System) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	10.879	120	1.305	-	-	-	10.875	120	1.305
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	4.350	-	-	10.156	-	-	0.024	-	-	10.179
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	4.350	-	-	10.156	-	-	0.024	-	-	10.179
Gross/Weapon System Cost	•	-	-	-	-	-	•	-	4.350	11.808	860	10.155	6.000	4	0.024	11.781	864	10.179

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	-	465	4	469
	Total Obligation Authority	-	4.350	5.890	0.024	5.914
ANG	Quantity	-	-	263	-	263
	Total Obligation Authority	-	-	2.742	-	2.742
AR	Quantity	-	-	132	-	132
	Total Obligation Authority	-	-	1.523	-	1.523
Total:	Quantity	=	-	860	4	864
Secondary Distribution	Total Obligation Authority	-	4.350	10.155	0.024	10.179

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 60	P-1 Line Item Number / Title: MA9800 / Generators And Associated Equip	Item Number / Title [DODIC]: M50202 / Improved Power Distribution Illumination Systems E

	O			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Microgrid Kit (PDU)		2018	Cummins Power Generation, Inc. / Minneapolis, MN	C / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2018	20	35.000			
M 40 (Distribution System)		2018	Fidelity Technologies Corp / Reading, PA	C / FFP	ACC-APG, Belvoir	Jan 2018	Jul 2018	481	4.250			
M60 (Distribution System)	1	2018	Fidelity Technologies Corp / Reading, PA	C / FFP	ACC-APG, Belvoir	Jan 2018	Jul 2018	2	6.000			
M100 (Feeder System)		2018	Fidelity Technologies Corp / Reading, PA	C / FFP	ACC-APG, Belvoir	Jan 2018	Jul 2018	241	5.860			
M200 (Feeder System)		2018	Fidelity Technologies Corp / Reading, PA	C / FPIF	ACC-APG, Belvoir	Jan 2018	Jul 2018	120	10.880			

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 60

P-1 Line Item Number / Title:

MA9800 / Generators And Associated Equip

Date: May 2017

Item Number / Title [DODIC]:

M53500 / MEDIUM SETS (5-60 KW)

ID Code (A=Service Ready, B=Not Service Ready):		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	1,013	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	941.315	1.299	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	4.200	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	937.115	1.299	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	4.200	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	941.315	1.299	-	-	-	-
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	929.235	-	-	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	3		FY 2016			FY 2017		F۱	/ 2018 Ba	se	FY	/ 2018 OC	0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cost
Flyaway Cost	·					·	·			·			· · · · · · · · · · · · · · · · · · ·			'		
Recurring Cost																		
Engineering     Support	-	-	134.324	-	-	0.500	-	-	-	-	-	-	-	-	-	-	-	
Engineering     Change Orders	-	-	32.158	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3. Testing	-	-	74.891	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
System Fielding     Support	-	-	11.685	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
5. System Assesment	-	-	5.609	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
6. Logistics Support	-	-	28.793	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
7. Data	-	-	33.750	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
PM Management     Support	-	-	610.753	-	-	0.799	-	-	-	-	-	-	-	-	-	-	-	
5kW/60Hz (MEP1030)	76.820	50	3.841	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
10kW/60Hz (MEP1040)	36.740	150	5.511	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	941.315	-	-	1.299	-	-	-	-	-	-	-	-	-	-	-	
ubtotal: Flyaway Cost	-	-	941.315	-	-	1.299	-	-	-	-	-	-	-	-	-	-	-	
Gross/Weapon System	929.235	1,013	941.315	-	-	1.299	-	-	-	-	-	-	-	-	-	-	-	

Exhibit P-5, Cost Analysis: FY 2018 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 60	P-1 Line Item Number / Title: MA9800 / Generators And Associated Equip	Item Number / Title [DODIC]: M53500 / MEDIUM SETS (5-60 KW)
ID Code (A-Sanjias Boody, B-Net Sanjias Boody)	MDAP/MAIS Code:	•

ID Code (A=Service Ready, B=Not	Service Ready) .		WIDAP/WIAIS COUR	ŧ.		
	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	-	-	-	-
	Total Obligation Authority	1.299	-	-	-	-
Total:	Quantity	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.299	-	-	-	-

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 60

P-1 Line Item Number / Title:

MA9800 / Generators And Associated Equip

R45400 / P-DISE 40-200 AMP

ID Code (A=Service Ready, B=Not Service Ready):		M	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	164	282	-	-	-
Gross/Weapon System Cost (\$ in Millions)	78.417	11.010	2.856	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	78.417	11.010	2.856	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	78.417	11.010	2.856	-	-	-
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	s are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	67.134	10.128	-	-	-

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2016			FY 2017		F۱	′ 2018 Ba	se	FY	2018 OC	0	FY	2018 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cos												
Flyaway Cost	'	'										'				'		
Recurring Cost																		
1. Enginering Support	-	-	6.698	-	-	1.700	-	-	-	-	-	-	-	-	-	-	-	
Engineering     Change Orders	-	-	0.708	-	-	0.104	-	-	-	-	-	-	-	-	-	-	-	
3. Testing	-	-	0.450	-	-	0.104	-	-	-	-	-	-	-	-	-	-	-	
System Fielding     Support	-	-	0.364	-	-	0.848	-	-	-	-	-	-	-	-	-	-	-	
5. System Assessment	-	-	1.220	-	-	0.081	-	-	-	-	-	-	-	-	-	-	-	
6. Logistics Support	-	-	5.088	-	-	2.461	-	-	-	-	-	-	-	-	-	-	-	
7. Data	-	-	0.545	-	-	0.081	-	-	-	-	-	-	-	-	-	-	-	
PM Management     Support	-	-	16.676	-	-	3.735	-	-	-	-	-	-	-	-	-	-	-	
M200 (Feeder System)	32.544	338	11.000	11.560	164	1.896	-	-	-	-	-	-	-	-	-	-	-	
M100 (Feeder System)	9.913	807	8.000	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M60 (Distribution System)	5.556	1,952	10.845	-	-	-	10.128	282	2.856	-	-	-	-	-	-	-	-	
M 40 (Distribution System)	27.335	319	8.720	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
M46 (Utility Kit)	3.750	2,161	8.104	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	78.418	-	-	11.010	-	-	2.856	-	-	-	-	-	-	-	-	
Subtotal: Flyaway Cost	-	-	78.418	-	-	11.010	-	-	2.856	-	-	-	-	-	-	-	-	

UNCLASSIFIED
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P-1 Line #166

200

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 60

P-1 Line Item Number / Title:

MA9800 / Generators And Associated Equip

R45400 / P-DISE 40-200 AMP

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	3		FY 2016			FY 2017		FY	/ 2018 Bas	se	F	Y 2018 OC	0	F	Y 2018 To	tal
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Gross/Weapon System Cost	-		78.417	67.134	164	11.010	10.128	282	2.856	-	-	-	-	-	-	-	-	-

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	164	282	-	-	-
	Total Obligation Authority	11.010	2.856	-	-	-
Total:	Quantity	164	282	-	=	-
Secondary Distribution	Total Obligation Authority	11.010	2.856	-	-	-

**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2035A / 03 / 60 R51050 / Advanced Medium Mobile MA9800 / Generators And Associated Equip

Power Systems (AMMPS)

ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	1,300	3,366	2,121	-	2,121
Gross/Weapon System Cost (\$ in Millions)	-	35.105	85.400	52.062	-	52.062
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	35.105	85.400	52.062	-	52.062
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	35.105	85.400	52.062	-	52.062
(The following Resource Summary rows are for informa	ational purposes only. The co	rresponding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

27.004

25.371

24.546

P-1 Line #166

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Gross/Weapon System Unit Cost (\$ in Thousands)

	P	rior Years	S		FY 2016			FY 2017		F۱	/ 2018 Bas	se	F۱	′ 2018 OC	0	F	/ 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Tota Cost
lyaway Cost			'	'	,		'	'		'			'			'	'	
Recurring Cost																		
Engineering     Support	-	-	-	-	-	0.753	-	-	0.966	-	-	0.985	-	-	-	-	-	C
Engineering     Change Orders	-	-	-	-	-	-	-	-	0.094	-	-	0.095	-	-	-	-	-	(
3. Testing	-	-	-	-	-	-	-	-	0.150	-	-	0.154	-	-	-	-	-	
System Fielding     Support	-	-	-	-	-	1.655	-	-	1.848	-	-	1.885	-	-	-	-	-	
5. System Assessment	-	-	-	-	-	0.458	-	-	0.558	-	-	0.569	-	-	-	-	-	
6. Logistics Support	-	-	-	-	-	1.310	-	-	1.441	-	-	1.457	-	-	-	-	-	
7. Data	-	-	-	-	-	-	-	-	0.366	-	-	0.194	-	-	-	-	-	
8. PM Management Support	-	-	-	-		1.536	-	-	2.131	-	-	2.154	-	-	-	-		
5kW/60Hz (MEP1030) <sup>(†)</sup>	-	-	-	20.997	650	13.648	21.400	1,916	41.002	18.500	1,039	19.222	-	-	-	18.500	1,039	1
10kW/60Hz (MEP1040) <sup>(†)</sup>	-	-	-	24.223	650	15.745	24.800	1,306	32.389	22.695	800	18.156	-	-	-	22.695	800	1
15kW/400Hz (MEP1051) <sup>(†)</sup>	-	-	-	-	-	-	27.519	54	1.486	24.872	180	4.477	-	-	-	24.872	180	
15kW/60Hz (MEP1050) <sup>(†)</sup>	-	-	-	-	-	-	26.100	40	1.044	23.385	26	0.608	-	-	-	23.385	26	

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24.546

Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title:

Date: May 2017

**Appropriation / Budget Activity / Budget Sub Activity:** 2035A / 03 / 60

MA9800 / Generators And Associated Equip

Item Number / Title [DODIC]:
R51050 / Advanced Medium Mobile
Power Systems (AMMPS)

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	s		FY 2016			FY 2017		FY	′ 2018 Ba	se	F	Y 2018 OC	0	F	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
30kW/60Hz (MEP1060) <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	27.711	76	2.106	-	-	-	27.711	76	2.106
60kW/60Hz (MEP1070) <sup>(†)</sup>	-	-	-	-	-	-	38.500	50	1.925	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	-	-	-	35.105	-	-	85.400	-	-	52.062	-	-	-	-	-	52.062
Subtotal: Flyaway Cost	-	-	-	-	-	35.105	-	-	85.400	-	-	52.062	-	-	-	-	-	52.062
Gross/Weapon System Cost	-	-	-	27.004	1,300	35.105	25.371	3,366	85.400	24.546	2,121	52.062	-	-	-	24.546	2,121	52.062

				EV 0040	EV 0040	F)/ 0040
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	1,300	2,272	1,161	-	1,161
	Total Obligation Authority	35.105	54.929	28.678	-	28.678
ANG	Quantity	-	632	539	-	539
	Total Obligation Authority	-	17.845	13.406	-	13.406
AR	Quantity	-	462	421	-	421
	Total Obligation Authority	-	12.626	9.978	-	9.978
Total:	Quantity	1,300	3,366	2,121	-	2,121
Secondary Distribution	Total Obligation Authority	35.105	85.400	52.062	•	52.062

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

**Date:** May 2017

2035A / 03 / 60

MA9800 / Generators And Associated Equip

R51050 / Advanced Medium Mobile Power Systems (AMMPS)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
5kW/60Hz (MEP1030) <sup>(†)</sup>		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	1,916	21.400	Y		
5kW/60Hz (MEP1030) <sup>(†)</sup>		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	1,039	18.500	Y		
10kW/60Hz (MEP1040) <sup>(†)</sup>		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	1,306	24.800	Y		
10kW/60Hz (MEP1040) <sup>(†)</sup>		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	800	22.700	Y		
15kW/400Hz (MEP1051)		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	54	27.520	Y		
15kW/400Hz (MEP1051)		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	180	24.870	Υ		
15kW/60Hz (MEP1050)		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	40	26.100	Y		
15kW/60Hz (MEP1050)		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	26	23.390	Y		
30kW/60Hz (MEP1060)		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	76	27.710	Y		
60kW/60Hz (MEP1070)		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	50	38.500	Y		

<sup>(†)</sup> indicates the presence of a P-21

Exl	hib	it P	P-21, Pro	oducti	ion Sc	hedu	le: F	/ 201	8 Arm	ıy														Date	e: Ma	y 201	7				
	-	-	i <b>ation</b> / 1 03 / 60	Budge	et Acti	vity /	Budg	get S	ub Ac	tivity	:	1				i <b>ber</b> / ors An		ociate	ed Eq	luip				R51	050 <i>l</i>	Adva	Title nced I s (AMI	Mediu	um Mo	bile	
				lements in Each)		,						Fiscal Y	ear 2017											Fiscal Y	ear 2018						ВА
					ACCEPT									C	Calendar	Year 201	17								Caler	ndar Year	r <b>2018</b>				L
O   F	M F R #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	N C E
5kW	//60H	Iz (ME	EP1030)					,																							
-	1 2	2017	ARMY	1,916	0	1,916				Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	156	160	160	160	1,28
1	1 2	2018	ARMY	1,039	0	1,039																	·				Α -	-	-	-	1,03
10kV	W/60	Hz (N	1EP1040)																												
2	2 2	2017	ARMY	1,306	0	1,306				Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	108	108	109	109	87
2	2 2	2018	ARMY	800	0	800																					Α -	-	-	-	80
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	

Ex	hi	bit F	P-21, Pro	oducti	on Sc	hedu	le: FY	2018	3 Arm	У														Date	: May	/ 2017	7				
-	-	-	iation / 03 / 60	Budge	et Acti	vity /	Budg	et Sı	ıb Ac	tivity		1					<b>Title:</b> d Ass		ed Eq	uip				R510	)50 <i>I</i> .	Advaı	nced I	<b>[DOD</b> Mediu MPS)	-	bile	
				ements n Each)								Fiscal Y	ear 2019											Fiscal Ye	ar 2020						В
					ACCEPT									С	alendar	Year 201	9								Calen	dar Year	2020				Ļ
0 0		FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	N C E
5kV	V/60	Hz (MI	EP1030)																												
	1	2017	ARMY	1,916	636	1,280	160	160	160	160	160	160	160	160																	
	1	2018	ARMY	1,039	0	1,039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	86	86	86	86	86	87	87	87	87	87	17
10k	W/e	60Hz (N	MEP1040)																												
	2	2017	ARMY	1,306	434	872	109	109	109	109	109	109	109	109																	
	2	2018	ARMY	800	0	800	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66	66	66	66	67	67	67	67	67	67	134
							0 0	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	Ŋ	A U G	S E P	0 C	N O V	D E C	J A N	F E B	M A R	A P R	M A	U U	n 1	A U G	S E P	

2035A / 03 / 60  MA9800 / Generators And Associated Equip  R51050 / Advanced Medium Mobile Power Systems (AMMPS)  Fiscal Year 2021  Fiscal Year 2021  Calendar Year 2021  Calendar Year 2021  Calendar Year 2021  Calendar Year 2021  PRIOR BAL TO 1 DUE 0 N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D J F M A M J J J A S O N D D J F M A M J J J A S O N D D J F M A M J J J A S O N D D J F M A M D J J F M A S O N D D J F M A M D J J A S O N D D J F M A D D D D D D D D D D D D D D D D D D													UN	ICL/	ASSI	FIEC	)													
MA9800 / Generators And Associated Equip   R51050 / Advanced Medium Mobile   Power Systems (AMMPS)	nibit F	P-21, Pro	oducti	on Sc	hedul	e: FY	2018	3 Arm	ıy														Date	e: Ma	y 201	7				
Color   Fiscal Year 2021   Fiscal Year 2021   Fiscal Year 2022   Fis			Budge	et Acti	vity /	Budg	et Su	ıb Ac	tivity	<b>':</b>		_						ed Eq	uip				R51	050 <i>l</i>	Adva	nced	Medi	ium M		
N											Fiscal Y	ear 2021											Fiscal Y	ear 2022	·					В
0 F F V SERVICE QTY 2020 10CT T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N B R R R Y N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G P T V C N L G T T T V C N L G P T T V C N L G T T T V C N L G T T T T T T T T T T T T T T T T T T		,				-							(	Calendar	Year 202	21		1		_				Cale	ndar Yea	r 2022				- A
1   2017   ARMY   1,916   1,916   0	:	SERVICE		TO 1 OCT	DUE AS OF		0	E		E	A	P	Α		J U L	U	E	С	0	E	J A N	F E B	Α	P	Α	Ü		U	E	N C
1 2018 ARMY 1,039 865 174 87 87  10kW/60Hz (MEP1040)  2 2017 ARMY 1,306 1,306 0  2 2018 ARMY 800 666 134 67 67  O N D J F M A M J J A S  O N D J F M A S	60Hz (ME	EP1030)		l																							_			
10kW/60Hz (MEP1040)  2 2017 ARMY 1,306 1,306 0  2 2018 ARMY 800 666 134 67 67  O N D J F M A M J J A S O N D J F M A M J J A S	2017	ARMY	1,916	1,916	0																									
2   2017   ARMY   1,306   1,306   0	2018	ARMY	1,039	865	174	87	87																							
2   2018   ARMY																														
ONDJFMAMJJJASONDJFMAMJJAS																														
	2018	ARMY	800	666	134					1					1								1	1						
						С	0				A	P	Α	U	U L	U	E	С	0	E	J A N		Α	P	Α			U	E	
		FY 600Hz (MI 2017 2018 (V60Hz (N 2017 2017 2017 2017 2017 2017 2017 2017	Cost El (Units in FY SERVICE BOHz (MEP1030)  2017 ARMY 2018 ARMY  2017 ARMY  2017 ARMY	Cost Elements (Units in Each)  FY SERVICE QTY  80Hz (MEP1030)  2017 ARMY 1,916 2018 ARMY 1,039  1/60Hz (MEP1040)  2017 ARMY 1,306	Cost Elements (Units in Each)  Cost Elements (Units in Each)  RCCEPT PRIOR TO 1 OCT 2020  BOHz (MEP1030)  2017 ARMY 1,916 1,916 2018 ARMY 1,039 865  1/60Hz (MEP1040)  2017 ARMY 1,306 1,306	Cost Elements (Units in Each)  Cost Elements (Units in Each)  PROC OCT DUE OCT AS OF 1 OCT 2020 1 OCT 2020 1 OCT 2020 1 OCT 2020 2020 2020 2020 2020 2020 2020 20	Cost Elements (Units in Each)   ACCEPT   PRIOR   DUE   OCT   AS OF   CC   T   AS OF   CC   CC   AS OF   CC   CC   AS OF   CC   CC   AS OF   CC   CC   CC   AS OF   CC   CC   CC   CC   CC   CC   CC	Cost Elements (Units in Each)   ACCEPT   PRIOR   DUE   O   N	Cost Elements	Cost Elements (Units in Each)	Cost Elements (Units in Each)	Cost Elements	P-21, Production Schedule: FY 2018 Army   P-1 Line Item Number / Title: MA9800 / Generators And Ass   P-1 Line Item Number /	Cost Elements	Date	Date: Maximum	Date: May 2018   Date: May 2018   Date: May 2018   Date: May 2019   Date	Date: May 2017    P-21, Production Schedule: FY 2018 Army   P-1 Line Item Number / Title:   May 800 / Generators And Associated Equip   R51050 / Advanced Power Systems (AN   R51050 / A	Date: May 2017	Date: May 2017	Date: May 2017   Standard   Date: May 2017   Date: May									

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 60	MA9800 / Generators And Associated Equip	R51050 / Advanced Medium Mobile Power Systems (AMMPS)

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						In	itial			Reo	rder	
Ref #		MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	CUMMINS POWER GENERATION; INC - Minneapolis, MN	1,500	3,000	4,800	6	2	2 17	19	0	0	0	0
2	CUMMINS POWER GENERATION; INC - Minneapolis, MN	1,500	3,000	4,800	6	2	. 17	19	0	0	0	0

#### Remarks:

All production rates shown on a yearly basisManufacturer has multiple products that contribute to the minimum production rate.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 60

P-1 Line Item Number / Title:

MA9800 / Generators And Associated Equip

R59210 / Power Units/Mounted (AMMPS)

ID Code (A=Service Ready, B=Not Service Ready):		М	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	640	696	603	9	612
Gross/Weapon System Cost (\$ in Millions)	=	31.250	35.840	35.855	0.545	36.400
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	31.250	35.840	35.855	0.545	36.400
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	31.250	35.840	35.855	0.545	36.400
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	48.828	51.494	59.461	60.556	59.477

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2016			FY 2017		F١	' 2018 Bas	se .	FY	' 2018 OC	0	FY	2018 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
lyaway Cost	'			'				,								'	'	
Recurring Cost																		
Engineering     Support	-	-	-	-	-	1.522	-	-	1.673	-	-	1.761	-	-	-	-	-	1.5
Engineering     Change Orders	-	-	-	-	-	0.020	-	-	0.021	-	-	0.022	-	-	-	-	-	0.0
3. Testing	-	-	-	-	-	1.051	-	-	0.052	-	-	0.053	-	-	-	-	-	0.0
4.System Fielding Support	-	-	-	-	-	1.569	-	-	1.642	-	-	1.676	-	-	-	-	-	1.6
5. System Assessment	-	-	-	-	-	0.392	-	-	0.400	-	-	0.240	-	-	-	-	-	0.2
6. Logistics Support	-	-	-	-	-	1.050	-	-	1.155	-	-	1.215	-	-	-	-	-	1.:
7. Data	-	-	-	-	-	0.192	-	-	0.366	-	-	0.199	-	-	-	-	-	0.
PM Management     Support	-	-	-	-	-	1.984	-	-	2.019	-	-	2.171	-	-	-	-	-	2.
PP3001, two 5kW 50/60Hz, LTT <sup>(†)</sup>	-	-	-	-	-	-	53.863	80	4.309	51.308	26	1.334	-	-	-	51.308	26	1.3
PP3102, two 10kW 50/60Hz <sup>(†)</sup>	-	-	-	-	-	-	61.371	35	2.148	58.456	90	5.261	-	-	-	58.456	90	5.:
PP3105, two 30kW 50/60Hz <sup>(†)</sup>	-	-	-	-	-	-	72.350	40	2.894	68.916	119	8.201	-	-	-	68.916	119	8.
PP3106, two 60kW 50/60Hz <sup>(†)</sup>	-	-	-	-	-	-	86.000	1	0.086	82.300	40	3.292	-	-	-	82.300	40	3.

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LI MA9800 - Generators And Associated Equip Army

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P-1 Line #166

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 60

P-1 Line Item Number / Title:
MA9800 / Generators And Associated Equip

R59210 / Power Units/Mounted (AMMPS)

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Year	S	FY 2016			FY 2017			F`	Y 2018 Bas	se	F`	Y 2018 OC	0	FY 2018 Total		
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
PU2001, 5kW 50/60Hz <sup>(†)</sup>	-	-	-	29.010	98	2.843	29.526	114	3.366	28.122	90	2.531	-	-	-	28.122	90	2.531
PP3003, two 15kW 50/60Hz <sup>(†)</sup>	-	-	-	61.980	50	3.099	63.040	25	1.576	-	-	-	-	-	-	-	-	-
PU2002, 10kW 50/60Hz <sup>(†)</sup>	-	-	-	28.020	100	2.802	30.648	142	4.352	29.189	90	2.627	60.556	9	0.545	32.040	99	3.172
PU2101, 15kW 50/60Hz, M200 <sup>(†)</sup>	-	-	-	-	-	-	33.685	54	1.819	32.078	51	1.636	-	-	-	32.078	51	1.636
PU2102, 30kW 50/60Hz <sup>(†)</sup>	-	-	-	37.137	313	11.624	37.806	103	3.894	36.000	31	1.116	-	-	-	36.000	31	1.116
PU2112, 30kW 400Hz <sup>(†)</sup>	-	-	-	-	-	-	40.500	18	0.729	38.567	30	1.157	-	-	-	38.567	30	1.157
PU2103, 60kW 50/60Hz <sup>(†)</sup>	-	-	-	39.266	79	3.102	39.750	84	3.339	37.861	36	1.363	-	-	-	37.861	36	1.363
Subtotal: Recurring Cost	-	-	-	-	-	31.250	-	-	35.840	-	-	35.855	-	-	0.545	-	-	36.400
Subtotal: Flyaway Cost	-	-	-	-	-	31.250	-	-	35.840	-	-	35.855	-	-	0.545	-	-	36.400
Gross/Weapon System Cost	-	-	-	48.828	640	31.250	51.494	696	35.840	59.461	603	35.855	60.556	9	0.545	59.477	612	36.400

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	640	471	334	9	343
	Total Obligation Authority	31.250	21.975	20.109	0.545	20.654
ANG	Quantity	-	166	193	-	193
	Total Obligation Authority	-	10.181	10.628	-	10.628
AR	Quantity	-	59	76	-	76
	Total Obligation Authority	-	3.684	5.118	-	5.118
Total:	Quantity	640	696	603	9	612
Secondary Distribution	Total Obligation Authority	31.250	35.840	35.855	0.545	36.400

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 60

P-1 Line Item Number / Title:

MA9800 / Generators And Associated Equip

**Date:** May 2017

Item Number / Title [DODIC]: R59210 / Power Units/Mounted

(AMMPS)

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)		Now?	Available	Date
PP3001, two 5kW 50/60Hz, LTT		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	80	53.860	Υ		
PP3001, two 5kW 50/60Hz, LTT		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	26	51.310	Υ		
PP3102, two 10kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	35	61.370	Υ		
PP3102, two 10kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	90	58.460	Υ		
PP3105, two 30kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	40	72.350	Υ		
PP3105, two 30kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	119	68.920	Υ		
PP3106, two 60kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	1	86.000	Υ		
PP3106, two 60kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	40	82.300	Υ		
PU2001, 5kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	114	29.530	Υ		
PU2001, 5kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	90	28.120	Υ		
PP3003, two 15kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	25	63.040	Υ		
PU2002, 10kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	142	30.650	Υ		
PU2002, 10kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	99	32.040	Υ		
PU2101, 15kW 50/60Hz, M200		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	54	33.690	Υ		
PU2101, 15kW 50/60Hz, M200		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	51	32.080	Υ		
PU2102, 30kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	103	37.810	Υ		
PU2102, 30kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	31	36.000	Υ		
PU2112, 30kW 400Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	18	40.500	Υ		
PU2112, 30kW 400Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	30	38.570	Υ		

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E	xhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
		P-1 Line Item Number / Title: MA9800 / Generators And Associated Equip	Item Number / Title [DODIC]: R59210 / Power Units/Mounted (AMMPS)

Cost Elements	000	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
PU2103, 60kW 50/60Hz		2017	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jan 2017	Jun 2018	84	39.750	Y		
PU2103, 60kW 50/60Hz		2018	CUMMINS POWER GENERATION; INC / Minneapolis, MN	SS / FFP	ACC-APG, Belvoir	Jun 2018	Dec 2019	36	37.860	Y		

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 60

P-1 Line Item Number / Title:
MA9800 / Generators And Associated Equip

R61510 / Large Advanced Mobile Power

ID Code (A=Service Ready, B=Not Service Ready):		N	IDAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	20	4 130	130	-	130
Gross/Weapon System Cost (\$ in Millions)	-	14.82	2 15.328	16.278	-	16.278
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	14.82	2 15.328	16.278	-	16.278
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	14.82	2 15.328	16.278	-	16.278
(The following Resource Summary rows are for informati	onal purposes only. The cor	responding budget reque	sts are documented elsewhe	re.)		3
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	72.65	7 117.908	125.215	-	125.215

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	Prior Years FY 2016						FY 2017	FY	' 2018 Bas	e	FY	2018 OC	0	FY	2018 Tota	al	
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost					'		'	'		'	'		'					
Recurring Cost																		
<ol> <li>Engineering Support</li> </ol>	-	-	-	-	-	0.350	-	-	1.185	-	-	1.209	-	-	-	-	-	1.20
Engineering     Change Orders	-	-	-	-	-	-	-	-	0.104	-	-	0.106	-	-	-	-	-	0.1
3. Testing	-	-	-	-	-	-	-	-	0.104	-	-	0.106	-	-	-	-	-	0.1
4.System Fielding Support	-	-	-	-	-	-	-	-	0.766	-	-	0.781	-	-	-	-	-	0.7
5. Systems Assesment	-	-	-	-	-	-	-	-	0.113	-	-	0.115	-	-	-	-	-	0.1
6. Logistics Support	-	-	-	-	-	0.350	-	-	1.065	-	-	1.086	-	-	-	-	-	1.0
7. Data	-	-	-	-	-	-	-	-	0.104	-	-	0.106	-	-	-	-	-	0.1
8. PM Management Support	-	-	-	-	-	0.252	-	-	1.135	-	-	1.396	-	-	-	-	-	1.3
LAMPS 100kW Skid <sup>(†)</sup>	-	-	-	73.439	41	3.011	85.200	15	1.278	86.000	15	1.290	-	-	-	86.000	15	1.2
LAMPS 100kW Power Unit <sup>(†)</sup>	-	-	-	89.904	83	7.462	102.286	70	7.160	108.043	70	7.563	-	-	-	108.043	70	7.5
LAMPS PDU <sup>(†)</sup>	-	-	-	42.463	80	3.397	51.422	45	2.314	56.000	45	2.520	-	-	-	56.000	45	2.5
Subtotal: Recurring Cost	-	-	-	-	-	14.822	-	-	15.328	-	-	16.278	-	-	-	-	-	16.2
Subtotal: Flyaway Cost	-	-	-	-	-	14.822	-	-	15.328	-	-	16.278	-	-	-	-	-	16.2
Gross/Weapon System Cost	-	-	-	72.657	204	14.822	117.908	130	15.328	125.215	130	16.278	-	-	-	125.215	130	16.27

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 60	MA9800 / Generators And Associated Equip	R61510 / Large Advanced Mobile Power

ID Code (A=Service Ready, B=Not Service Read	dy):		MDAP/MAIS Code	):		
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	204	69	69	-	69
	Total Obligation Authority	14.822	8.035	8.627	-	8.627
AR	Quantity	-	61	61	-	61
	Total Obligation Authority	-	7.293	7.651	-	7.651
Total:	Quantity	204	130	130	<u>-</u>	130
Secondary Distribution	Total Obligation Authority	14.822	15.328	16.278	-	16.278

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	ırmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 60	MA9800 / Generators And Associated Equip	R61510 / Large Advanced Mobile Power

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
LAMPS 100kW Skid		2017	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jul 2017	Apr 2018	15	85.200	Y		
LAMPS 100kW Skid		2018	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jan 2018	Sep 2018	15	86.000	Y		
LAMPS 100kW Power Unit		2017	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jul 2017	Apr 2018	70	102.290	Y		
LAMPS 100kW Power Unit		2018	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jan 2018	Sep 2018	70	108.040	Y		
LAMPS PDU		2017	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jul 2017	Apr 2018	45	51.422	Y		
LAMPS PDU		2018	L-3 Communications Westwood Co / Tulsa	C / FP	ACC-APG, Belvoir	Jan 2018	Sep 2018	45	56.000	Y		

Exhibit P-5, Cost	Analysis	s: FY 20	)18 Army	<i>'</i>									I	Date: M	ay 2017			
<b>Appropriation / B</b> 2035A / 03 / 60	Sudget A	ctivity /	Budget	Sub Act	ivity:			n Number enerators A			Equip				mber / 1 / Small		DIC]: Electric F	ower '
ID Code (A=Service Read	dy, B=Not Servi	ce Ready):	A						MI	DAP/MAIS	Code:							
F	Resource	Sumn	nary			Prior Yea	ars	FY 201	6	FY	2017	FY	2018 Bas	e F	Y 2018 (	осо	FY 2018	Total
Procurement Quantity (Un	its in Each)						-		-			-		-		-		
Gross/Weapon System C	ost (\$ in Million	s)					-		3.668		1.2	53	1	.285		-		1.285
Less PY Advance Procure	ement (\$ in Mi	lions)					-		-			-		-		-		-
Net Procurement (P-1) (\$	in Millions)						-		3.668		1.2	53	1	.285		-		1.285
Plus CY Advance Procure	ment (\$ in Mil	lions)					-		-			-		-		-		-
Total Obligation Authori	<b>ty</b> (\$ in Millions	;)					-		3.668		1.2	53	1	.285		-		1.285
(T	he following l	Resource S	Summary rov	vs are for info	rmational p	ourposes only	v. The corres	sponding budge	et request	s are docum	ented elsev	here.)				-		
Initial Spares (\$ in Millions)							-		-			-		-		-		-
Gross/Weapon System U	nit Cost (\$ in T	Thousands)					-		-			-		-		-		-
Note: Subtotals or Totals	n this Exhibit	P-5 may r	ot be exact	or sum exactl	y due to ro	unding.												
	F	Prior Yea	's		FY 2016			FY 2017		FY	7 2018 Ba	se	FY	2018 OC	0	F	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(\$79	(Luon)	(\$ 111)	(\$75)	(Eddin)	(\$ 111)	(\$75)	(Eddin)	(\$ 101)	(\$75)	(Luon)	(\$ 111)	(\$75)	(Eddin)	(\$ 101)	(\$75	(Luon)	(\$ 101)
Recurring Cost	_																	
Engineering     Support	-	-	-	-	-	1.057	-	-	-	-	-	-	-	-	-	-	-	-
Engineering     Change Orders	-	-	-	-	-	0.579	-	-	-	-	-	-	-	-	-	-	-	-
7. Data	-	-	-	-	-	0.159	-	-	-	-	-	-	-	-	-	-	-	-
8. PM Management Support	-	-	-	-	-	1.873	-	-	1.253	-	-	1.285	-	-	-	-	-	1.285
Subtotal: Recurring Cost	-	-	-	-	-	3.668	-	-	1.253	-	-	1.285		-	-	-	-	1.285
Subtotal: Flyaway Cost	-	-	-	-	-	3.668	-	-	1.253	-	-	1.285	-	-	-	-	-	1.285
Gross/Weapon System Cost	-	-	-	-	-	3.668	-	-	1.253	-	-	1.285	-	-	-	-	-	1.285
												FY 2	018		FY 2018		FY 20	 18
	Sec	ondary D	istributior	1			FY	2016		FY 2017		Ba	se		осо		Tota	i .
Army		_	antity					-			-		-			-		-
Tatali			al Obligation A	Authority				3.668	3		1.253		1.285			-		1.285
Total: Secondary Distribution			antity al Obligation	Authority				3.668			1.253		1.285	:		-		1.285
-		10	ai Obligation	Authority				3.000	•		1.255		1.200	'		-		1.205

LI MA9800 - Generators And Associated Equip Army

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P-1 Line #166

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 60:

R42501 / Tactical Electric Power Recapitalization

Generators

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Line item widat /wato oode: N/A												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	12	-	12	70	16	16	16	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	-	13.806	7.867	7.436	-	7.436	24.907	7.937	8.067	8.376	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	13.806	7.867	7.436	-	7.436	24.907	7.937	8.067	8.376	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	13.806	7.867	7.436	-	7.436	24.907	7.937	8.067	8.376	Continuing	Continuing
(The following	Resource Sum	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	619.667	-	619.667	355.814	496.063	504.188	523.500	Continuing	Continuing

### **Description:**

This effort supports the recapitalization of the MEP-PU-810A/B, Deployable Power Generation & Distribution System (DPGDS) Prime Power Unit (PPU). The DPGDS PPU is the U.S. Army's current prime power mobile electric power generating asset. The DPGDS PPU is a wheel-mounted, diesel engine driven, prime power (Type II), utility (Class 2A), Mode I unit that produces 840 kilowatts (kW), 4160 volts line-to-line at 60Hz and 700kW, 3800 volts line-to-line at 50Hz with an 0.8 power factor, lagging. The MEP-PU-810 has two variants, the MEP-PU-810A, a towed trailer configuration capable of being air transported by a C-130 aircraft, and the MEP-PU-810B, a 5th wheel configuration Department of Transportation (DOT) approved for over the road use at 55 miles per hour. Throughout the Department of Defense there are 165 'A' Models and 66 'B' Models supporting numerous missions, such as supporting the nation's Ballistic Missile Defense System.

FY 2016 and FY 2017 are first article build/test years. Upon contract award the vendor will take possession of Government Furnished Property first article units, three (3) each MEP-PU-810A and MEP-PU-810B, and proceed to create the Modification Work Order to Recapitalize a MEP-PU-810 A to a MEP-PU-810B to a MEP-PU-810D. Upon successful completion of the MWO on the first article units, first article testing will commence. Consequently, there are no quantities listed.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	12	-	12	70	16	16	16
	Total Obligation Authority	13.806	7.867	7.436	-	7.436	24.907	7.937	8.067	8.376
Total:	Quantity	-	-	12	-	12	70	16	16	16
Secondary Distribution	Total Obligation Authority	13.806	7.867	7.436	-	7.436	24.907	7.937	8.067	8.376

#### Justification:

FY18 Base procurement dollars in the amount of \$7.436 million supports the DPGDS PPU Recapitalization. IAW Army Regulation 70-1, Army Acquisition Policy, Recapitalization is a key element in the modernization and sustainment of the Army's current force. The goals of recapitalization are to extend service life, stabilize the rate of growth of operating and support costs, improve reliability, maintainability, safety, and the efficiency of recapitalized systems. Further, recapitalization is expected to reduce the logistics footprint, as well as enhance warfighting capabilities for selected recapitalized systems. Hence, the recapitalization of the existing DPGDS PPUs is required to extend their economic useful life and to prevent a capability gap from emerging. Units currently requiring this capability include the 249th Engineer

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Exhibit P-40, Budget Line Item Justification	: FY 2018 Army		<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sul 2035A: Other Procurement, Army / BA 03: Othe Generators		P-1 Line Item N R42501 / Tactica	umber / Title: al Electric Power Recapitalization
D Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	-		
	istical support requirements, capitalize on ad		le Defense Agency/U.S. Army Space and Missile Defense Command Forward- gy and afford the capability to the force for an estimated additional fifteen (15) years.
In accordance with Section 1815 of the FY2008 National I defense missions, domestic emergency responses, and p		titem is necessary for us	se by the active and reserve components of the Armed Forces for homeland

LI R42501 - Tactical Electric Power Recapitalization Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 65:

G41001 / Family Of Forklifts

Material Handling Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	280	232	13	85	-	85	165	163	170	170	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	51.604	27.982	3.153	9.000	-	9.000	17.937	18.297	19.721	20.345	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	51.604	27.982	3.153	9.000	-	9.000	17.937	18.297	19.721	20.345	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	51.604	27.982	3.153	9.000	-	9.000	17.937	18.297	19.721	20.345	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	d elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	184.300	120.612	242.538	105.882	-	105.882	108.709	112.252	116.006	119.676	Continuing	Continuing

### Description:

The Family of Forklifts supports various combat, combat support, and combat service support units in the loading and unloading of palletized supplies. Currently, the forklift family consists of the 5K Light Capability Rough Terrain Forklift (LCRTF) and the All-Terrain Lifter, Army System (ATLAS).

The 5K Light Capability Rough Terrain Forklift (LCRTF) is used to load and unload palletized supplies including ammunition from International Standard Organization (ISO) containers and tactical vehicles. The 5K LCRTF will move supplies across the beach and rough terrain to transfer loads from aircraft landing zones and tactical vehicles. The 5K LCRTF mission profile is 20 hours of operations in all types of environmental conditions. The 5K LCRTF will be employed by cargo battalions, artillery units, transportation support battalions, combat service support units and various aviation units. It will be routinely in forward deployed areas with operating forces in support of combat operations other than war. The 5K LCRTF system is a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations (i.e. Disaster Relief). It can be transported by C-130 aircraft and external sling load via CH47D helicopter. The 5K LCRT Forklift Army Acquisition Objective (AAO): 2.776 Systems. The minimum sustainment rate is 15 systems.

The All-Terrain Lifter, Army System (ATLAS) is a family of, C-130 airplane, transportable 10,000 Pound (LB) capacity variable reach rough terrain forklifts. The ATLAS primary missions include handling all classes of supply, stuffing and un-stuffing standard Army pallets in 20 foot International Standard Organization (ISO) containers, handling break-bulk cargo and loads weighing up to 10,000 LBS on Air Force 463L pallets. It is a key component to the Army's Container Oriented Distribution System which is essential to the deployment of an Expeditionary Army and sustainment of a deployed force. The ATLAS forklift mobility capabilities support all the Army's Brigade Combat Teams and units from seven branches (Transportation, Quartermaster, Ordnance, Missile & Munitions, Engineer, Aviation and Medical). Crew survivability is being addressed in accordance with the Army's Long Term Armor Strategy (LTAS). The ATLAS is a military unique vehicle. It operates in all terrains, has cross country mobility and road speed of 23 Miles per Hour (MPH). Commercial forklifts cannot meet the military requirements nor the Key Performance Parameters (KPP) identified in the ATLAS requirements document. The ATLAS is capable of performing all mission requirements and meets EPA Tier III emissions requirements, with increased reliability and survivability. The ATLAS system is a Critical Dual Use (CDU) system enabling and supporting Defense Support to Civil Authorities (DSCA) operations (i.e. Disaster Relief). The ATLAS Army Acquisition Objective (AAO) is: 4,645. The Army has procured 4,399 Systems.

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	138	13	31	-	31	59	58	60	60
	Total Obligation Authority	18.336	3.153	3.240	-	3.240	6.354	6.483	6.975	7.198

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UNCLASSIFIED LI G41001 - Family Of Forklifts Army

P-1 Line #168

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 65:

G41001 / Family Of Forklifts

Material Handling Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

				FY 2018	FY 2018	FY 2018				
Secondar	y Distribution	FY 2016	FY 2017	Base	осо	Total	FY 2019	FY 2020	FY 2021	FY 2022
ANG	Quantity	47	-	21	-	21	41	41	43	43
	Total Obligation Authority	4.818	-	2.250	-	2.250	4.508	4.597	4.960	5.116
AR	Quantity	47	-	33	-	33	65	64	67	67
	Total Obligation Authority	4.828	-	3.510	-	3.510	7.075	7.217	7.786	8.031
Total:	Quantity	232	13	85	-	85	165	163	170	170
Secondary Distribution	Total Obligation Authority	27.982	3.153	9.000	-	9.000	17.937	18.297	19.721	20.345

#### Justification:

FY 2018 Base procurement dollars in the amount of \$9.000 million will procure and field 85 LCRTF systems. The funding will also be used for all associated Program Management support costs.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

LI G41001 - Family Of Forklifts Army

UNCLASSIFIED Page 2 of 2

P-1 Line #168

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

MA6600 / Combat Training Centers Support

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	3,330	1,033	1,330	631	-	631	527	1,261	2,483	417	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888	80.941	112.049	105.120	97.824	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888	80.941	112.049	105.120	97.824	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888	80.941	112.049	105.120	97.824	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	ourposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	_
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	427.693	72.523	60.683	140.868	-	140.868	153.588	88.857	42.336	234.590	Continuing	Continuing

### **Description:**

The Combat Training Centers (CTCs) are the Army's premiere collective training centers. The CTCs provide high-fidelity Live, Virtual and Constructive (LVC) Brigade training rotations which prepare Brigade Combat Teams, Joint partners, and supporting units to deploy in support of the Army's Sustainable Readiness Model (SRM). The CTC program supports the National Training Center (NTC), the Joint Readiness Training Center (JRTC), and the Joint Multinational Readiness Center (JMRC). The CTCs primary goal is to develop agile and adaptive leaders at the tactical, operational and strategic levels while providing BCTs the core training necessary to conduct decisive action in a dynamic operating environment.

The Instrumentation System (IS) is a communications, analysis and feedback system that provides a realistic operational environment for training the Brigade Combat Team (BCT) and below in preparation for deployment to conduct Unified Land Operations (ULO). It is comprised of voice, video, and data instrumentation subsystem networks that include software, hardware, work stations, base-station equipment, communications infrastructure, voice radios, data devices, and interfaces. The Instrumentation System provides the Combat Trainer (CT) critical situational awareness for training safety, analysis, and feedback capabilities to conduct After Action Reviews (AARs).

The Combat Training Center Military Operations on Urban Terrain Instrumentation System (CTC MOUT IS) provides instrumentation for the collection, data transfer, control, editing and presentation of training exercises including realistic battlefield effects, targetry, and night operations. The After Action Review (AAR) theater provides a multi-media environment with video replay capability to enable discussions and assessments of unit performance during exercises. Program instrumentation is fielded at the National Training Center (NTC), the Joint Readiness Training Center (JRTC), and the Joint Multinational Readiness Center (JMRC).

The Combat Training Center LIVE FIRE Modernization (CTC LIVE FIRE MOD) provides Future Army System of Integrated Targets (FASIT) qualified live-fire capable targets: stationary armor targets (SAT) with accompanying battlefield effects simulators (BES); stationary infantry targets (SIT); human urban targets (HUT); double-arm SIT's; moving infantry targets (MIT); and non-FASIT qualified Aviation 3-D and Unattended Aerial Systems (UAS) targets which provide a capability for the CTCs to support the transition from Mission Rehearsal Exercise/Situational Training Exercise (MRE/ST) rotations to Unified Land Operations (ULO) against a hybrid threat.

The CTC Aviation program procures and installs instrumentation capabilities on the Light Utility Helicopter (LUH) and for the Instrumentation System (IS) to track newly fielded Light Utility Helicopters (LUH) performing Observer/Controller (OC) and Opposing Forces (OPFOR) roles at the three CTCs. The CTC Aviation program provides the capabilities to communicate with LUH organic onboard radios via the CTC ground-based Observer Controller Communications Systems (OCCS). The OPFOR capability provides a high-fidelity threat to the BLUFOR in training at the CTCs and the OC capability provides and aids the control of the CTC exercises to ultimately achieve the objective of improved and sustained readiness of the force.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Other Related Program Elements: N/A

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

MA6600 / Combat Training Centers Support

Training Equipment

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

The OPFOR Surrogate Wheeled Vehicles (OSWV) program procures technical vehicles, unique VISMODs, and Civilian on the Battlefield Vehicles (COBVs). This capability provides for an accurate replication of OPFOR and Civilians on the Battlefield (COB) vehicle environment that rotational units must train against.

Program Elements for Code B Items: N/A

The Army identified an operational gap in the training strategy for the OPFOR Integrated Air Defense System (IADS). It's a collection of enemy weapons systems that engage Army aviation assets. Training Aircraft Survivability Equipment (ASE) Stimulation Suite (TASS) is a live training system consisting of aircraft components and ground emitters that replicate current and emerging enemy Air Defense systems. Its fidelity supports individual pilot training as well as the collective training requirements of the Brigade Combat Team to fully plan, prepare, execute and react against an enemy air defense weapons at the Combat Training Centers (CTC).

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Jeconda	iy Distribution	1 1 2010	1 1 2017	Dase		iotai	1 1 2013	1 1 2020	1 1 202 1	1 1 2022
Army	Quantity	1,033	1,330	631	-	631	527	1,261	2,483	417
	Total Obligation Authority	74.916	80.708	88.888	-	88.888	80.941	112.049	105.120	97.824
Total:	Quantity	1,033	1,330	631	-	631	527	1,261	2,483	417
Secondary Distribution	Total Obligation Authority	74.916	80.708	88.888	-	88.888	80.941	112.049	105.120	97.824

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

MA6600 / Combat Training Centers Support

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	MA6601 / Combat Training Centers (CTC) Support	P-5a, P-21			3,330 / 1,424.217	1,033 / 74.916	1,330 / 80.708	631 / 88.888	- / -	631 / 88.888
P-40	Total Gross/Weapon System Cost				3,330 / 1,424.217	1,033 / 74.916	1,330 / 80.708	631 / 88.888	- 1 -	631 / 88.888

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$88.888 million supports the following efforts:

FY 2018 Base procurement dollars in the amount of \$73.819 million procures completion of the modernization of the existing Range Communications System (RCS) at the Joint Readiness Training Center (JRTC) to include the Combat Trainer Communications Subsystem (CTCS) data communications devices, live fire, and test and integration. Funding will also procure the initial phase of the RCS Infrastructure for the JRTC Land Expansion area and will also be used to perform essential lifecycle activities on the existing subsystems of the fielded Instrumentation Systems located at the National Training Center (NTC), JRTC, and Joint Multinational Readiness Center (JMRC). These essential lifecycle activities consist of Information Technology (IT) Hardware Replacement, Continuous Technology Refresh (CTR), and Post Deployment Software Support (PDSS) to ensure that the Instrumentation System subsystems do not become obsolete and that there is a continuing evolution of system capability over the lifecycle of the Instrumentation Systems at the three Combat Training Centers.

FY 2018 CTC MOUT- IS Base procurement dollars in the amount of \$4.587 million procures Continuous Technology Refreshment (CTR) components to evolve the system architecture to Common Training Instrumentation Architecture (CTIA) Version 4 standards for the CTC MOUT- IS system at the National Training Center, Joint Readiness Training Center and the Joint Multinational Readiness Center.

FY 2018 CTC Live Fire Mod Base procurement dollars in the amount of \$4.358 million procures for the program a variation of a company live-fire set which includes; Stationary Armor Targets (SATs) that are FASIT compliant, Stationary Infantry Targets (SITs), Double-Arm Targets (DATs) and Moving Infantry Targets (MITs) for the Joint Readiness Training Center (JRTC). Each kit is comprised of different quantities of components. In addition the procurement includes initial spares, replacing obsolete/unsafe Hoffman Devices, and refreshes/replaces obsolete target lifters and thermal signature devices at both the JRTC and National Training Center (NTC).

FY 2018 Base procurement dollars in the amount of \$3.542 million provides program support for CTC Aviation team needed to maintain the life of existing Light Utility Helicopter (LUH) Tactical Engagement Simulation System (TESS) instrumentation for the Observer Controller and OPFOR aircraft at the three CTCs.

FY 2018 Base procurement dollars in the amount of \$0.582 million procures government labor and travel in support of OPFOR Surrogate Wheeled Vehicles (OSWV) program.

FY2018 OPFOR Integrated Air Defense System (IADS) Base procurement dollars in the amount of \$2.000 million procures 30 UH-60 Black Hawk Integration Hardware in support of opposing threat training at the National Training Center, Joint Readiness Training Center and the Joint Multinational Readiness Center.

FY 2018 Base procurement dollars procure training devices and systems in support of U.S. Army Readiness to support a balanced investment strategy for the Army's approved force structure and the Army's Sustainable Readiness Model (SRM).

All quantities support the Active Army.

UNCLASSIFIED
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P-1 Line #169

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
MA6600 / Combat Training Centers Support

MA6601 / Combat Training Centers
(CTC) Support

MDAD/MAIC Codes

ID COde (A=Service Ready, B=Not Service Ready):		IVIL	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	3,330	1,033	1,330	631	-	631
Gross/Weapon System Cost (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,424.217	74.916	80.708	88.888	-	88.888
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget requests	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	427.693	72.523	60.683	140.868	-	140.868

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	<b>3</b>		FY 2016			FY 2017		FY	2018 Bas	e	FY	2018 OC	:0	FY	2018 Tot	.al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
lyaway Cost	'	'			'		'	'			'		'		'	'	'	
Recurring Cost																		
IS: Range Communication System (RCS) <sup>(†)</sup>	-	-	-	27,585.000	1	27.585	33,612.000	1	33.612	27,750.000	1	27.750	-	-	-	27,750.000	1	27.7
IS: Essential Lifecycle Activities	-	-	1,314.727	-	-	34.322	-	-	29.042	-	-	41.007	-	-	-	-	-	41.0
CTC MOUT IS Instrumentation <sup>(†)</sup>	3,882.333	9	34.941	1,107.500	2	2.215	-	-	-	-	-	-	-	-	-	-	-	
CTC MOUT IS Continuous Tech Refresh	-	-	-	-	-	-	-	-	1.694	-	-	3.491	-	-	-	-	-	3.4
OPFOR WEAPONS (MBT, OSV & SLM) kits	19.450	626	12.176	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CTC LIVE FIRE MOD Kits <sup>(†)</sup>	86.368	106	9.155	2.321	1,033	2.398	4.712	1,213	5.716	6.007	600	3.604	-	-	-	6.007	600	3.0
OPFOR Integrated Air Defense System (IADS) <sup>(†)</sup>	-	-	-	-	-	-	17.241	116	2.000	66.667	30	2.000	-	-	-	66.667	30	2.0
CTC Aviation Shootback Kits	2,012.083	12	24.145	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
OSWV Program Management	-	-	-	-	-	0.213	-	-	0.216	-	-	0.582	-	-	-	-	-	0.

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
MA6600 / Combat Training Centers Support

MA6601 / Combat Training Centers
(CTC) Support

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Note. Subtotals of Totals II						. 3					, aa 4a B		_				, aa 4a <b>T</b> 4	
	F	Prior Years	S		FY 2016			FY 2017		F	/ 2018 Bas	se	F	Y 2018 OC	O	F	/ 2018 Tot	ai
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Subtotal: Recurring Cost	-	-	1,395.144	-	-	66.733	-	-	72.280	-	-	78.434	-	-	-	-	-	78.434
Subtotal: Flyaway Cost	-	-	1,395.144	-	-	66.733	-	-	72.280	-	-	78.434	-	-	-	-	-	78.434
Support Cost	,																	
CTC-IS (Range Communication System & Essential Lifecycle Activities) - Program Management	-	-	29.073	-	-	5.997	-	-	6.323	-	-	5.062	-	-	-	-	-	5.062
CTC MOUT IS - Program Management	-	-	-	-	-	-	-	-	0.529	-	-	1.096	-	-	-	-	-	1.096
CTC Live Fire Modernization Program Management	-	-	-	-	-	0.386	-	-	0.476	-	-	0.754	-	-	-	-	-	0.754
CTC Aviation Program Management	-	-	-	-	-	1.800	-	-	1.100	-	-	3.542	-	-	-	-	-	3.542
Subtotal: Support Cost	-	-	29.073	-	-	8.183	-	-	8.428	-	-	10.454	-	-	-	-	-	10.454
Gross/Weapon System Cost	427.693	3,330	1,424.217	72.523	1,033	74.916	60.683	1,330	80.708	140.868	631	88.888	-	-	-	140.868	631	88.888

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	1,033	1,330	631	-	631
	Total Obligation Authority	74.916	80.708	88.888	-	88.888
Total:	Quantity	1,033	1,330	631	•	631
Secondary Distribution	Total Obligation Authority	74.916	80.708	88.888	-	88.888

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

MA6600 / Combat Training Centers Support

MA6601 / Combat Training Centers (CTC) Support

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	<b>Contractor and Location</b>	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
IS: Range Communication System (RCS) <sup>(†)</sup>		2016	Northrup Grumman Tech Services / Orlando, Fl	C / FFP	ACC, Orlando, FL	Mar 2016	Mar 2017	1	27,585.000	Y		
IS: Range Communication System (RCS) <sup>(†)</sup>		2017	Northrup Grumman Tech Services / Orlando, Fl	C / FFP	ACC, Orlando, FL	Jun 2017	May 2018	1	33,612.000	Y		
IS: Range Communication System (RCS) <sup>(†)</sup>		2018	TBS (CTC IS) / TBS	C / FFP	ACC, Orlando, FL	Apr 2018	Apr 2019	1	27,750.000	N		
CTC MOUT IS Instrumentation		2016	Lockheed Martin Simulation Tra / Orlando, FI	C / FFP	ACC, Orlando, FL	Mar 2016	Dec 2016	2	1,107.500	Y		
CTC LIVE FIRE MOD Kits		2016	Advanced IT Concepts (CTC LF) / Winter Springs, FL	C / IDIQ	ACC, Orlando, FL	Mar 2016	Dec 2016	1,033	2.320	Y		
CTC LIVE FIRE MOD Kits		2017	Advanced IT Concepts (CTC LF) / Winter Springs, FL	Option / IDIQ	ACC, Orlando, FL	Jun 2017	Mar 2018	1,213	4.710	Y		
CTC LIVE FIRE MOD Kits		2018	TBS (CTC LF MOD) / TBS	C / IDIQ	ACC, Orlando, FL	Mar 2018	Dec 2018	600	6.010	Y		
OPFOR Integrated Air Defense System (IADS)		2017	TBS (IADS) / TBS	SS / FFP	ACC, Orlando, FL	Sep 2017	Sep 2018	116	17.240	Y		
OPFOR Integrated Air Defense System (IADS)		2018	TBS (IADS) / TBS	SS / FFP	ACC, Orlando, FL	Jan 2018	Jan 2019	30	66.670	N		

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

PEO STRI = Program Executive Office for Simulation, Training and Instrumentation Army Contracting Command, (ACC) Orlando, FL LMSTS = Lockheed Martin Simulation Training Systems

The FY17 to FY18 unit cost increase in IADS is attributed to procuring different items. In FY17, we are procuring 22 Ground Threat Emulators, 22 Improved Hand Held Initializers (IHHI), 72 sets of Integration hardware, software upgrades and new equipment training for the AH-64 in support of opposing threat training at the National Training Center, Joint Readiness Training Center and the Joint Multinational Readiness Center. In FY18, we are procuring 30 UH-60 Black Hawk Integration Hardware in support of opposing threat training at the National Training Center, Joint Readiness Training Center and the Joint Multinational Readiness Center.

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				lements in Each)								Fiscal Y	ear 2016	6										Fiscal Y	ear 2017	,					В
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IS: F	Ran	nge Co	mmunication	System (F	CS)								,																		
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	1	2017	ARMY	1	0	1															•						Α -	-	-	_	
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xhib	it P-	-21, Pro	ducti	on Sc	hedul	le: FY	2018	3 Arm	ıy														Date	: May	y 201	7				
	-	<b>ation / E</b> 3 / 70	Budge	t Acti	vity /	Budg	jet Sı	ıb Ac	tivity	:			Item / Com					Supp	ort				MA6	Num 6601 / C) Su	Com	bat T		<b>DIC]:</b> g Cer	iters	
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: Range	Comn	munication S	System (R	CS)																										
1 20	016 A	ARMY	1	1	0																									
1 20	017 A	ARMY	1	0	1	-	-	-	-	-	-	-	1												,					
2 20	018 A	ARMY	1	0	1			,			,	Α -	-	-	-	-	-	-	-	-	-	-	-	1						
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Exhibit P-21, Production Schedule: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

MA6600 / Combat Training Centers Support

MA6601 / Combat Training Centers

(CTC) Support

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						lni	tial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	Northrup Grumman Tech Services - Orlando, Fl	1	1	1	0	5	13	18	0	8	12	20
2	TBS (CTC IS) - TBS	1	1	1	0	6	13	19	0	0	0	0

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0100 / Training Devices, Nonsystem

Training Equipment

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Line item widap/wais code. N/A												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	2,323	44,728	18,782	5,841	63	5,904	858	57	873	1,354	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	4,951.670	278.141	253.050	285.989	2.700	288.689	245.769	199.757	188.341	186.199	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	4,951.670	278.141	253.050	285.989	2.700	288.689	245.769	199.757	188.341	186.199	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	4,951.670	278.141	253.050	285.989	2.700	288.689	245.769	199.757	188.341	186.199	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	2,131.584	6.219	13.473	48.962	42.857	48.897	286.444	3,504.509	215.740	137.518	Continuing	Continuing

### **Description:**

The Army continues to build on a major initiative with the Non-System Training Device (NSTD) program to introduce realistic and effective 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 Soldiers with a valuable experience of battlefield conditions in a training environment. This effort includes the acquisition of training capabilities that support force-on-force training, force-on-target training, engagement simulation, and classroom instruction. Devices and simulations are being fielded to minimize resource consumption which will affect a direct cost reduction through conservation of energy and ammunition. These devices provide capabilities that allow Soldiers, leaders, and units to train tasks and missions that would be unsafe or too resource intensive to conduct with actual weapons, weapons systems, and ammunitions or if done in the actual environment. This budget line supports all Other Procurement, Army (OPA) funding for Non-System Training Devices (NSTD). It procures a variety of NSTD items such as the Home Station Instrumentation Training System (HITS), Live, Virtual, Constructive Integrating Architecture (LVC-IA), Army Targetry System (ATS), Digital Range Training System (DRTS), Integrated Military Operations in Urbanized Terrain (MOUT) Training System (IMTS), Battle Command Training Complex - Equipment Support (BCTC-ES), Common Training Instrumentation Architecture (CTIA), Intelligence & Electronic Warfare Tactical Proficiency Trainer (IEWTPT), Target Modernization, Common Battle Command Simulations Equipment (CBCSE), Joint Pacific Multinational Readiness Capability-Instrumentation System (JPMRC-IS), Call For Fire Trainer (CFFT), Engagement Skills Trainer (EST), Instrumentable Multiple Integrated Laser Engagement System (I-MILES), Basic Electronics Maintenance Trainer (BEMT), and Medical Simulation Training Center (MSTC).

The Engagement Skills Trainer (EST) is the unit/institutional, indoor, multipurpose, multi-lane, small arms, crew-served and individual anti-tank training simulation that enables training across three different modes: individual marksmanship; small unit (collective) gunnery and tactical training; and judgmental use of force (shoot/don't shoot), which includes escalation of force/graduated response scenarios.

The Call For Fire Trainer (CFFT) family of systems is a lightweight, rapidly deployable, observed fire training system that provides simulated battlefield training for Fire Support Specialists (FSS), Joint Fires Observers (JFO), and Soldiers. The system provides simulated battlefield training to conduct Indirect Fires, Close Air Support, Close Combat Attack, and Naval Surface Fire Support. The CFFT Immersive System provides the capability for Army, Joint, Multinational, and Special Operations Forces to conduct advanced, complex, and realistic fires training at the Fires Center of Excellence, Ft Sill, OK. CFFT is a critical training enabler to support Warfighters in applying precision fires on target to prevent fratricide and minimize collateral damage.

The Basic Electronics Maintenance Trainer (BEMT) is a stand-alone, non-system training device that supports critical basic electronics training for 45 different Military Occupational Specialties (MOS) in all aspects of basic electronics, including theory and hands-on application. The system allows instructors and administrators to assign lessons and practical exercises to either a class of networked student stations, or individual students, and track their progress.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0100 / Training Devices, Nonsystem Training Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

The Home Station Instrumentation Training System (HITS) provides a high-fidelity deployable instrumented training capability to support platoon through battalion level Live Force-on-Force Training. HITS tracks the location of soldiers and vehicles and simulates weapons' effects and engagements, allowing units to "Train as they Fight" against live opponents. HITS provides accurate feedback to training units. HITS consists of light deployable components that can be rapidly assembled/disassembled and transported to support deployed training. HITS integrates with future and legacy MILES. HITS is a member of the Live Training Transformation (LT2) family of training systems and shares several hardware and software components with the Instrumentation Systems (IS). HITS provides the Live domain for Live-Virtual-Constructive (LVC) training integration.

The Joint Pacific Multinational Readiness Capability-Instrumentation System (JPMRC-IS) is a transportable instrumentation system that provides instrumented training for the Brigade Combat Team and below. JPMRC-IS a rapidly deployable, self-supported system providing an Observer Controller Communications Systems, Battle Command Systems, Instrumentation System, Embedded Constructive Simulations, TAF workstations, Voice and Video Monitoring, AAR presentation, and provides its own power generation. JPMRC-IS performs the end-to-end mission functions of Exercise Planning, System Preparation, Exercise Management, Monitoring, and Control, Training Performance Feedback through onsite AARs and unit Take Home Packages.

The Medical Simulation Training Center (MSTC) is a critical readiness enabler for combat units as it provides realistic medical training to both medical and non-medical Soldiers in the Active, Reserve, and National Guard. MSTCs provide hands-on instruction on the latest battlefield trauma and critical care techniques based on Army Medical Department (AMEDD) approved performance oriented Program of Instructions (POI). Medical treatment validation exercises simulate the high stress of performing medical interventions in combat. MSTC supports Unit Medical Readiness by validating Combat Medic Military Occupational Specialty (MOS) (68W) Emergency Medical Technician (EMT) biennial recertification requirements and provides Combat Lifesaver (CLS) training to non-medical Soldiers.

The Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT) is a Non-System Training Device (NTSD) which supports training intelligence soldiers by simulating and stimulating Military Intelligence (MI) organic or surrogate equipment. It enables sustainment of critical individual and collective tasks/skills and is the core of the United States Army Intelligence Center of Excellence (USAICoE) MI holistic training strategy and includes both stand-alone and network enabled training capabilities. IEWTPT provides a realistic Intelligence target environment for Multi-Intelligence disciplines such as Signals Intelligence (SIGINT), Imagery Intelligence (IMINT), Human Intelligence (HUMINT), Counterintelligence (CI), Geospatial Intelligence (GEOINT) and must stimulate and emulate multiple intelligence, surveillance, reconnaissance (ISR) platform systems such as: PROPHET, Distributed Common Ground Station-Army (DCGS-A), Joint Surveillance Target Attack Radar System-Common Ground Station (JSTARS-CGS), Tactical Unmanned Aerial Vehicle (TUAV), Tactical Exploitation System/Distributed Tactical Exploitation System (TES/DTES), and Aerial Intelligence assets such as Enhanced Medium Altitude Reconnaissance and Surveillance System (EMARSS), Airborne Reconnaissance Low-Enhanced (ARL-E), and Guardrail Common Sensor (GRCS). IEWTPT provides static and dynamic training capabilities (interactive environment for individual, collective, and Live, Virtual, and Constructive integrated mission rehearsals/exercises utilizing a constructive simulation feed) in an integrated, playback, and stand-alone mode. IEWTPT is composed of three major components: Technical Control Cell (TCC), Target Signature Arrays (TSA) or Simulation Interface, and the HUMINT Control Cell (HCC). The IEWTPT TCC provides critical Intel enhancements to a constructive simulation to stimulate go-to-war or surrogate ISR systems where system operators/analysts are able to exploit exercise intelligence data during training, just as they would in a "real world" oper

Common Battle Command Simulation Equipment (CBCSE) is a fundamental element of the Joint Land Component Constructive Training Capability (JLCCTC) Program of Record, which supports institutional and operational Mission Command training for Active, Reserve, and National Guard units. CBCSE procures and fields commercial-off-the-shelf hardware, software and delta/new equipment training for Army Hub and Spoke Mission Training Complexes in support of JLCCTC. CBCSE must be capable of running each JLCCTC fielded software version of Army training in support of Army Force 2025 and beyond.

Army Targetry Systems (ATS) will provide computerized live fire Armor and Infantry training ranges to the Army, Active Reserve (USAR) and Army National Guard (ARNG) installations. This equipment enables trainers to develop scenarios and to control targetry and battlefield simulation devices so that soldiers can practice wartime mission tasks in a stressful battlefield environment. The computerized system also provides feedback on individual and unit level performance to enable recognition of problem areas needing corrective action while at the same time recognizing positive performance. This equipment reinforces correct procedures and fosters soldier's confidence. The fielded equipment includes stationary and moving infantry and armor targets along with battlefield simulators for sound and sight. All ranges can be used with Multiple Integrated Laser Engagement System (MILES) equipment.

The Digital Range Training System (DRTS) provides new and modern ranges capable of training, evaluating and stressing Soldiers and their modern equipment with a realistic train-as-you-fight environment. Four standard training ranges Digital Multi-Purpose Range Complex (DMPRC), Digital Multi-Purpose Training Range (DMPTR), Battle Area Complex (BAX) and Digital Air Ground Integrated Range (DAGIR) will utilize all available combat systems capabilities, and digitally integrate them to manage all forces undergoing individual and collective live-fire training and qualification. These Training Systems replace obsolete,

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

Training Equipment

NA0100 / Training Devices, Nonsystem

ID Code (A=Service Ready, B=Not Service Ready): Program Elements for Code B Items: 0654715A Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

inadequate training methods and equipment in order to simulate new weapon systems, challenge Soldiers, incorporate the Digitized Force, and provide enhanced training data collection and After Action Review (AAR) capabilities. They incorporate digital system training as well as integrate multiple ranges and training environments for the training units.

The Integrated Military Operations in Urban Terrain (MOUT) Training System (IMTS) program fields the Combined Arms Collective Training Facility (CACTF), the Collective Training Facility (CTF), Live Fire Shoot House (LFSH), and the Urban Assault Course (UAC). The IMTS training systems provide instrumentation to enable training and After Action Review (AAR) of Soldier training exercises up to the battalion level combined training for the Active and Reserve Component Army. The CACTF, CTF, and LFSH enable training and AAR under daylight and night vision environments.

The Target Modernization program enhances the warfighter's live fire readiness by providing continued software support and enhancements for the Government owned target control system software Targetry Range Automated Control and Recording (TRACR), integration with legacy range adapter software (interfacing TRACR to legacy targets, allowing range upgrades without the need to replace the targets), a single Information Assurance accreditation and support package, and synchronization with the Common Training Instrumentation Architecture (CTIA). Target Modernization supports the revitalization vice replacement of existing ranges. The Target Modernization program provides a single common target specification, standards, and interfaces for all target system devices, and provides support for Live, Virtual, and Constructive Training Environment.

Battle Command Training Center-Equipment Support (BCTC-ES) provides the furniture, fixtures, equipment (FF&E), network, Reconfigurable Tactical Operation Center (RTOC), technical control, classroom and work cell capabilities, and technical tools required for all Army Mission Training Complexes (MTC) and for the associated Military Construction Army (MCA) infrastructure. Enabling the linkage of constructive simulations to Mission Command (MC) systems and extending unit communications. BCTC-ES provides equipment that integrates Army MC Systems into Tactical Operation Center (TOC) sets, providing visualization of the Common Operating Picture (COP). It also supports the requirements for the DoD Information Assurance Certification and Accreditation Process (DIACAP), which helps enable the linkage within a MTC that supports secure and distributed MC/Simulation training. Provides Architectural and Engineering (A&E) support to the MTC Design Board for new MCA development.

The Instrumentable-Multiple Integrated Laser Engagement System (I-MILES) program enhances the warfighter's capability to prepare for combat operations allowing training and assessment of individual and collective tasks during force-on-force operations. The devices use an eye-safe laser to replicate the engagement effects of their intended "line of sight" weapons systems. I-MILES provides realistic, real-time casualty effects for force-on-force tactical engagement training scenarios and its ability to integrate into training instrumentation systems provide for high fidelity combined arms combat exercises. Due to their modular design, I-MILES devices are approved for use at Home Station, the Combat Training Centers (CTCs) and in the theater of operations to meet training requirements. The current "Instrumentable" MILES replaces the previously fielded "Basic" MILES, which cannot integrate into training instrumentation systems. Army Tactical Engagement Simulation System (A-TESS) will combine existing I-MILES capabilities with indirect fire capabilities into a single TESS program of record.

The Common Training Instrumentation Architecture (CTIA) is the critical Live core product-line architecture of the Live, Virtual, Constructive Integrated Training Environment (LVC-ITE). CTIA provides the common Army owned software, product-line architecture, product line software, standards, services, and architecture framework for supporting the Live Training Transformation (LT2) Product Line of Live Training Systems (LTS) supporting Army-wide live instrumented Force-On-Force (FOF) and Force-On-Target (FOT) training requirements. CTIA provides the Post Deployment Software Support (PDSS) and technology refresh for the LT2 family of LTS supporting over 200 fielded live training systems across the Army. CTIA also provides the live training architecture standard for achieving and maintaining the interoperability between LTS and the Live, Virtual, Constructive Integrating Architecture (LVC-IA), battle command and control (C2) systems.

The Live, Virtual, Constructive - Integrating Architecture (LVC-IA) provides a net-centric linkage that collects, retrieves and exchanges data among existing Training Aids, Devices, Simulations, and Simulators (TADSS) and Mission Command Systems. The LVC-IA defines "how" information is exchanged among the different LVC domains and the Mission Command Systems. The LVC-IA provides enterprise level tools for exercise control, After Action Review, and system information assurance. It also provides hardware and software to interface the different Live, Virtual, and Constructive communication protocols and provides a correlated common operating picture for the training audience on their organic Mission Command equipment. The integration of the Live, Virtual, and Constructive and Gaming TADSS with the Mission Command equipment will enable larger and more robust training events to better prepare U.S. Soldiers for their missions at an overall reduced cost. The end-state goal is to enable an LVC Integrated Training Environment that can cost effectively replicate Operational Environments to provide a high level of value-added training and mission rehearsal opportunities to Army Commanders and their Soldiers enhancing Army training and readiness.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0100 / Training Devices, Nonsystem

Training Equipment

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

				FY 2018	FY 2018	FY 2018				
Secondary	Distribution	FY 2016	FY 2017	Base	осо	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	44,565	18,594	5,680	63	5,743	699	47	857	1,332
	Total Obligation Authority	239.009	185.328	225.173	2.700	227.873	179.605	170.435	158.865	166.932
ANG	Quantity	120	186	97	-	97	99	7	11	15
	Total Obligation Authority	22.240	58.841	45.520	-	45.520	53.741	18.228	19.823	11.776
AR	Quantity	43	2	64	-	64	60	3	5	7
	Total Obligation Authority	16.892	8.881	15.296	-	15.296	12.423	11.094	9.653	7.491
Total:	Quantity	44,728	18,782	5,841	63	5,904	858	57	873	1,354
Secondary Distribution	Total Obligation Authority	278.141	253.050	285.989	2.700	288.689	245.769	199.757	188.341	186.199

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0100 / Training Devices, Nonsystem

Training Equipment

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	NA0101 / NSTD Soldier Training Support Program (STSP)	P-5a	Α		3 / 2,535.564	556 / 53.584	342 / 45.263	294 / 44.775	- / -	294 / 44.775
P-5	NA0102 / NSTD INTELLIGENCE	P-5a	Α		- / 63.668	2 / 3.797	2 / 5.377	2 / 6.693	- / -	2 / 6.693
P-5	NA0103 / NSTD COMMAND & CONTROL	P-5a	Α		3 / 354.514	8 / 40.171	9 / 41.959	15 / 35.578	- / -	15 / 35.578
P-5	NA0105 / NSTD RANGES AND TARGETS	P-5a, P-21	Α		- / 1,348.800	13 / 53.905	5 / 56.718	5 / 88.602	63 / 2.700	68 / 91.302
P-5	NA0106 / NSTD Battle Command Training Center Support Prg	P-5a			18 / 327.773	14 / 12.043	18 / 18.038	20 / 22.506	- / -	20 / 22.506
P-5	NA0116 / NSTD- MILES	P-5a, P-21			2,280 / 264.516	44,123 / 102.587	18,399 / 74.518	5,498 / 76.144	- / -	5,498 / 76.144
P-5	NA0121 / NSTD - LVC ARCHITECTURE			19 / 56.835	12 / 12.050	7 / 11.177	7 / 11.691	- / -	7 / 11.691	
P-40	Total Gross/Weapon System Cost				2,323 / 4,951.670	44,728 / 278.141	18,782 / 253.050	5,841 / 285.989	63 / 2.700	5,904 / 288.689

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 BASE dollars in the amount of \$285.989 million supports the following efforts:

Soldier Training Support program of \$44.775 million consists of:

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FY 2018 Base procurement dollars in the amount of \$7.737 million will be used to perform essential lifecycle activities on the existing 15 fielded Home Station Instrumentation Systems (HITS). Primary focus is to maintain the system relevancy to ensure concurrence of training capabilities and integration into Live Virtual Constructive Integrated Architecture (LVC-IA).

FY 2018 Base procurement dollars in the amount of \$13.567 million will be used to procure continued post development software support in addition to additional capabilities to support the Full Operational Capability of Joint Pacific Multinational Readiness Capability (JPMRC-IS) located at Schofield Barracks, HI.

FY 2018 Base procurement dollars in the amount of \$0.417 will support the fielding of upgraded systems, produce a solution for the upgraded JFO certification requirements and to improve the training of precision fires for Call For Fire Trainer (CFFT). The use of the CFFT maximizes and enhances live training, and is used for total recertification of Joint Fires Observers (JFO), reducing time and cost while enabling readiness.

FY 2018 Base procurement dollars in the amount of \$12.794 million will provide (9) Medical Training Command and Control (MT-C2). The MT-C2 enables training environment manipulation, medical scenario integration, mannequin control, audio video (AV) surveillance and recording as well as hostile fire simulations and friendly force engagement control in order to maximize the positive impact and training experience of each fluid training event. Procurement dollars will also provide Tactical Combat Casualty Care - Exportable (TC3-X) Kits to US Army Brigades. Each TC3-X kit consists of, and utilizes, High Fidelity Tetherless Mannequins, Low fidelity Mannequins, Traumatic Amputation Task Trainers, Upper Torso airway/breathing task trainers, a Field Expedient Bleeding System, Moulage kit and an expendables kit. The TC3 - X provides medical training on basic and advanced medical skills necessary for recertification of US Army 68Ws, as well as trains non-medical Soldiers/Combat Lifesavers (CLS) on basic lifesaving tasks and techniques often experienced on the battlefield (Warrior Tasks).

FY 2018 Base procurement dollars in the amount of \$9.939 million will tech re-fresh 206 Engagement Skills Trainer (EST) systems and provides for pre-planned product improvements in weapons optics integration. The EST enables readiness and enhances live training, and is identified as a substitute for night and chemical, biological, radiological, nuclear and explosives scenarios. Units without assigned weapons are authorized to use the EST for qualification per regulations.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

Training Equipment

Date: May 2017

P-1 Line Item Number / Title:

NA0100 / Training Devices, Nonsystem

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

FY2018 Base procurement dollars of \$.050 million supports the Basic Electronics Maintenance Trainer (BEMT) program management.

FY 2018 Base procurement dollars in the amount of \$.271 million will enable the Army Corps of Engineers to procure, install, test, and certify racks and shelving, which incorporates a fire suppression system part of the racks and shelving effort associated with the Training Support Center MILCON projects.

Intelligence program of \$6.693 million consists of:

FY 2018 Base procurement dollars in the amount of \$6.693 million supports the Intelligence Electronic Warfare Tactical Proficiency Trainer (IEWTPT) in procuring two technical control cells (TCC) and Interim Contractor Support for two installations, to include technical concurrency of seven TCC systems across the Army. IEWTPT consists of a blend of non-developmental hardware components and mission specific software to support detailed Army intelligence corps training and readiness at home station locations.

Command & Control program of \$35.578 million consists of:

FY 2018 Base procurement dollars in the amount of \$35.578 million will be used to procure Common Battle Command Simulation Equipment (CBCSE) commercial off-the-shelf (COTS) hardware and software, to conduct Joint Land Component Constructive Training Capability (JLCCTC) post deployment software refinement and Pre-Planned Product Improvement (P3I) activities. This includes fixing Problem Tracking Reports (PTRs), First-Use exercise support and Training Documentation updates, Information Assurance/Risk Management Framework (RMF) for Mission Command Concurrency, Synthetic Environment Core (SE Core) and Live, Virtual, Constructive - Integrating Architecture (LVC-IA) Interoperability, Regression Test of external interfaces, Fielding activities, Information Assurance Vulnerability Assessment (IAVA), Configuration Management, and Helpdesk activities. This will enable continued efficient training from the current systems and facilities, then transition these facilities to the objective simulation systems as part of the Constructive Simulation Strategy. This Constructive Simulation Strategy will merge software from two Federations (Multi-Resolution Federation used for Brigade and below exercises) into a single Federation solution. Quantities represent sites and vary to configuration of site size, therefore, causing unit costs to fluctuate. The base quantity reflects the number of planned fielding events.

Ranges and Targets program of \$88.602 million consists of:

FY 2018 Base procurement dollars in the amount of \$16.872 million procures for the Army Targetry Systems (ATS) program computerized live fire Armor and Infantry training ranges to the Army, USAR, and ARNG installations to ensure soldier readiness. These ranges will replace existing ranges with new technology and increase throughput capability by providing additional ranges. Readiness of soldiers is critical to saving lives in wartime situations. Training ranges being provided will enhance the quality of training at installations. Accurate feedback to soldiers on training with battlefield conditions helps them learn procedures and techniques that will save lives and achieve success on the battlefield.

FY 2018 Base procurement dollars in the amount of \$29.824 million procures for the Digital Range Training System (DRTS) program; labor, travel, Digital Air-Ground Integration for Orchard Range Phase I, Post Deployment Software Support (PDSS), Continuous Technology Refreshment (CTR), and Aviation Integration.

FY 2018 Base procurement dollars in the amount of \$13.077 million procures for the Integrated Military Operations in Urban Terrain (MOUT) Training System (IMTS) program, in-house government support, and Continuous Technology Refreshment (CTR) of three aging Combined Arms Collective Training Facilities (CACTFs) and one shoot house that have been in operation for six to eight years.

FY 2018 Base procurement dollars amount to \$5.829 million. \$3.444 million procures for the Target Modernization program a single Government owned common target control system for all Army targets and small arms ranges, this also includes, Range Configuration Management, Continuous Technology Refreshment (CTR), Post Deployment Software Support (PDSS), Future Army System of Integrated Targets (FASIT) Technology Refreshment/Maturation, updates to Targetry Range Automated Control and Recording (TRACR) Legacy Range and Device Adapters, and advance the TRACR Product Line to maintain synchronization with Common Training Instrumentation Architecture (CTIA). \$2.385 million procures the conversion of 40 legacy live fire ranges from their legacy proprietary target control system to the Government owned target control system software Targetry Range Automated Control and Recording (TRACR), provides for appropriate property accountability for the new equipment fielded, and system training.

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P-1 Line #170

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Appropriation / Budget Activity / Budget Sub Activity.

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

Training Equipment

NA0100 / Training Devices, Nonsystem

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: 0654715A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

FY 2018 procurement dollars in the amount of \$23.000 million procures deployable target lifters and all associated battlefield training equipment, simulators, and devices in order to modernize the USARCENT target lifter inventory managed at the Udairi Range Complex, Camp Buehring, Kuwait. The current inventory of target lifters is the original training package supplied, and is at least five years beyond its life cycle end date. As a result, these lifters need to be replaced by a radio remote system that offers the technical requirements and capabilities necessary to support units within the theater of operation conducting both individual and collective Warrior Skills Training in a desert environment.

Battle Command Training Support Program of \$22.506 million consists of:

FY 2018 Base procurement dollars in the amount of \$22.506 million procures Mission Command equipment for refresh/ upgrades, network infrastructure equipment for upgrades or to meet emerging Information Assurance and Risk Management Framework (RMF) requirements, and the refresh of furniture, fixtures and equipment for the Mission Command Training Complexes. Battle Command Training Capability-Equipment Support (BCTC-ES), CTC-ES also funds DIACAP and Risk Management Framework (RMF), server refresh and upgrades, as well as the Electronic Security System (ESS). All of these systems enable initial, sustainment and pre-deployment digital training as well as providing a reach back capability for deployed units. DIACAP and Mission Command refresh quantities reflect all sites which will receive at least one type of these fieldings or equipment installations. The cost varies by site and fiscal year, depending on the size of the MTC or length of time between upgrades. Starting in FY17, the increase in costs show actual costs in regards to refreshing legacy MTCs; the older systems were analog and all technology is currently digital and has increased refresh cost significantly. The onset of the RMF process and the new requirements it is levying on MTC has driven costs up, which is from the increased amount of equipment (HW/SW) required to maintain accreditation and system security. Specific sites scheduled to be refreshed in FY18 include: Ft. Knox, Ellington Field, Arlington Heights and Ft. Bliss.

MILES Program of \$76.144 million consists of:

FY 2018 Base procurement dollars in the amount of \$76.144 million procures Instrumentable-Multiple Integrated Laser Engagement System (I-MILES) and replaces the obsolete Basic MILES, and MILES XXI at various installations Army wide. Both Basic MILES and MILES XXI have reached the end of their life cycle in which they are not economical to repair and sustain. I-MILES Devices are to be fielded as either Brigade Combat Team (BCT) or Battalion sets that can be integrated into the Live-Virtual-Constructive Integrated Architecture (LVC-IA) as a component of the full training environment. The completion of the I-MILES basis of issue (BOI) and pure fleeting of the I-MILES product lines will standardize training at Home Station, Combat Training Centers and deployed training environments. Pure fleeting the I-MILES product lines allows maximized maintenance efficiencies and balance requirements to set the conditions for Commanders to conduct improved force-on-force training contributing to unit readiness supporting the 39th Chief of the Staff of the Army's #1 priority of "Readiness". Vehicle Tactical Engagement Simulation System (VTESS) is the newest I-MILES product line. I-MILES FY18 program funding supports VTESS Full Rate Product (FRP) requirements with the first delivery being in 3rd quarter FY19.

LVC Architecture Program of \$11.691 million consists of:

FY 2018 Base procurement dollars in the amount of \$3.528 million procures for the CTIA program required infrastructure, core lab facility, PDSS, Technology Refresh and modifications for the LT2, Family of Training Systems (FTS), and the LVC-ITE.

FY 2018 Base procurement dollars in the amount of \$8.163 million procures the Live, Virtual, Constructive - Integrating Architecture (LVC-IA) associated hardware and software, Post Deployment Software Support (PDSS) activities, version upgrades, technology refresh/ spares, site support and New Equipment Training (NET) at Army Mission Training Complexes (MTC) in preparation for Force 2025 and beyond. LVC-IA program PDSS provides a capability to support sustainment of the system software and its associated subsystems and components. LVC-IA program performs version upgrades for replacement or modification of components for reasons other than obsolescence including Pre-Planned Product Improvement (P3I), modification, conversion, reconfiguration, retrofit, and technology insertion to increase the performance capability of the system; program will conduct upgrades from Version 2 to Version 3 at 2 fielded locations. Government Program Management will provide program management, engineering and technical oversight, contract support and travel for the LVC-IA. System Technical Support will perform the activities necessary Army Risk Management Framework (RMF) requirement. The LVC-IA provides the architecture that enables the Army to utilize the Live, Virtual, and Constructive training devices in the Army's Integrated Training Environment (ITE).

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Exhibit P-40, Budget Line Item Justification	n: FY 2018 Army		Date: May 2017	
Appropriation / Budget Activity / Budget St 2035A: Other Procurement, Army / BA 03: Oth Training Equipment		P-1 Line Item Nun NA0100 / Training	nber / Title: Devices, Nonsystem	
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code E	Items: 0654715A	Other Related Program Elements: N/A	
Line Item MDAP/MAIS Code: N/A		_		
Ranges and Targets OCO - FY 2018 OCO procurement dollars in the amount of \$2.7 part of European Reassurance Initiative (ERI).	700 million provides Information Technology (I	Γ) support to United States A	Army Europe (USAREUR) in support Army Pre-Positioned Stock (APS) sites	as
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and		is item is necessary for use	by the active and reserve components of the Armed Forces for homeland	

LI NA0100 - Training Devices, Nonsystem Army

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

P-1 Line Item Number / Title:
NA0101 / NSTD Soldier Training Support
Program (STSP)

ID Code (A=Service Ready, B=Not Service Ready) : A	·	N	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	3	556	342	294	-	294
Gross/Weapon System Cost (\$ in Millions)	2,535.564	53.584	45.263	44.775	-	44.775
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,535.564	53.584	45.263	44.775	-	44.775
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,535.564	53.584	45.263	44.775	-	44.775
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget reques	ts are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	845,188.000	96.374	132.348	152.296	-	152.296

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2016			FY 2017		FY	2018 Bas	e	FY	' 2018 OC	0	FY	' 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
yaway Cost	'	'		'	'		'	<u>'</u>			'		'				'	
Recurring Cost																		
EST - Five Lane Subsystem/Refresh <sup>(†)</sup>	7,826.500	2	15.653	31.948	368	11.757	45.846	298	13.662	42.519	206	8.759	-	-	-	42.519	206	8.7
CFFT (Various Configurations) <sup>(†)</sup>	-	-	13.637	726.250	4	2.905	111.583	24	2.678	-	-	-	-	-	-	-	-	
CFFT Concurrency/ PDSS	-	-	0.852	-	-	1.644	-	-	3.140	-	-	-	-	-	-	-	-	
HITS version 4 <sup>(†)</sup>	-	-	-	3,772.500	2	7.545	-	-	-	-	-	-	-	-	-	-	-	
HITS Engineering Change Proposal	-	-	-	-	-	1.217	-	-	-	-	-	1.491	-	-	-	-	-	1.49
HITS Concurrency	-	-	-	-	-	3.646	-	-	-	-	-	-	-	-	-	-	-	-
HITS PDSS/CTR	-	-	6.617	-	-	5.349	-	-	5.602	-	-	4.204	-	-	-	-	-	4.20
JPMRC-IS PDSS/CTR	-	-	3.784	-	-	6.178	-	-	7.680	-	-	12.963	-	-	-	-	-	12.96
MSTC MT-C2 <sup>(†)</sup>	9,996.000	1	9.996	-	-	-	350.000	10	3.500	323.556	9	2.912	-	-	-	323.556	9	2.91
MSTC MATT Concurrency <sup>(†)</sup>	-	-	-	32.929	42	1.383	-	-	-	-	-	-	-	-	-	-	-	-
MSTC Validation Lanes <sup>(†)</sup>	-	-	-	33.000	2	0.066	-	-	-	-	-	-	-	-	-	-	-	-
MSTC Part Task Trainers <sup>(†)</sup>	-	-	-	32.905	21	0.691	-	-	-	-	-	-	-	-	-	-	-	-

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Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line Item Number / Title: Item Number / Title [DODIC]:

MDAP/MAIS Code:

Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70

Army

NA0100 / Training Devices, Nonsystem

NA0101 / NSTD Soldier Training Support

Program (STSP)

**Date:** May 2017

ID Code (A=Service Ready, B=Not Service Ready): A

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	8		FY 2016			FY 2017		F	1 2018 Ba	se	F	Y 2018 OC	0	F	/ 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
MSTC High Fidelity Tetherless Mannequin <sup>(†)</sup>	-	-	-	32.915	117	3.851	113.000	10	1.130	-	-	-	-	-	-	-	-	-
MSTC TC3X <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	96.203	79	7.600	-	-	-	96.203	79	7.60
Racks and Shelving	-	-	-	-	-	-	-	-	1.877	-	-	0.271	-	-	-	-	-	0.27
Training Devices	-	-	2,318.749	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	2,369.288	-	-	46.232	-	-	39.269	-	-	38.200	-	-	-	-	-	38.20
Subtotal: Flyaway Cost	-	-	2,369.288	-	-	46.232	-	-	39.269	-	-	38.200	-	-	-	-	-	38.20
Support Cost																		
MSTC In-house/ Contractor Support	-	-	4.575	-	-	1.775	-	-	1.309	-	-	2.282	-	-	-	-	-	2.28
EST In-house/Contractor Support	-	-	140.149	-	-	0.511	-		0.506	-	-	1.180	-	-	-	-	-	1.18
CFFT Initial Spares	-	-	0.626	-	-	0.107	-	-	0.147	-	-	-	-	-	-	-	-	-
CFFT In-house/ Contractor Support	-	-	7.847	-	-	1.135	-	-	1.107	-	-	0.417	-	-	-	-	-	0.41
JPMRC-IS In-House/ Contractor Spt	-	-	-	-	-	0.847	-	-	0.372	-	-	0.604	-	-	-	-	-	0.60
HITS In-House/ Contractor Spt	-	-	13.079	-	-	2.977	-	-	2.553	-	-	2.042	-	-	-	-	-	2.04
BEMT Program Management	-	-	-	-	-	-	-	-	-	-	-	0.050	-	-	-	-	-	0.05
Subtotal: Support Cost	-	-	166.276	-	-	7.352	-	-	5.994	-	-	6.575	-	-	-	-	-	6.57
Gross/Weapon System Cost	845,188.000	3	2,535.564	96.374	556	53.584	132.348	342	45.263	152.296	294	44.775	-	-	-	152.296	294	44.77

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	404	162	147	-	147
	Total Obligation Authority	37.278	39.570	34.727	-	34.727
ANG	Quantity	112	180	91	-	91
	Total Obligation Authority	4.329	5.693	6.344	-	6.344
AR	Quantity	40	-	56	-	56
	Total Obligation Authority	11.977	-	3.704	-	3.704
Total:	Quantity	556	342	294	-	294

LI NA0100 - Training Devices, Nonsystem UNCLASSIFIED

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P-1 Line #170

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0100 / Training Devices, Nonsystem	Item Number / Title [DODIC]: NA0101 / NSTD Soldier Training Support Program (STSP)
ID Code (A=Service Ready, B=Not Service Ready) · A	MDAP/MAIS Code:	

ID Code (A=Service Ready, B=Not Service Ready	y) . A		WIDAP/WAIS COUR	<b>₽.</b>		
Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Secondary Distribution	Total Obligation Authority	53.584	45.263	44.775	-	44.775

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A / 03 / 70

NA0100 / Training Devices, Nonsystem

Item Number / Title [DODIC]:

NA0101 / NSTD Soldier Training Support

Program (STSP)

**Date:** May 2017

								0	`	,		
Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issu Date
EST - Five Lane Subsystem/ Refresh		2016	Meggitt Training Systems, Inc / Suwanee, GA	C / FFP	ACC, Orlando, FL	Apr 2016	Jan 2017	368	31.948	Υ		
EST - Five Lane Subsystem/ Refresh		2017	Meggitt Training Systems, Inc / Suwanee, GA	C / FFP	ACC, Orlando, FL	Apr 2017	Jan 2018	298	45.846	Υ		
EST - Five Lane Subsystem/ Refresh		2018	Meggitt Training Systems, Inc / Suwanee, GA	C / FFP	ACC, Orlando, FL	Apr 2018	Aug 2018	206	42.520	Υ		
CFFT (Various Configurations)		2016	Nova Technologies / Panama City, FL	C / FFP	ACC, Orlando, FL	Apr 2016	Jan 2017	4	726.250	Υ		
CFFT (Various Configurations)		2017	Nova Technologies / Panama City, FL	C / FFP	ACC, Orlando, FL	Apr 2017	Jan 2018	24	111.583	Υ		
HITS version 4		2016	Cubic Simulation Systems / Orlando, FL	C / FFP	ACC, Orlando, FL	Mar 2016	Dec 2016	2	3,772.500	Υ		
MSTC MT-C2		2017	General Dynamics Mission Sys / Fairfax, VA	C / FFP	ACC, Orlando, FL	Mar 2017	Sep 2017	10	350.000	Υ		
MSTC MT-C2		2018	TBS (MSTC) MT-C2 / TBS	C / FFP	ACC Orlando, FL	Mar 2018	May 2018	9	323.556	N		
MSTC MATT Concurrency		2016	KFORCE Gov't Sol. (MSTC) MATT / FAIRFAX, VA	SS / FFP	ACC, Orlando, FL	Mar 2016	Apr 2016	42	32.929	Υ		
MSTC Validation Lanes		2016	TBS (MSTC) Validation Lanes / TBS	C / FFP	ACC, Orlando, FL	Mar 2016	Jul 2016	2	33.000	N		
MSTC Part Task Trainers		2016	TBS (MSTC) PTT / TBS	C / FFP	ACC, Orlando, FL	Jun 2016	Jul 2016	21	32.905	Υ		
MSTC High Fidelity Tetherless Mannequin		2016	General Dynamics Mission Sys / Fairfax, VA	C / FFP	ACC, Orlando, FL	Jun 2016	Jul 2016	117	32.915	N		
MSTC High Fidelity Tetherless Mannequin		2017	General Dynamics Mission Sys / Fairfax, VA	C / FFP	ACC, Orlando, FL	Mar 2017	Jul 2017	10	113.000	N		
MSTC TC3X		2018	TBS (MSTC) TC3X / TBS	C / FFP	ACC, Orlando, FL	Mar 2018	May 2018	79	96.203	N		

#### Remarks:

PEO STRI = Program Executive Office for Simulation, Training and Instrumentation

MSTC High Fidelity Tetherless Mannequin (HFTM) are COTS.

Army Contracting Command, (ACC) Orlando, FL

EST - Difference in unit costs are due to quantity levels purchased and associated costs for OCONUS fieldings. In-house contractor support increases due to the OCONUS installations and associated travel.

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

Date: May 2017

Item Number / Title [DODIC]:
NA0100 / Training Devices, Nonsystem

NA0102 / NSTD INTELLIGENCE

ID Code (A=Service Ready, B=Not Service Ready) : A		М	DAP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	2	2	2	-	2
Gross/Weapon System Cost (\$ in Millions)	63.668	3.797	5.377	6.693	-	6.693
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	63.668	3.797	5.377	6.693	-	6.693
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	63.668	3.797	5.377	6.693	-	6.693
(The following Resource Summary rows are for information	onal purposes only. The con	responding budget reques	ts are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1,898.500	2,688.500	3,346.500	-	3,346.500

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	5		FY 2016			FY 2017		F	/ 2018 Bas	se	F	<b>/ 2018 OC</b>	0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost				'			'	'					''		·	'	'	
Recurring Cost																		
IEWTPT TCC <sup>(†)</sup>	-	-	41.454	469.000	2	0.938	384.000	2	0.768	384.000	2	0.768	-	-	-	384.000	2	0.7
IEWTPT HCC	-	-	2.761	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
IEWTPT TCC - Retrofit	-	-	0.267	-	-	-	-	-	-	-	-	1.228	-	-	-	-	-	1.2
PDSS	-	-	-	-	-	-	-	-	-	-	-	0.900	-	-	-	-	-	0.9
Concurrency	-	-	-	-	-	-	-	-	-	-	-	1.000	-	-	-	-	-	1.0
P3I	-	-	-	-	-	-	-	-	-	-	-	0.535	-	-	-	-	-	0.5
Subtotal: Recurring Cost	-	-	44.482	-	-	0.938	-	-	0.768	-	-	4.431	-	-	-	-	-	4.4
Subtotal: Flyaway Cost	-	-	44.482	-	-	0.938	-	-	0.768	-	-	4.431	-	-	-	-	-	4.4
Hardware Cost																		
Recurring Cost																		
Engineering for Product Improvement	-	-	14.838	-		1.150	-	-	2.521		-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	14.838	-	-	1.150	-	-	2.521	-	-	-	-	-	-	-	-	
Subtotal: Hardware Cost	-	-	14.838	-	-	1.150	-	-	2.521	-	-	-	-	-	-	-	-	
Support Cost	,						,	,										
Interim Contractor Support	-	-	2.642	-	-	0.899	-	-	0.900	-	-	0.900	-	-	-	-	-	0.9
Program Management	-	-	1.706	-	-	0.810	-	-	1.188	-	-	1.362	-	-	-	-	-	1.3
Subtotal: Support Cost	-	-	4.348	-	-	1.709	-	-	2.088	-	-	2.262	-	-	-	-	-	2.2

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

NA0100 / Training Devices, Nonsystem

Date: May 2017

Item Number / Title [DODIC]:

NA0102 / NSTD INTELLIGENCE

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

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	F	Prior Years	S		FY 2016			FY 2017	-	F	Y 2018 Ba	se	F	Y 2018 OC	0	FY 2018 Total		
	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost
Cost Elements	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)
Gross/Weapon System Cost	-	-	63.668	1,898.500	2	3.797	2,688.500	2	5.377	3,346.500	2	6.693	-	-	-	3,346.500	2	6.693

Secon	dary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	2	-	-	-	-
	Total Obligation Authority	3.797	-	-	-	-
ANG	Quantity	-	1	1	-	1
	Total Obligation Authority	-	2.656	3.347	-	3.347
AR	Quantity	-	1	1	-	1
	Total Obligation Authority	-	2.721	3.346	-	3.346
Total:	Quantity	2	2	2	=	2
Secondary Distribution	Total Obligation Authority	3.797	5.377	6.693	=	6.693

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	rmy	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0100 / Training Devices, Nonsystem	NA0102 / NSTD INTELLIGENCE

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
IEWTPT TCC		2016	General Dynamics C4 Sys Inc / Orlando, FL	Option / FFP	ACC, Orlando, FL	Jun 2016	Sep 2016	2	469.000	Y		
IEWTPT TCC		2017	General Dynamics C4 Sys Inc / Orlando, FL	C / FFP	ACC, Orlando, FL	Feb 2017	May 2017	2	384.000	Y		
IEWTPT TCC		2018	General Dynamics C4 Sys Inc / Orlando, FL	Option / FFP	ACC, Orlando, FL	Feb 2018	May 2018	2	384.000	Y		

#### Remarks:

The IEWTPT system contract, awarded 16 Feb 2017, will continue using Commercial, Off-the-Shelf (COTS) items, integration, fielding, training, hardware/software updates, and technical support of the IEWTPT Technical Control Cell (TCC) system. Software version releases are planned as well as engineering for product improvement releases.

Army Contracting Command, (ACC) Orlando, FL

LI NA0100 - Training Devices, Nonsystem

P-1 Line #170

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

Date: May 2017

Item Number / Title [DODIC]:
NA0103 / NSTD COMMAND &
CONTROL

MDAP/MAIS Code:

The service ready, B Not convice ready) . The						
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	3	8	9	15	-	15
Gross/Weapon System Cost (\$ in Millions)	354.514	40.171	41.959	35.578	-	35.578
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	354.514	40.171	41.959	35.578	-	35.578
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	354.514	40.171	41.959	35.578	-	35.578
(The following Resource Summary rows are for informati	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	118,171.333	5,021.375	4,662.111	2,371.867	-	2,371.867

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready) : A

	P	rior Years	3		FY 2016			FY 2017		FY	' 2018 Bas	se	FY	/ 2018 OC	:0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost	'	'			'			'					'		'	'	'	
Recurring Cost																		
Flyaway Recurring: Division/Hub <sup>(†)</sup>	94,415.000	3	283.245	2,111.600	5	10.558	1,168.500	6	7.011	776.571	7	5.436	-	-	-	776.571	7	5.4
Flyaway Recurring: Spoke <sup>(†)</sup>	-	-	23.326	1,597.333	3	4.792	1,066.000	3	3.198	618.500	8	4.948	-	-	-	618.500	8	4.94
Subtotal: Recurring Cost	-	-	306.571	-	-	15.350	-	-	10.209	-	-	10.384	-	-	-	-	-	10.3
Subtotal: Flyaway Cost	-	-	306.571	-	-	15.350	-	-	10.209	-	-	10.384	-	-	-	-	-	10.3
Hardware Cost																		
Recurring Cost																		
Common Hardware Platform Refresh	-	-	8.373	-	-	2.814	-	-	9.079	-	-	2.091	-	-	-	-	-	2.0
Subtotal: Recurring Cost	-	-	8.373	-	-	2.814	-	-	9.079	-	-	2.091	-	-	-	-	-	2.0
Subtotal: Hardware Cost	-	-	8.373	-	-	2.814	-	-	9.079	-	-	2.091	-	-	-	-	-	2.0
Software Cost																		
Recurring Cost																		
Post Deployment Software Refinement	-	-	24.669	-	-	10.383	-	-	11.573	-	-	11.805	-	-	-	-	-	11.80
Pre-Planned Product Improvement (P3I)	-	-	-	-	-	10.267	-	-	6.862	-	-	6.679	-	-	-	-	-	6.67
		_	24.669	_	-	20.650	_	_	18.435	-	_	18.484	_		_	_	_	18.48

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LI NA0100 - Training Devices, Nonsystem Army

P-1 Line #170

245

Exhibit P-5, Cost Analysis: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

Item Number / Title [DODIC]:

2035A / 03 / 70

NA0100 / Training Devices, Nonsystem

NA0103 / NSTD COMMAND & CONTROL

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	rior Years	\$		FY 2016			FY 2017		FY	/ 2018 Ba	se	FY	/ 2018 OC	0	F	/ 2018 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Constructive Strategy Implementation	-	-	-	-	-	-	-	-	2.500	-	-	3.010	-	-	-	-	-	3.010
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	=	2.500	-	-	3.010	-	-	-	=	-	3.010
Subtotal: Software Cost	-	-	24.669	-	-	20.650	-	-	20.935	-	-	21.494	-	-	-	-	-	21.494
Support Cost																		
Program Management	-	-	14.901	-	-	1.357	-	-	1.736	-	-	1.609	-	-	-	-	-	1.609
Subtotal: Support Cost	-	-	14.901	-	-	1.357	-	-	1.736	-	-	1.609	-	-	-	-	-	1.609
Gross/Weapon System Cost	118,171.333	3	354.514	5,021.375	8	40.171	4,662.111	9	41.959	2,371.867	15	35.578	-	-	-	2,371.867	15	35.578

		1				
Second	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	8	9	6	-	6
	Total Obligation Authority	40.171	31.600	24.037	-	24.037
ANG	Quantity	-	-	4	-	4
	Total Obligation Authority	-	5.651	6.005	-	6.005
AR	Quantity	-	-	5	-	5
	Total Obligation Authority	-	4.708	5.536	-	5.536
Total:	Quantity	8	9	15	=	15
Secondary Distribution	Total Obligation Authority	40.171	41.959	35.578	-	35.578

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0100 / Training Devices, Nonsystem	Item Number / Title [DODIC]: NA0103 / NSTD COMMAND & CONTROL

Cost Elements	0 0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date
Flyaway Recurring: Division/Hub		2016	General Dynamics / Fairfax, VA	C / FFP	ACC, Orlando, FL	Feb 2016	Apr 2016	5	2,111.600	Y		
Flyaway Recurring: Division/Hub		2017	Lockheed Martin / Orlando, FL	C / FFP	ACC, Orlando, FL	Dec 2016	Feb 2017	6	1,168.500	Y		
Flyaway Recurring: Division/Hub		2018	Lockheed Martin / Orlando, FL	C/FFP	ACC, Orlando, FL	Oct 2017	Jan 2018	7	776.571	Υ		
Flyaway Recurring: Spoke		2016	General Dynamics / Fairfax, VA	C/FFP	ACC, Orlando, FL	Feb 2016	Apr 2016	3	1,597.330	Υ		
Flyaway Recurring: Spoke		2017	Lockheed Martin / Orlando, FL	C/FFP	ACC, Orlando, FL	Dec 2016	Feb 2017	3	1,066.000	Υ		
Flyaway Recurring: Spoke		2018	Lockheed Martin / Orlando, FL	C/FFP	ACC, Orlando, FL	Oct 2017	Jan 2018	8	618.500	Υ		

Army

Items are all commercial-off-the-shelf (COTS).

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

Item Number / Title [DODIC]:
NA0105 / NSTD RANGES AND
TARGETS

ID Code (A=Service Ready, B=Not Service Ready): A		MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	13	5	5	63	68
Gross/Weapon System Cost (\$ in Millions)	1,348.800	53.905	56.718	88.602	2.700	91.302
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,348.800	53.905	56.718	88.602	2.700	91.302
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,348.800	53.905	56.718	88.602	2.700	91.302
(The following Resource Summary rows are for information	onal purposes only. The corre	esponding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	4,146.538	11,343.600	17,720.400	42.857	1,342.676

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Year	s		FY 2016			FY 2017		FY	' 2018 Bas	se .	FY	' 2018 OC	0	FY	2018 Tota	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Flyaway Cost	'		·	'	'		'	<u>'</u>			'		· · · · · · · · · · · · · · · · · · ·			'	<u>'</u>	
Recurring Cost																		
ATS Hardware <sup>(†)</sup>	-	-	47.278	1,910.111	9	17.191	2,814.500	4	11.258	5,040.333	3	15.121	-	-	-	5,040.333	3	15.1
DRTS Complex <sup>(†)</sup>	-	-	1,203.060	2,142.500	4	8.570	7,000.000	1	7.000	18,316.000	1	18.316	-	-	-	18,316.000	1	18.3
DRTS CTR	-	-	-	-	-	4.715	-	-	14.616	-	-	5.788	-	-	-	-	-	5.7
DRTS Aviation Integration	-	-	-	-	-	0.995	-	-	6.150	-	-	1.075	-	-	-	-	-	1.0
IMTS CTR	-	-	-	-	-	10.755	-	-	6.779	-	-	11.321	-	-	-	-	-	11.3
Target Modernization	-	-	12.485	-	-	2.539	-	-	2.375	-	-	4.687	-	-	-	-	-	4.6
IMTS CTF	-	-	12.402	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost	-	-	1,275.225	-	-	44.765	-	-	48.178	-	-	56.308	-	-	-	-	-	56.3
Non Recurring Cost																		
UDAIRI Range Target Lifter <sup>(†)</sup>	-	-	-	-	-	-	-	-	-	23,000.000	1	23.000	-	-	-	23,000.000	1	23.0
Subtotal: Non Recurring Cost	-	-	-	-	-	-	-	-	-	-	-	23.000	-	-	-	-	-	23.0
Subtotal: Flyaway Cost	-	-	1,275.225	-	-	44.765	-	-	48.178	-	-	79.308	-	-	-	-	-	79.3
Software Cost					·		·	,		,								
Non Recurring Cost																		
European Reassurance Initiative	-	-	-	-	-	-	-	-	-	-	-	-	42.857	63	2.700	42.857	63	2.7

**UNCLASSIFIED** 

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Exhibit P-5, Cost Analysis: FY 2018 Army

**Date:** May 2017

**Appropriation / Budget Activity / Budget Sub Activity:** 2035A / 03 / 70

P-1 Line Item Number / Title:

NA0100 / Training Devices, Nonsystem

Item Number / Title [DODIC]: NA0105 / NSTD RANGES AND

249

TARGETS

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	ı	Prior Years	S		FY 2016			FY 2017		F`	/ 2018 Ba	se	F`	Y 2018 OC	0	F	<b>Y 2018 To</b> 1	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost
- IT support to USAREUR <sup>(†)</sup>																		
Subtotal: Non Recurring Cost	-	-	-	-	-	-	=	-	-	-	-	-	-	-	2.700	-	-	2.70
Subtotal: Software Cost	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.700	-	-	2.70
Support Cost				,														
ATS Engineering Support	-	-	5.961	-	-	0.250	-	-	0.298	-	-	0.310	-	-	-	-	-	0.31
Interim Logistic Support	-	-	15.130	-	-	0.735	-	-	0.663	-	-	0.899	-	-	-	-	-	0.89
Contracting Support	-	-	0.400	-	-	0.215	-	-	0.192	-	-	0.235	-	-	-	-	-	0.23
Quality Assurance	-	-	4.861	-	-	0.233	-	-	0.214	-	-	0.307	-	-	-	-	-	0.30
DRTS In-house gov't & contractor support	-	-	30.544	-	-	3.525	-	-	3.212	-	-	3.407	-	-	-	-	-	3.40
DRTS PDSS	-	-	3.259	-	-	0.688	-	-	0.688	-	-	0.688	-	-	-	-	-	0.68
Cyber Security	-	-	-	-	-	0.727	-	-	0.550	-	-	0.550	-	-	-	-	-	0.55
IMTS In-house gov't & contractor support	-	-	11.151	-	-	1.878	-	-	1.765	-	-	1.756	-	-	-	-	-	1.75
Target Modernization In- House Gov't sup	-	-	2.269	-	-	0.889	-	-	0.958	-	-	1.142	-	-	-	-	-	1.14
Subtotal: Support Cost	-	-	73.575	-	-	9.140	-	-	8.540	-	-	9.294	-	-	-	-	-	9.29
Gross/Weapon System Cost	-	-	1,348.800	4,146.538	13	53.905	11,343.600	5	56.718	17,720.400	5	88.602	42.857	63	2.700	1,342.676	68	91.302

				FY 2018	FY 2018	FY 2018
Secondary	y Distribution	FY 2016	FY 2017	Base	осо	Total
Army	Quantity	6	-	4	63	67
	Total Obligation Authority	33.484	11.877	58.778	2.700	61.478
ANG	Quantity	5	5	1	-	1
	Total Obligation Authority	16.283	44.841	29.824	-	29.824
AR	Quantity	2	-	-	-	-
	Total Obligation Authority	4.138	-	-	-	-
	Quantity	13	5	5	63	68
Secondary Distribution	Total Obligation Authority	53.905	56.718	88.602	2.700	91.302

<sup>(†)</sup> indicates the presence of a P-5a

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P-1 Line #170

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

NA0100 / Training Devices, Nonsystem

Date: May 2017

Item Number / Title [DODIC]:

NA0105 / NSTD RANGES AND

TARGETS

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
ATS Hardware <sup>(†)</sup>		2016	TBS (ATS HW) / TBS	C / IDIQ	TACOM-RI	Feb 2016	Jul 2016	9	1,910.111	Y		
ATS Hardware <sup>(†)</sup>		2017	TBS (ATS HW) / TBS	C / IDIQ	TACOM-RI	Feb 2017	Jul 2017	4	2,814.500	Y		
ATS Hardware <sup>(†)</sup>		2018	TBS (ATS HW) / TBS	C / IDIQ	TACOM-RI	Feb 2018	Jul 2018	3	5,040.333	Υ		
DRTS Complex <sup>(†)</sup>		2016	Lockheed Martin (DRTS) / Orlando, FL 32825	C / FFP	ACC, Orlando, FL	Jun 2016	Jun 2017	4	2,142.500	Y		
DRTS Complex <sup>(†)</sup>		2017	Lockheed Martin (DRTS) / Orlando, FL 32825	C / FFP	ACC, Orlando, FL	Mar 2017	Sep 2018	1	7,000.000	Y		
DRTS Complex <sup>(†)</sup>		2018	Lockheed Martin (DRTS) / Orlando, FL 32825	C / FFP	ACC, Orlando, FL	Mar 2018	Mar 2019	1	18,316.000	N		
UDAIRI Range Target Lifter <sup>(†)</sup>		2018	TBS (UDAIRI) / Orlando, FL 32825	C / FFP	ACC, Orlando, FL	Mar 2018	Aug 2018	1	23,000.000	Y		
European Reassurance Initiative - IT support to USAREUR	1	2018	TBS (IT Support to USAREUR) / Orlando, FL 32825	C / FFP	ACC, Orlando, FL	Mar 2018	Sep 2018	63	42.860	Y		

<sup>(†)</sup> indicates the presence of a P-21

### Remarks:

\* ATS contractors are Meggitt Defense Systems-Caswell, Minneapolis, MN; Action Target, Provo, UT; SAAB, Orlando, FL; Lockheed-Martin, Huntsville, AL; and Strategic Systems Inc., Decatur, AL. Long term IDIQ contracts have been negotiated with all five sources. Contract awards will be made in some combination to some or all of these sources.

Army Contracting Command, (ACC) Orlando, FL

hibit P-21, Prod	ductio	n Sc	nedul	e: FY	2018	3 Arm	ıy														Date	: May	2017	7			
<b>propriation / B</b> 35A / 03 / 70	udget	Acti	vity / I	Budg	et Su	ıb Ac	tivity	:		<b>Line</b> 0100 <i>i</i>					onsyst	em					NA0		NSTE		[DOD NGES		
Cost Elen (Units in I									Fiscal Y	ear 2016											Fiscal Ye	ar 2017					
		ACCEPT PRIOR	BAL								(	Calendar	Year 20	16								Calend	dar Year	2017			
	PROC	TO 1 OCT 2015	DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P
Hardware			ı						I																		
1 2016 ARMY	9	0	9					Α -	-	-	-	-	3	3	3												
1 2017 ARMY	4	0	4																	A -	-	-	-	-	1	1	1
1 2018 ARMY	3	0	3																								
S Complex																											
2 2016 ARMY	4	0										Α -	-	-	-	-	-	-	-	-	-	-	-	4	ļ,		
2 2017 ARMY	1	0	1																		Α -	-	-	-	-	-	-
2 2018 ARMY	1	0	1																								
AIRI Range Target Lifter																											
3 2018 ARMY	1	0	1	0	N		T	F			М	1	_		s	0		D		F	М		М				s

LI NA0100 - Training Devices, Nonsystem Army

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P-1 Line #170

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NA0100 / Training Devices, Nonsystem	Exhibit P-2	21, Pro	ducti	on Sc	hedul	e: FY	201	8 Arm	ny														Date	: Ma	y 201	7				
Column   C	<b>Appropriat</b> 2035A / 03	<b>tion / E</b> 5 / 70	Budge	t Acti	vity /	Budg	et Sı	ub Ac	tivity	<b>':</b>								tem					NA0	105 <i>l</i>	NSTI	Title D RAI	(DOE NGES	DIC]: S AND	ı	
A C C F   PRIOR   TO 1 DUE   TO											Fiscal Y	/ear 2018	1										Fiscal Y	ear 2019						В
C   F   F   F   F   F   F   F   F   F				ACCEPT	DAI			1						Calenda	Year 20	18				1				Caler	dar Yea	r 2019				L
ATS Hardware    1   2016   ARMY	O F C R	SERVICE		TO 1 OCT	DUE AS OF	С	0	D E C	Α	F E B	Α	P	Α	U	U		S E P	С	0	D E C	A	F E B	Α	P	Α	N U J	U	U	E	N C E
1 2017   ARMY			4		1 4 4 4 1	-		_										-	-						-				-	Ť
1   2018   ARMY   3   0   3       A -   -   -   1   1   1   1	1 2016 AF	RMY	9	9	0																									
DRTS Complex  2 2016 ARMY	1 2017 AF	RMY	4	3	1	1																								
2       2016       ARMY       4       4       0         2       2017       ARMY       1       0       1       -       -       -       -       -       -       1         2       2018       ARMY       1       0       1       - <td>1 2018 AF</td> <td>RMY</td> <td>3</td> <td>0</td> <td>3</td> <td></td> <td></td> <td></td> <td></td> <td>Α -</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>1</td> <td>1</td> <td>1</td> <td></td>	1 2018 AF	RMY	3	0	3					Α -	-	-	-	-	1	1	1													
2       2017       ARMY       1       0       1       - </td <td></td>																														
2       2018       ARMY       1       0       1       A -       -       -       -       -       -       -       -       -       1       0       1       A -       -       -       -       1       0       1       0       1       1       0       1       0       1       0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td>1</td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>_</td></td<>								1	1				1																	_
UDAIRI Range Target Lifter           3         2018         ARMY         1         0         1         A -         -         -         -         1						-	-	-	-	-		-	-	+	+	-								1						<u> </u>
3 2018 ARMY 1 0 1 A 1				0	1						Α -		-	-	-		-	-	-	-	-	-	1							Ш.
											1	_	1																	
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LI NA0100 - Training Devices, Nonsystem Army

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P-1 Line #170

Exhibit P-21, Production Schedule: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

Date: May 2017

Item Number / Title [DODIC]:
NA0105 / NSTD RANGES AND
TARGETS

		Produ	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						Ir	itial			Reo	rder	
Ref #	1	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	TBS (ATS HW) - TBS	1	48	120	0	4	1 6	10	0	4	6	10
2	Lockheed Martin (DRTS) - Orlando, FL 32825	1	15	25	0	,	13	22	0	5	13	18
3	TBS (UDAIRI) - Orlando, FL 32825	1	1	1	0		6	11	0	0	0	0

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

Item Number / Title [DODIC]:
NA0106 / NSTD Battle Command
Training Center Support Prg

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2016	FY 2017	<b>FY 2018 Base</b>	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	18	14	18	20	-	20
Gross/Weapon System Cost (\$ in Millions)	327.773	12.043	18.038	22.506	-	22.506
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	327.773	12.043	18.038	22.506	-	22.506
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	327.773	12.043	18.038	22.506	-	22.506
(The following Resource Summary rows are for informati	onal purposes only. The cor	responding budget request	s are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	18,209.611	860.214	1,002.111	1,125.300	-	1,125.300

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

ID Code (A=Service Ready, B=Not Service Ready):

	P	rior Years	;		FY 2016			FY 2017		FΥ	' 2018 Bas	e	FY	′ 2018 OC	0	FY	2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost								Į.		l						1	l	
Recurring Cost																		
MCTC Furniture, Fixture & Equipment	35,013.625	8	280.109	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Furniture, Fixtures & Equipment Refresh <sup>(†)</sup>	2,684.250	4	10.737	1,018.333	3	3.055	1,050.000	4	4.200	1,313.250	4	5.253	-	-	-	1,313.250	4	5.25
Mission Command Equipment - Hardware <sup>(†)</sup>	-	-	4.253	548.000	6	3.288	780.000	6	4.680	836.143	7	5.853	-	-	-	836.143	7	5.8
Battlefield Visualization <sup>(†)</sup>	-	-	-	759.000	1	0.759	2,526.000	1	2.526	3,159.000	1	3.159	-	-	-	3,159.000	1	3.1
DIACAP / RMF <sup>(†)</sup>	5,174.750	4	20.699	1,091.750	4	4.367	1,303.500	4	5.214	1,629.500	4	6.518	-	-	-	1,629.500	4	6.5
ESS Services <sup>(†)</sup>	5,684.000	2	11.368	-	-	-	270.000	3	0.810	253.250	4	1.013	-	-	-	253.250	4	1.01
Subtotal: Recurring Cost	-	-	327.166	-	-	11.469	-	-	17.430	-	-	21.796	-	-	-	-	-	21.79
Subtotal: Flyaway Cost	-	-	327.166	-	-	11.469	-	-	17.430	-	-	21.796	-	-	-	-	-	21.79
Support Cost																		
Program Management	-	-	0.607	-	-	0.574	-	-	0.607	-	-	0.710	-	-	-	-	-	0.7
Subtotal: Support Cost	-	-	0.607	-	-	0.574	-	-	0.607	-	-	0.710	-	-	-	-	-	0.7
Gross/Weapon System Cost	18,209.611	18	327.773	860.214	14	12.043	1,002.111	18	18.038	1,125.300	20	22.506	-	-	-	1,125.300	20	22.50

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0100 / Training Devices, Nonsystem	Item Number / Title [DODIC]: NA0106 / NSTD Battle Command Training Center Support Prg

ID Code (A=Service Ready, B=Not Service Re	ady):		MDAP/MAIS Code	:		
Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	10	17	18	-	18
	Total Obligation Authority	9.638	16.586	19.796	-	19.796
ANG	Quantity	3	-	-	-	-
	Total Obligation Authority	1.628	-	-	-	-
AR	Quantity	1	1	2	-	2
	Total Obligation Authority	0.777	1.452	2.710	-	2.710
Total:	Quantity	14	18	20	-	20
Secondary Distribution	Total Obligation Authority	12.043	18.038	22.506	-	22.506

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title:

2035A / 03 / 70

NA0100 / Training Devices, Nonsystem

Item Number / Title [DODIC]:

**Date:** May 2017

NA0106 / NSTD Battle Command Training Center Support Prg

									5		U	
Cost Elements	0 0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue
Furniture, Fixtures & Equipment Refresh		2016	General Dynamics / Fairfax, VA 22030	C / FFP	ACC Orlando, FL	Mar 2016	Jun 2016	3	1,018.330	Y		
Furniture, Fixtures & Equipment Refresh		2017	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2017	Sep 2017	4	1,050.000	Υ		
Furniture, Fixtures & Equipment Refresh		2018	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2018	Sep 2018	4	1,313.250	N		
Mission Command Equipment - Hardware		2016	General Dynamics / Fairfax, VA 22030	C / FFP	ACC Orlando, FL	Mar 2016	Jun 2016	6	548.000	Υ		
Mission Command Equipment - Hardware		2017	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2017	Sep 2017	6	780.000	Υ		
Mission Command Equipment - Hardware		2018	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2018	Sep 2018	7	836.140	N		
Battlefield Visualization		2016	General Dynamics / Fairfax, VA 22030	C / FFP	ACC Orlando, FL	Mar 2016	Jun 2016	1	759.000	Y		
Battlefield Visualization		2017	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2017	Sep 2017	1	2,526.000	Υ		
Battlefield Visualization		2018	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2018	Sep 2018	1	3,159.000	N		
DIACAP / RMF		2016	General Dynamics / Fairfax, VA 22030	C / FFP	ACC Orlando, FL	Mar 2016	Jun 2016	4	1,091.750	Υ		
DIACAP / RMF		2017	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2017	Sep 2017	4	1,303.500	Υ		
DIACAP / RMF		2018	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2018	Sep 2018	4	1,629.500	N		
ESS Services		2017	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2017	Sep 2017	3	270.000	Υ		
ESS Services		2018	TBD / TBD	C / TBD	ACC Orlando, FL	Jun 2018	Sep 2018	4	253.250	N		

#### Remarks:

Items are COTS.

Program is currently going through a contract recompete. Anticipated contract award date is 3QFY17.

Army Contracting Command, (ACC) Orlando, FL

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

NA0116 / NSTD- MILES

ID Code (A=Service Ready, B=Not Service Ready):		ME	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	2,280	44,123	18,399	5,498	-	5,498
Gross/Weapon System Cost (\$ in Millions)	264.516	102.587	74.518	76.144	-	76.144
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	264.516	102.587	74.518	76.144	-	76.144
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	264.516	102.587	74.518	76.144	-	76.144
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	116.016	2.325	4.050	13.849	-	13.849

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	;		FY 2016			FY 2017		F۱	/ 2018 Bas	se	F۱	/ 2018 OC	0	F	' 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
MILES Individual Weapon System (IWS) <sup>(†)</sup>	314.568	695	218.625	1.205	42,382	51.073	2.100	15,959	33.514	-	-	-	-	-	-	-	-	-
MILES Tactical Vehicle System (TVS)	11.107	1,000	11.107	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
I-MILES Vehicle TESS (V-TESS) <sup>(†)</sup>	-	-	-	11.400	568	6.475	11.500	2,440	28.060	11.659	5,498	64.100	-	-	-	11.659	5,498	64.100
MILES CVTESS(†)	24.501	585	14.333	25.906	1,173	30.388	-	-	-	-	-	-	-	-	-	-	-	-
MILES Tech Refresh	-	-	5.345	-	-	1.222	-	-	1.000	-	-	1.260	-	-	-	-	-	1.260
MILES Contractor Engineering Support	-	-	2.596	-	-	2.400	-	-	2.500	-	-	-	-	-	-	-	-	-
MILES ECPs	-	-	2.171	-	-	4.543	-	-	1.800	-	-	2.500	-	-	-	-	-	2.500
MILES PDSS	-	-	-	-	-	-	-	-	1.146	-	-	-	-	-	-	-	-	-
MILES Initial Spares	-	-	1.600	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	255.777	-	-	96.098	-	-	68.020	-	-	67.861	-	-	-	-	-	67.86
Subtotal: Flyaway Cost	-	-	255.777	-	-	96.098	-	-	68.020	-	-	67.861	-	-	-	-	-	67.86
Support Cost																		
MILES In House Government Support	-	-	8.739	-	-	6.489	-	-	6.498	-	-	8.283	-	-	-	-	-	8.283
Subtotal: Support Cost	-	-	8.739	-	-	6.489	-	-	6.498	-	-	8.283	-	-	-	-	-	8.28
Gross/Weapon System Cost	116.016	2,280	264.516	2.325	44,123	102.587	4.050	18,399	74.518	13.849	5,498	76.144	-	-	-	13.849	5,498	76.144

LI NA0100 - Training Devices, Nonsystem Army

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P-1 Line #170

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Exhibit P-5, Cost Analysis: FY 2018 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0100 / Training Devices, Nonsystem	Item Number / Title [DODIC]: NA0116 / NSTD- MILES
ID Code as a series as a serie	MDAD/MAIS Code:	

ID Code (A=Service Ready, B=Not Service Read	y):		MDAP/MAIS Code	) <b>:</b>		
Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	44,123	18,399	5,498	-	5,498
	Total Obligation Authority	102.587	74.518	76.144	-	76.144
	Quantity	44,123	18,399	5,498	-	5,498
Secondary Distribution	Total Obligation Authority	102.587	74.518	76.144	-	76.144

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0100 / Training Devices, Nonsystem	NA0116 / NSTD- MILES

	1 _ 1			T T	-					_		
Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
MILES Individual Weapon System (IWS)		2016	Cubic Defense Sys. (IWS) / San Diego, CA	C / FFP	ACC, Orlando, FL	Mar 2016	Jul 2016	42,382	1.210	Y		
MILES Individual Weapon System (IWS)		2017	Cubic Defense Sys. (IWS) / San Diego, CA	C / FFP	ACC, Orlando, FL	Mar 2017	Jul 2017	15,959	2.100	Y		
I-MILES Vehicle TESS (V-TESS) <sup>(†)</sup>		2016	Lockheed Martin Corporation / Orlando, FL	C / FFP	ACC, Orlando, FL	Mar 2017	Sep 2018	568	11.400	Y		
I-MILES Vehicle TESS (V-TESS) <sup>(†)</sup>		2017	Lockheed Martin Corporation / Orlando, FL	C / FFP	ACC, Orlando, FL	Sep 2017	Jun 2018	2,440	11.500	Y		
I-MILES Vehicle TESS (V-TESS) <sup>(†)</sup>		2018	Lockheed Martin Corporation / Orlando, FL	C / FFP	ACC, Orlando, FL	May 2018	May 2019	5,498	11.660	Y		
MILES CVTESS		2016	SAAB Training USA LLC (CVTESS) / Orlando, FL	C / FFP	ACC, Orlando, FL	Dec 2015	Jul 2016	1,173	25.910	Y		

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

Army Contracting Command, (ACC) Orlando, FL

E>	ιhi	bit P	-21, Pro	oducti	on Sc	hedu	le: F`	Y 201	8 Arm	ıy														Date	: Ma	y 201	7				
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				ements n Each)								Fiscal Y	ear 2016)	i		,								Fiscal Y	ear 2017				,		В
					ACCEPT			,							alendar	Year 201	6							,	Calen	dar Year	2017				L
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I-N	/ILES	S Vehicl	e TESS (V-T	ESS)			l					1				ļ.	l											<u> </u>			
	1	2016	ARMY	568	0	568																		Α -	-	-	-	-	-	-	5
	1	2017	ARMY	2,440	0	2,440																			,					Α -	2,4
	1	2018	ARMY	5,498	0	5,498																									5,4
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	N N	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	U J	A U G	S E P	

LI NA0100 - Training Devices, Nonsystem Army

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P-1 Line #170

E	khi	bit F	P-21, Pro	oducti	on Sc	hedul	<b>e:</b> F\	Y 201	8 Arm	ıy														Date	: Ma	y 2017	,				
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0 C 0		FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	A N C E
I-N	/ILES	S Vehic	le TESS (V-T	ESS)																											
	1	2016	ARMY	568	0	568	-	-	-	-	-	-	-	-	-	-	-	568													(
	1	2017	ARMY	2,440	0	2,440	-	-	-	-	-	-	-	-	610	610	610	610													(
	1	2018	ARMY	5,498	0	5,498							•	Α -	-	-	-	-	-	-	-	-	-	-	-	459	458	458	458	458	3,207
						,	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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			riation / 03 / 70	Budge	et Acti	vity /	Budg	get Su	ıb Ac	tivity	:	1					Title:		tem							nber / / NSTI			OIC]:		
	Cost Elements																														
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I-M	IILE	S Vehi	icle TESS (V-1	TESS)	ı																<u> </u>										
	1	2016	ARMY	568	568	0																									
	1	2017	ARMY	2,440	2,440	0								_																	
	1	2018	ARMY	5,498	2,291	3,207	458	458	458	458	458	458	459																		
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J L	A U G	S E P	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0100 / Training Devices, Nonsystem	NA0116 / NSTD- MILES

		Produc	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MFR						Init	ial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Lockheed Martin Corporation - Orlando, FL	500	2,750	5,700	0	17	19	36	0	7	13	20

#### Remarks:

I-MILES CVTESS production completed with FY16 PB Funds. I-MILES Individual Weapon System (IWS) production completed with FY17 PB Funds. I-MILES Vehicle TESS (V-TESS) production to be completed with FY16-FY19 Funds.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:
NA0100 / Training Devices, Nonsystem

MDAP/MAIS Code:

MDAP/MAIS Code:

Resource Summary	Prior Years	FY 2016	FY 2017	<b>FY 2018 Base</b>	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	19	12	7	7	-	7
Gross/Weapon System Cost (\$ in Millions)	56.835	12.050	11.177	11.691	-	11.691
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	56.835	12.050	11.177	11.691	-	11.691
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	56.835	12.050	11.177	11.691	-	11.691
(The following Resource Summary rows are for information	onal purposes only. The cor	responding budget request	s are documented elsewhe	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-

1,004.167

1,596.714

1,670.143

2,991.316

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

Gross/Weapon System Unit Cost (\$ in Thousands)

	P	rior Years	;		FY 2016			FY 2017		FY	2018 Ba	se	FY	2018 OC	0	FY	2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Flyaway Cost																		
Recurring Cost																		
CTIA Modifications	-	-	-	-	-	-	-	-	0.750	-	-	0.773	-	-	-	-	-	0.77
CTIA Continuous Tech Refresh	-	-	-	-	-	-	-	-	0.445	-	-	0.445	-	-	-	-	-	0.44
LVC-IA Fieldings	445.667	12	5.348	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LVC New Equipment Training	-	-	3.044	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LVC-IA Spares	-	-	0.269	-	-	0.160	-	-	-	-	-	-	-	-	-	-	-	-
LVC-IA Site Support	-	-	1.213	-	-	0.102	-	-	-	-	-	0.465	-	-	-	-	-	0.46
Subtotal: Recurring Cost	-	-	9.874	-	-	0.262	-	-	1.195	-	-	1.683	-	-	-	-	-	1.68
Non Recurring Cost																		
LVC-IA Version Upgrade/ Tech Refresh <sup>(†)</sup>	382.000	1	0.382	427.833	6	2.567	400.000	5	2.000	1,430.000	2	2.860	-	-	-	1,430.000	2	2.86
Subtotal: Non Recurring Cost	-	-	0.382	-	-	2.567	-	-	2.000	-	-	2.860	-	-	-	-	-	2.86
Subtotal: Flyaway Cost	-	-	10.256	-	-	2.829	-	-	3.195	-	-	4.543	-	-	-	-	-	4.54
Software Cost																		
Recurring Cost																		
LVC-IA PDSS <sup>(†)</sup>	2,102.000	6	12.612	399.333	6	2.396	1,260.000	2	2.520	578.800	5	2.894	-	-	-	578.800	5	2.89
LVC-IA Core System Integration	-	-	5.447	-	-	0.564	-	-	0.700	-	-	0.717	-	-	-	-	-	0.71
CTIA PDSS	-	-	12.986	-	-	2.348	-	-	1.700	-	-	1.722	-	-	-	-	-	1.72

LI NA0100 - Training Devices, Nonsystem Army

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P-1 Line #170

1,670.143

**Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Item Number / Title [DODIC]: 2035A / 03 / 70 NA0121 / NSTD - LVC ARCHITECTURE

NA0100 / Training Devices, Nonsystem

ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	3		FY 2016			FY 2017		FY	/ 2018 Ba	se	F	/ 2018 OC	0	F	Y 2018 Tot	:al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Subtotal: Recurring Cost	-	-	31.045	-	-	5.308	-	-	4.920	-	-	5.333	-	-	-	-	-	5.333
Subtotal: Software Cost	-	-	31.045	-	-	5.308	-	-	4.920	-	-	5.333	-	-	-	-	-	5.333
Support - System Technical S	Support (STS)	Cost																
System Technical Support (STS)	-	-	-	-		-	-	-	0.650	-	-	-	-	-	-	-	-	-
Subtotal: Support - System Technical Support (STS) Cost	-	-	-	-	-	-	-	-	0.650	-	-	-	-	-	-	-	-	-
Support Cost																		
LVC-IA Program Management	-	-	11.906	-	-	3.247	-	-	1.838	-	-	1.227	-	-	-	-	-	1.227
CTIA Program Management	-	-	3.628	-		0.666	-	-	0.574	-	-	0.588	-	-	-	-	-	0.588
Subtotal: Support Cost	-	-	15.534	-	-	3.913	-	-	2.412	-	-	1.815	-	-	-	-	-	1.815
Gross/Weapon System Cost	2,991.316	19	56.835	1,004.167	12	12.050	1,596.714	7	11.177	1,670.143	7	11.691	-	-	-	1,670.143	7	11.691

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	12	7	7	-	7
	Total Obligation Authority	12.050	11.177	11.691	-	11.691
Total:	Quantity	12	7	7	-	7
Secondary Distribution	Total Obligation Authority	12.050	11.177	11.691	-	11.691

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0100 / Training Devices, Nonsystem	NA0121 / NSTD - LVC ARCHITECTURE

								<u> </u>					
Cost Elements	000	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	<b>Qty</b> (Each)	Unit Cost	Specs Avail Now?	Revision	RFP Issue Date	
LVC-IA Version Upgrade/ Tech Refresh		2016	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Apr 2016	Jun 2016	6	427.833	Y			
LVC-IA Version Upgrade/ Tech Refresh		2017	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Nov 2016	May 2017	5	400.000	Υ		Jul 2015	
LVC-IA Version Upgrade/ Tech Refresh		2018	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Dec 2017	Feb 2018	2	1,430.000	Υ			
LVC-IA PDSS		2016	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Jun 2016	Aug 2016	6	399.330	Υ			
LVC-IA PDSS		2017	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Apr 2017	Jun 2017	2	1,260.000	Υ		Jul 2015	
LVC-IA PDSS		2018	Cole Engineering Services / Orlando	C / CPFF	ACC Orlando, FL	Jun 2018	Aug 2018	5	578.800	Υ			

#### Remarks:

In FY16, the Basis of Issue Plan (BOIP) was changed from 15 to 12 sites.

In FY16, the LVC-IA program awarded an extension of its base contract to Cole Engineering Services, to conduct the Version Upgrades/Tech Refresh of the LVC-IA System at 2 locations and PDSS Activities. Additionally, In FY16, the program competitively awarded its Enhance Capability contract to Cole Engineering Services, this contract is the follow-on effort beginning in 3rd Quarter FY16, to continue Version Upgrades/Tech Refreshes and PDSS activities.

In FY16, the quantities for LVC-IA Version Upgrades/Tech Refresh increased from 2 to 6 on the on P5/P5a. This is due to a decision to satisfy the user requirement in accelerating upgrades from Version 1 to Version 2 at 6 locations.

In FY17, the deliveries for LVC-IA Version Upgrades/Tech Refresh commences in May 2017, once FY16 fielding's supporting the accelerated upgrades from Version 1 to Version 2 are completed (slated for April 2017); these deliveries continues the accelerating upgrades from Version 1 to Version 2 at 5 locations.

In FY18, the increase in unit cost for LVC-IA Version Upgrades/Tech Refresh is due to the additional integration requirements required to comply with the Army's Constructive Strategy to be completed by FY19.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0170 / Close Combat Tactical Trainer

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

THE REIT HIDAL / HIALO COUC. N/A												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	108	190	317	216	-	216	219	411	209	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718	47.135	51.430	39.503	1.274	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718	47.135	51.430	39.503	1.274	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718	47.135	51.430	39.503	1.274	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request:	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	9,778.787	237.947	188.552	211.657	-	211.657	215.228	125.134	189.010	-	Continuing	Continuing

#### Description:

The Close Combat Tactical Trainer (CCTT) is a critical readiness enabler for Armored Brigade Combat Team (ABCT) units. CCTT simulators support Commanders' home station collective training and readiness requirements in conducting pre-deployment training in preparation for worldwide combat operations. CCTT immersively and comprehensively trains Armor, Cavalry, Infantry, Mechanized Infantry and Armored Reconnaissance units from squad through Battalion/Squadron level to include their staffs. The primary training audience operates from full-crew simulators, reconfigurable command posts and live battalion command posts to accomplish their combined arms training tasks. CCTT is a ground based, collective training device, CCTT is comprised of full fidelity, manned simulators for the M1 Abrams Main Battle Tank. M2 Bradley Fighting Vehicle (BFV) variants and includes the Reconfigurable Vehicle Tactical Trainer (RVTT) and Reconfigurable Vehicle Simulator (RVS) modules. RVTT is comprised of full fidelity, manned simulators for the High Mobility Multipurpose Wheeled Vehicle (HMMWV) and the Heavy Expanded Mobility Tactical Truck (HEMTT).

CCTT is an integral part of the Army training strategy, and through planned platform concurrency modernization, will enable CCTT to support Army Force 2025 and Beyond.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	150	269	180	-	180	195	321	184	-
	Total Obligation Authority	40.110	56.891	41.172	-	41.172	40.312	45.499	36.969	1.274
ANG	Quantity	40	48	34	-	34	20	90	25	-
	Total Obligation Authority	5.100	2.880	4.488	-	4.488	4.519	5.931	2.534	-
AR	Quantity	-	-	2	-	2	4	-	-	-
	Total Obligation Authority	-	-	0.058	-	0.058	2.304	-	-	-
Total:	Quantity	190	317	216	-	216	219	411	209	-
Secondary Distribution	Total Obligation Authority	45.210	59.771	45.718	-	45.718	47.135	51.430	39.503	1.274

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0170 / Close Combat Tactical Trainer

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	NA0170 / Close Combat Tactical Trainer	P-5a, P-21			108 / 1,056.109	190 / 45.210	317 / 59.771	216 / 45.718	- / -	216 / 45.718
P-40	Total Gross/Weapon System Cost				108 / 1,056.109	190 / 45.210	317 / 59.771	216 / 45.718	- 1 -	216 / 45.718

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 base procurement dollars in the amount of \$45.718 million procures simulator modernization upgrades. A follow-on Production Contract called Manned Module Modernization (M3) will focus on fleet wide tech refresh and concurrency, and a Post Deployment Software Support (PDSS) contract will focus on software maintenance and cybersecurity. In the first year of the contract FY18 funds will provide: non-recurring engineering, development and production of updated Input/Output components and procurement of long lead material to update physical (modules) and architectural (software/networking) infrastructure.

CCTT PDSS will provide services to CCTT fielded systems which includes: Software Maintenance and associated activities for preparing new block releases; Perfective Maintenance to support CCTT concurrency modification to the simulators; Adaptive Maintenance to support CCTT's close affiliation with the One Semi-Automated Forces (OneSAF), Synthetic Environment Core (SE Core), and the Live, Virtual and Constructive-Integrated Architecture (LVC-IA) programs; and Corrective maintenance to support fielded software baselines. It will provide Sustainment Engineering to allow the Government to sustain multiple software releases in the field and conduct Independent Test and Evaluation for verifying and validating the system as releases are prepared. It will provide product support to maintain the overall integrity and quality of the process and products during the operations phase of the system. It will provide the means for maintaining the CCTT systems security by providing Cybersecurity related services that comply with DOD guidance.

Modernization upgrades and software support are essential to continue providing long term operation and sustainability of the CCTT system which is a key training enabler for the Active, Reserve, and National Guard components for training in a simulated, fully interactive, virtual battlefield. The CCTT requirement exists to train and sustain collective (crew through battalion) tasks to meet Army readiness and Mission objectives. CCTT training also contributes to unit readiness by augmenting live training to train tasks that cannot be performed in a live environment due to safety, cost and/or environmental constraints.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the Active and Reserve Components of the Army Forces for homeland defense missions, domestic emergency responses and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

NA0170 / Close Combat Tactical Trainer

ID Code (A-Sparies Boods (Briblet Series Boods):

MDAP/MAIS Code:

ID Code (A=Service Ready, B=Not Service Ready):		MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	108	190	317	216	-	216
Gross/Weapon System Cost (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,056.109	45.210	59.771	45.718	-	45.718
(The following Resource Summary rows are for informati	ional purposes only. The cor	responding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	9,778.787	237.947	188.552	211.657	-	211.657

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	Pi	rior Years	;		FY 2016			FY 2017		FY	' 2018 Bas	se	F۱	/ 2018 OC	0	FY	' 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost		'			'		'	'					'				'	
Recurring Cost																		
MODERNIZATION/ TECHNOLOGY REFRESH <sup>(†)</sup>	-	-	-	-	-	-	98.113	309	30.317	126.042	216	27.225	-	-	-	126.042	216	27.2
Games for Training - Stryker Virtual Collective Trainer <sup>(†)</sup>	-	-		-	-	-	1,437.500	8	11.500	-	-		-	-	-	-	-	
Subtotal: Recurring Cost	-	-	-	-	-	-	-	-	41.817	-	-	27.225	-	-	-	-	-	27.2
Subtotal: Flyaway Cost	-	-	-	-	-	-	-	-	41.817	-	-	27.225	-	-	-	-	-	27.2
Support Cost																		
PROD ENGINEERING AND PMO SUPPORT	-	-	58.155	-	-	5.353	-	-	4.355	-	-	4.485	-	-	-	-	-	4.4
PRODUCTION ENGR CONTRACTOR SUPT	-	-	32.678	-	-	1.417	-	-	1.550	-	-	1.596	-	-	-	-	-	1.5
CONCURRENCY(†)	550.325	80	44.026	128.684	190	24.450	-	-	-	-	-	-	-	-	-	-	-	
SOFTWARE MAINTENANCE SUPPORT (PDSS)	-	-	904.614	-	-	13.990	-	-	12.050	-	-	12.412	-	-	-	-	-	12.4
INTERIM CONTRACTORS LOGISTICS SUPPORT	-	-	16.636	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Subtotal: Support Cost	-	-	1,056.109	-	-	45.210	-	-	17.955	-	-	18.493	-	-	-	-	-	18.4
Gross/Weapon System Cost	9,778.787	108	1,056.109	237.947	190	45.210	188.552	317	59.771	211.657	216	45.718	-	-	-	211.657	216	45.7

LI NA0170 - Close Combat Tactical Trainer Army

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P-1 Line #171

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0170 / Close Combat Tactical Trainer	NA0170 / Close Combat Tactical Trainer

ID Code (A=Service Ready, B=Not Service Re	ady):		MDAP/MAIS Code:						
Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Army	Quantity	150	269	180	-	180			
	Total Obligation Authority	40.110	56.891	41.172	-	41.172			
ANG	Quantity	40	48	34	-	34			
	Total Obligation Authority	5.100	2.880	4.488	-	4.488			
AR	Quantity	-	-	2	-	2			
	Total Obligation Authority	-	-	0.058	-	0.058			
Total:	Quantity	190	317	216	=	216			
Secondary Distribution	Total Obligation Authority	45.210	59.771	45.718	-	45.718			

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0170 / Close Combat Tactical Trainer	NA0170 / Close Combat Tactical Trainer

	O C			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
MODERNIZATION/ TECHNOLOGY REFRESH <sup>(†)</sup>		2017	TBS / TBS	C / TBD	ACC, Orlando Florida	Sep 2017	Mar 2018	309	98.110	N		
MODERNIZATION/ TECHNOLOGY REFRESH <sup>(†)</sup>		2018	TBS / TBS	C / TBD	ACC, Orlando Florida	Mar 2018	Oct 2018	216	126.040	N		
Games for Training - Stryker Virtual Collective Trainer		2017	AMRDEC-PIF / Redstone Arsenal, AL	MIPR	ACC, Hunstville, Alabama	Apr 2017	Dec 2017	8	1,437.500	N		
CONCURRENCY		2016	Lockheed Martin Corporation / Orlando	C / FFP	ACC, Orlando Florida	Aug 2016	Sep 2016	190	128.680	Y		

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

AMRDEC-PIF: Army Aviation and Missile Command, Prototype Integration Facility

Unit cost increase from FY17 to FY18 for Modernization/Tech Refresh is due to the specific subcomponents within a simulator receiving a tech refresh change each year. The cost of these subcomponents varies, so the unit costs are expected to adjust annually based on the specific changes being applied to each unit

Ex	ιhi	bit F	P-21, Pro	duct	ion Sc	hedul	<b>e:</b> F\	<b>/</b> 201	8 Arm	ıy														Date	e: Ma	y 201	7				
-	-	-	iation / 1 03 / 70	Budg	et Acti	vity /	Budç	get Sı	ıb Ac	tivity	:		<b>Line</b> 0170		-				ainer								<b>Title</b> e Com		DIC]: actical	l Trai	iner
				ements n Each)								Fiscal \	ear 2016							,				Fiscal Y	ear 2017	,					В
					ACCEPT									C	Calendar	Year 20	6								Cale	ndar Yea	r 2017				L
0 0	R	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n n	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n n	A U G	S E P	A N C E
MC	DDE	RNIZA	TION/ TECHN	OLOGY I	REFRESH																										
	1	2017	ARMY	309	0	309																								A -	3
	1	2018	ARMY	216	0	216																									2
			,				O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N U	n A	A U G	S E P	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	n n	A U G	S E P	ı

P-1 Line #171

Ex	hik	oit F	P-21, Pro	oducti	ion Sc	hedu	le: F\	2018	3 Arm	ıy														Date	: May	2017	7				
	-	-	<b>iation</b> / 03 / 70	Budge	et Acti	vity /	Budg	get Su	ıb Ac	tivity	:		<b>Line</b> 0170 <i>i</i>					al Tra	iner						<b>Num</b> 170 /				DIC]: actica	al Tra	iner
				lements in Each)								Fiscal Y	ear 2018									_		Fiscal Ye	ear 2019						B A
					ACCEPT									C	alendar	Year 201	8								Calen	dar Year	2019				Ļ
0 0	M F R #	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J J	A U G	S E P	A N C E
МО	DER	RNIZAT	TION/ TECHN	IOLOGY F	REFRESH																										
	1 :	2017	ARMY	309	0	309	-	-	-	-	-	5	15	15	34	36	36	34	34	34	34	20	12								0
	1 :	2018	ARMY	216	0	216						Α -	-	-	-	-	-	-	5	18	18	23	25	23	23	23	18	14	14	12	0
						-	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 70	NA0170 / Close Combat Tactical Trainer	NA0170 / Close Combat Tactical Trainer

		Produc	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MFR						Init	tial			Reo	rder	
Ref	Manufacturer				ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total
#	Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
1	TBS - TBS	1	72	200	0	11	7	18	0	5	8	13

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0173 / Aviation Combined Arms Tactical Trainer

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #172

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
•	rears				000						•	
Procurement Quantity (Units in Each)	-	23	15	21	-	21	21	21	21	21	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568	25.281	31.062	32.430	42.191	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568	25.281	31.062	32.430	42.191	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568	25.281	31.062	32.430	42.191	Continuing	Continuing
(The following	Resource Sumr	nary rows are fo	r informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1,307.304	2,666.667	1,455.619	-	1,455.619	1,203.857	1,479.143	1,544.286	2,009.095	Continuing	Continuing

#### **Description:**

The Aviation Combined Arms Tactical Trainer (AVCATT) is Army Aviation's only Collective Training System of Record to ensure the Active, Reserve and Army National Guard Aviation Units are trained and ready. AVCATT enables unit collective and combined arms air-ground training for AH-64, UH-60, CH-47, UH-72, and UH-72 aircrews within the Live, Virtual, Constructive (LVC) Integrated Training Environment (ITE). The AVCATT also supports the training of Non-Rated crew members in crew coordination, flight, aerial gunnery, hoist, and slingload related tasks via the Non-Rated Crewmember Manned Module (NCM3); which can be linked to AVCATT's UH-60, CH-47, and UH-72 cockpit configurations to support a unit's specific Mission Training Requirements.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	12	9	12	-	12	12	12	12	12
	Total Obligation Authority	15.635	24.807	12.227	-	12.227	12.641	18.637	17.837	25.238
ANG	Quantity	7	4	4	-	4	4	4	4	4
	Total Obligation Authority	9.171	9.654	12.227	-	12.227	5.056	3.106	4.864	10.396
AR	Quantity	4	2	5	-	5	5	5	5	5
	Total Obligation Authority	5.262	5.539	6.114	=	6.114	7.584	9.319	9.729	6.557
Total:	Quantity	23	15	21	-	21	21	21	21	21
Secondary Distribution	Total Obligation Authority	30.068	40.000	30.568	-	30.568	25.281	31.062	32.430	42.191

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0173 / Aviation Combined Arms Tactical Trainer

Training Equipment

TO THE THURST COMBINED THE TRANSPORT

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	NA0173 / Aviation Combined Arms Tactical Trainer	P-5a, P-21			- / 471.472	23 / 30.068	15 / 40.000	21 / 30.568	- / -	21 / 30.568
P-40	Total Gross/Weapon System Cost				- / 471.472	23 / 30.068	15 / 40.000	21 / 30.568	- 1 -	21 / 30.568

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$30.568 million supports AVCATT/NCM3 Post Deployment Software Support (PDSS), interoperability support, and replacement of obsolescent technology. Interoperability support includes the renewal of Authority to Operate for AVCATT and NCM3, resynchronization with and upgrades to the OneSAF semiautonomous forces, support for interoperability with the Close Combat Tactical Trainer (CCTT), support for interoperability with the Universal Mission Simulator (UMS), and testing/fielding of integrated Live Virtual Constructive Integrating Architecture (LVC-IA). Technology Refresh includes replacement of obsolete data switches, replacement of obsolete servo control modules, radio systems, and modernization of manned module hardware.

AVCATT/NCM3 modernization will occur in parallel with platform concurrency upgrades that support the AH-64E v4, CH-47F v9.4, Common Operating Environment Integrated Digital Modem, Aircraft Survivability Equipment, Link 16, and UH-72 system upgrades. The aforementioned modernization upgrades are essential toward enabling the long term operation and sustainability of the AVCATT/NCM3 system, which is a key training enabler for the Active and National Guard components for training combined arms operations in a simulated, fully interactive, virtual battlefield. The AVCATT/NCM3 requirement exists to train and sustain collective (crew through battalion) tasks to meet Army readiness and mission objectives. AVCATT/NCM3 training also contributes to unit readiness by augmenting live training to train tasks that cannot be performed in a live training environment due to safety, cost, and environmental constraints.

AVCATT/NCM3 is an integral part of the Army training strategy, and through planned platform concurrency modernization.

In 2018, AVCATT/ NCM3 will shift to an annual tech refresh cycle and complete one tech refresh on each of the 21 suites once per year. This will enable AVCATT/ NCM3 to support Army Force 2025 and beyond.

In 2017, the AVCATT Army Acquisition Objective changed from 20 to 21 suites.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the Active and Reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 70

P-1 Line Item Number / Title:
NA0173 / Aviation Combined Arms Tactical Trainer

Item Number / Title [DODIC]:
NA0173 / Aviation Combined Arms Tactical Trainer

ID Code (A=Service Ready, B=Not Service Ready):		MD	AP/MAIS Code:			
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	23	15	21	-	21
Gross/Weapon System Cost (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	471.472	30.068	40.000	30.568	-	30.568
(The following Resource Summary rows are for informa	tional purposes only. The corre	esponding budget requests	are documented elsewher	e.)		?
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	1,307.304	2,666.667	1,455.619	-	1,455.619

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	P	rior Years	3		FY 2016			FY 2017		FY	2018 Bas	е	FY	2018 OC	0	FY	2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
Flyaway Cost	'					'	'	<u>'</u>		<u>'</u>	'		'			<u>'</u>	'	
Recurring Cost																	-	
NCM3 Suite <sup>(†)</sup>	4,077.000	2	8.154	-	-	0.800	3,000.000	3	9.000	-	-	-	-	-	-	-	-	-
Technology Refresh <sup>(†)</sup>	-	-	2.820	-	-	5.200	-	-	3.577	762.143	21	16.005	-	-	-	762.143	21	16.00
Virtualization <sup>(†)</sup>	-	-	-	196.143	14	2.746	200.000	12	2.400	-	-	-	-	-	-	-	-	-
HVAC Obsolescence <sup>(†)</sup>	-	-	1.710	394.778	9	3.553	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Recurring Cost	-	-	12.684	-	-	12.299	-	-	14.977	-	-	16.005	-	-	-	-	-	16.00
Subtotal: Flyaway Cost	-	-	12.684	-	-	12.299	-	-	14.977	-	-	16.005	-	-	-	-	-	16.00
Support Cost																		
A. Production Engineering and PMO	-	-	406.076	-	-	2.388	-	-	4.511	-	-	3.589	-	-	-	-	-	3.58
B. Software Maintenance Support (PDSS)	-	-	33.926	-	-	6.425	-	-	6.629	-	-	7.223	-	-	-	-	-	7.22
D. LVC-IA Interoperability Support	-	-	6.134	-	-	1.334	-	-	4.649	-	-	1.405	-	-	-	-	-	1.40
G. CH-47F and UH-60M Concurrency	-	-	12.652	-	-	0.163	-	-	-	-	-	-	-	-	-	-	-	-
H. Helmet Mounted Display Obsolescence	-	-	-	-	-	-	-	-	3.260	-	-	2.346	-	-	-	-	-	2.34
I. AH-64 & Manned Unmanned Teaming Concu	-	-	-	-	-	5.583	-	-	2.000	-	-	-	-	-	-	-	-	-

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 70

P-1 Line Item Number / Title:

NA0173 / Aviation Combined Arms Tactical Trainer

NA0173 / Aviation Combined Arms Tactical Trainer

Date: May 2017

Item Number / Title [DODIC]:

NA0173 / Aviation Combined Arms Tactical Trainer

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

					,	- 3												_
	F	Prior Years	S		FY 2016			FY 2017		FY	/ 2018 Ba	se	F'	Y 2018 OC	0	F	Y 2018 Tot	tal
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)															
J. NCM3 Concurrency and Interoperability	-	-	-	-	-	0.238	-	-	3.974	-	-	-	-	-	-	-	-	-
L. Information Assurance	-	-	-	-	-	1.638	-	-	-	-	-	-	-	-	-	-	-	-
Subtotal: Support Cost	-	-	458.788	-	-	17.769	-	-	25.023	-	-	14.563	-	-	-	-	-	14.563
Gross/Weapon System Cost	-	-	471.472	1,307.304	23	30.068	2,666.667	15	40.000	1,455.619	21	30.568	-	-	-	1,455.619	21	30.568

Seco	ndary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	12	9	12	-	12
	Total Obligation Authority	15.635	24.807	12.227	-	12.227
ANG	Quantity	7	4	4	-	4
	Total Obligation Authority	9.171	9.654	12.227	-	12.227
AR	Quantity	4	2	5	-	5
	Total Obligation Authority	5.262	5.539	6.114	-	6.114
Total:	Quantity	23	15	21	-	21
Secondary Distribution	Total Obligation Authority	30.068	40.000	30.568	-	30.568

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0173 / Aviation Combined Arms Tactical Trainer	Item Number / Title [DODIC]: NA0173 / Aviation Combined Arms
2003/(100110	TVAOT7 A VIOLIOTI COMBINED ATTIS TUCICAL TRAINER	Tactical Trainer

	0			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
NCM3 Suite		2017	Cymstar / Broken Arrow, OK	SS / FFP	ACC Orlando, FL	Mar 2017	Mar 2018	3	3,000.000	Υ		
Technology Refresh <sup>(†)</sup>		2018	Cole Engineering Services, Inc I Orlando, FL	C / FFP	ACC Orlando, FL	Apr 2018	Apr 2019	21	762.140	N		
Virtualization		2016	Cole Engineering Services, Inc <i>I</i> Orlando, FL	C / FFP	ACC Orlando FL	Apr 2016	Apr 2017	14	196.140	N		
Virtualization		2017	Cole Engineering Services, Inc I Orlando, FL	C / FFP	ACC Orlando FL	May 2017	May 2018	12	200.000	N		
HVAC Obsolescence		2016	Applied Companies / Valencia, CA	C / CPFF	ACC Orlando, FL	May 2016	Oct 2016	9	394.780	N		

<sup>(†)</sup> indicates the presence of a P-21

#### Remarks:

NCM3 Suite - Procurement are options on existing contracts exercised in 2QFY17. The one-year lead time is based upon historical data for the amount of time required to produce and deliver an NCM3.

Technology refresh - Award date is for award of a new task order to an existing IDIQ contract. Tech refresh in 2018 includes replacement of obsolete data switches, partial replacement of electronic control loading servo control switches, and modernization of manned module computers.

Virtualization - Award dates are for awards of new task orders to an existing IDIQ contract. The award in 2016 includes upgrading the system computers, to include Risk Management Framework and host based security system (HBSS), Cyber Security computers. The quantity includes 2 labs worth of systems. The award in 2017 includes upgrades to the training environment and Semi Autonomous Forces computers (SAF).

HVAC Obsolescence - Procurement are options on existing contracts exercised in 2QFY17 for 9 units.

Exhibit P	-21, Pro	oducti	on Sc	hedul	le: F\	/ 201	8 Arm	У														Date	e: Ma	y 201	7				
<b>Appropri</b> 2035A / 0		Budge	et Acti	vity /	Budg	get Sı	ıb Ac	tivity	<b>'</b> :		<b>Line</b> 0173		-			∖rms ¯	Factio	al Tra	ainer			NA0	173 <i>I</i>		ion C	[DOI ombir	DIC]: ned A	rms	
		lements in Each)								Fiscal Y	ear 2016	;										Fiscal Y	ear 2017						E
			ACCEPT									(	Calendar	Year 201	6								Cale	ndar Yea	r 2017				] [
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Technology Re	efresh																												
1 2018	ARMY	21	0	21																									
					0 C	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J J	n 1	A U G	S E P	0 C	N O V	D E C	J A N	F E B	M A R	A P R	M A	N N	n 1	A U G	S E P	

Exh	ibit	Date: May 2017   Subject   Subject																												
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Techi	nology	Refresh									<u> </u>								·											
1	2018	8 ARMY	21	0	21		_					Α -	-	-	-	-	-	-	-	-	-	-	-	5	5	5	6			1
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Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 70	P-1 Line Item Number / Title: NA0173 / Aviation Combined Arms Tactical Trainer	Item Number / Title [DODIC]: NA0173 / Aviation Combined Arms
2000/(100110	TWO TTO TAVIATION COMBINED AIMS TRETICAL TRAINER	Tactical Trainer

		Produc	ction Rates (Each	/ Year)				Procurement Le	adtime (Months)			
MFR						In	nitial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	Cole Engineering Services, Inc - Orlando, FL	1	6	21	0	6	3	19	0	0	0	0

#### Remarks:

Note - Lead Times are estimates based on historical information.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 70:

NA0176 / Gaming Technology In Support of Army Training

Training Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	39	12	32	10	-	10	-	12	10	-	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	39.416	9.793	11.543	5.406	-	5.406	3.454	10.483	5.395	4.179	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	39.416	9.793	11.543	5.406	-	5.406	3.454	10.483	5.395	4.179	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	39.416	9.793	11.543	5.406	-	5.406	3.454	10.483	5.395	4.179	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1,010.667	816.083	360.719	540.600	-	540.600	-	873.583	539.500	-	Continuing	Continuing

# **Description:**

The Games for Training (GFT) Program prepares Soldiers and leaders for combined arms maneuver operations for Force 2025 and beyond in support of the Joint Force and allies with tailorable and scalable training and mission rehearsal capabilities. Gaming Technology provides an application to train and rehearse convoy-operations, platoon level, mounted infantry tactics, dismounted operations, rules-of-engagement training, cross-cultural communications training, Improvised explosive device (IED) defeat training, route clearance, ground air coordination, Unmanned Aerial Vehicle (UAV) integration, and other small unit and individual training and mission rehearsal requirements. The GFT program satisfies the Active, the National Guard, and the Army Reserves' educational requirements in the Operational, Institutional, and Self-Development Training Domains with a low-overhead, flexible, persistent training capability on geo-specific and geo-typical terrain that is relevant with all military platforms and weapon systems. GFT comprehensively trains Company and below formations to operate in today's dynamic combat environment. GFT trains higher multi-echelon units and staffs without troops to meet Combatant Commanders' requirements.

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	1	15	10	-	10	-	11	9	-
	Total Obligation Authority	2.664	4.505	3.136	-	3.136	1.152	5.999	2.932	1.393
ANG	Quantity	11	15	-	-	-	-	1	-	-
	Total Obligation Authority	4.665	4.645	1.135	-	1.135	1.151	2.421	1.131	1.393
AR	Quantity	-	2	-	-	-	-	-	1	-
	Total Obligation Authority	2.464	2.393	1.135	-	1.135	1.151	2.063	1.332	1.393
Total:	Quantity	12	32	10	-	10	-	12	10	-
Secondary Distribution	Total Obligation Authority	9.793	11.543	5.406	-	5.406	3.454	10.483	5.395	4.179

Justification:

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Exhibit P-40, Budget Line Item Justification: FY 2018	8 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activit 2035A: Other Procurement, Army / BA 03: Other Suppo Training Equipment		P-1 Line Item Number / 7 NA0176 / Gaming Techno	Title: ology In Support of Army Training
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B I	tems: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A	-		
competency on technical skills necessary to perform multiple mission the procurement hardware technical refresh of ten systems and performillation will also provide other commercial and Government off-the-shelf gam Management will provide program management, engineering and tech distribution, repository of content and tech support of the VBS3 and gallotter training Environment (ITE).  The Flyaway cost increase from FY16 to FY17 listed on the P-5 is a second content and technique.	a types in accordance with current ta orm concurrency of the Virtual Battle de software applications used to train chnical oversight, contract support a gaming software for the Army training result of the required refresh for the amework (RMF) requirements for infind; this information is not accurately	actics, techniques and procedures espace 3 (VBS3) Flagship software in Active, Reserve, and Army Natio and travel for the GFT program. Going community. GFT is a critical program of previously procured Gaming Hatormation assurance regulations. For reflected in the P-5 and P-5a and	anal Guard soldiers in a PC based, shared environment. Government overnment Furnished Material provides a Web Portal for the centralized gram enabling other virtual and constructive training capabilities and the ardware Suites. The increase in unit cost after FY16 is due to increase Y17 unit costs for New Gaming Hardware Suites and Gaming Hardware I will be updated in the next available future cycle. FY17 Software,
In accordance with Section 1815 of the FY 2008 National Defense Aidefense missions, domestic emergency responses, and providing mi	,	item is necessary for use by the A	ctive and Reserve components of the Armed Forces for homeland

LI NA0176 - Gaming Technology In Support of Army Tra... Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 80: Test N10000 / Calibration Sets Equipment

Measure and Dig Equipment (TMD) ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604746A

Line Item MDAP/MAIS Code: N/A

Line item indai /inaio code: 11//												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	186	190	66	123	-	123	111	86	152	133	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	291.558	4.650	4.963	5.564	-	5.564	8.515	4.459	3.964	4.022	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	291.558	4.650	4.963	5.564	-	5.564	8.515	4.459	3.964	4.022	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	291.558	4.650	4.963	5.564	-	5.564	8.515	4.459	3.964	4.022	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	1,567.516	24.474	75.197	45.236	-	45.236	76.712	51.849	26.079	30.241	Continuing	Continuing

#### **Description:**

Calibration Sets Equipment (CALSETS) consists of calibration instrumentation housed in fixed facilities or contained within tactical shelters with accompanying power generation equipment. The CALSETS instrumentation provides support to maintenance units and area support organizations from brigade to multi-theater sustainment operations and ensures a cascading transfer of precision accuracy originating from the US National Institute of Standards and Technology (NIST). The calibration sets are designed to support 90 percent of the Army test, measurement and diagnostic equipment (TMDE) workload with an objective of 98 percent. The instruments and equipment procured through this program are assembled into several set configurations (AN/GSM-286, AN/GSM-287, AN/GSM-439, and AN/GSM-440, and Reference) and two tactical calibration shelters (AN/GSM-705 and AN/GSM-421A(V)2). These calibration standards sets are integral to verifying the accuracy of TMDE with mandated traceability to accuracy standards. State-of-the-art calibration equipment is required to ensure that advanced technology weapons and systems are maintained at the required state of operational readiness. Systems supported by the Calibration Sets include, but are not limited to, unmanned aerial vehicles (Shadow); military signal and electronic intelligence operations; tactical and strategic communications (Single Channel Ground and Airborne Radio System (SINCGARS)); and ground, missile and aviation platforms such as the Army Family of Medium Tactical Vehicles (FMTV), Abrams, Multiple Launch Rocket System, Patriot, Apache, Blackhawk and Chinook

Army Acquisition Objective (AAO): AN/GSM-286 - 45; AN/GSM-287 - 67; AN/GSM-439 - 37; AN/GSM-440 - 32; AN/GSM-705 - 26; AN/GSM-421A(V)2 - 26; AN/GSM-26(V)1 - 161; AN/GSM-26(V)2 - 37; AN/GSM-401 - 32; AN/GSM-401 GSM-422 - 1: Secondary Reference Standards Set - 11

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	129	40	48	-	48	69	47	96	82
	Total Obligation Authority	3.157	2.779	4.459	-	4.459	3.907	2.437	2.504	2.480
ANG	Quantity	61	26	75	-	75	42	39	56	51
	Total Obligation Authority	1.493	2.184	1.105	-	1.105	4.608	2.022	1.460	1.542
Total:	Quantity	190	66	123	-	123	111	86	152	133
Secondary Distribution	Total Obligation Authority	4.650	4.963	5.564	-	5.564	8.515	4.459	3.964	4.022

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Exhibit P-40, Budget Line Item Justification	: FY 2018 Army		<b>Date</b> : May 2017	
Appropriation / Budget Activity / Budget Su 2035A: Other Procurement, Army / BA 03: Oth Measure and Dig Equipment (TMD)		P-1 Line Item Num N10000 / Calibratio		
ID Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B It	ems: N/A	Other Related Program Elements: 0604746A	
Line Item MDAP/MAIS Code: N/A	,	_		
Justification: FY 2018 base procurement dollars in the amount of \$5.56 signal generators and multi-function electrical calibrators pressure indicators (to support Army pitot-static test equip	(to support various electronic test, measuremen	t and diagnostic equipme	Tactical Calibration Shelter. This funding will also acquire low put used on aviation, communication, missile and radar systems	phase noise and pneumatic
In accordance with Section 1815 of the FY 2008 National defense missions, domestic emergency responses, and p		tem is necessary for use	by the active and reserve components of the Armed Forces for	homeland

LI N10000 - Calibration Sets Equipment Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 80: Test | MB4000 / Integrated Family Of Test Equipment (IFTE)

Measure and Dig Equipment (TMD) ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604746A

**Date:** May 2017

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	1,437	1,296	699	658	2	660	748	848	783	789	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	694.592	36.187	29.781	30.144	7.500	37.644	29.763	27.771	33.878	40.492	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	694.592	36.187	29.781	30.144	7.500	37.644	29.763	27.771	33.878	40.492	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	694.592	36.187	29.781	30.144	7.500	37.644	29.763	27.771	33.878	40.492	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	483.363	27.922	42.605	45.812	3,750.000	57.036	39.790	32.749	43.267	51.321	Continuing	Continuing

#### Description:

The Integrated Family of Test Equipment (IFTE) includes the Maintenance Support Device (MSD) for at-system automatic test support and the Next Generation Automatic Test System (NGATS) for consolidation of off-system automatic test and diagnostic equipment requirements. The IFTE systems provide electronic fault isolation, diagnostic and repair capabilities at all levels of maintenance and do it more cost effectively than system-specific testers. They are designed to and are capable of supporting multiple weapons systems. The MSD fleet consists of portable rugged and light (non-rugged) test and diagnostic equipment used at all levels of maintenance to automatically diagnose electronic and automotive subsystems of the Army's ground and aviation weapon systems. The MSD systems provide test and diagnostic support and maintenance automation capabilities that are critical to the readiness of Army units and their equipment. They host interactive electronic technical manuals and expert diagnostics systems, conduct intrusive testing in support of Army weapons and electronic systems, and provide a means to upload/download mission-critical software into weapon system on-board computer electronics. The MSDs are being fielded to support approved Army force structure requirements. They will host the Digital Logbook and Global Combat Support System-Army (GCSS-A) software, provide Army maintainers the capability to connect to the logistics enterprise, and perform maintenance management in an information-enabled environment. The MSDs are the Army's standard at-system test and diagnostic equipment. They are an essential maintenance tool in the support plans for the Army's ground vehicle and aviation fleets, and are in widespread use in deployed units. The NGATS is a mobile, rapidly deployable, reconfigurable general-purpose automatic test and diagnostic system which provides sustainment level maintenance testing and screening directly to the Army's major weapons systems in order to maintain the readiness and availability of those combat systems. NGATS maintains backward compatibility with previous IFTE versions, is Joint Services Next-Generation Test (NxTest) compliant, and includes interservice testing and diagnostic support capability. It is capable of satisfying field, sustainment and depot level requirements for fault isolation, diagnostics and off-system repair of current and future weapons systems. NGATS will be the single automatic test and diagnostic solution in the Army by incrementally replacing the Direct Support Electrical Systems Test Set (DSESTS), all previous IFTE Base Shop Test Facility versions, and depot system-specific automatic test equipment. It is the platform for transitioning Agile Rapid Global Combat Support System (ARGCS) technologies into the Army's weapon system support structure. The ARGCS Advanced Concept Technology Demonstration (ACTD) was sponsored by the Department of Defense (DoD), and all Services are expected to transition demonstrated technologies into their automatic test system (ATS) programs. The NGATS eliminates the requirement for the 1970s era DSESTS and reduces the associated logistics burden and cost of support. It implements a modern test and diagnostic capability to support the new generation of ground-based targeting and observation sensor packages for individual, crew and intelligence gathering systems and equipment such as Stryker Remote Weapons Station (RWS), Improved Tube-launched Optically-tracked Wire-guided missile (TOW) Acquisition System (ITAS), Common Remotely Operated Weapons Station (CROWS) and Common Missile Warning System (CMWS) and also has the ability to improve the testing and diagnostic support of legacy weapons systems.

Army Acquisition Objective (AAO): MSD - 39,612; NGATS - 173

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 80: Test | MB4000 / Integrated Family Of Test Equipment (IFTE)

Measure and Dig Equipment (TMD) ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604746A

Line Item MDAP/MAIS Code: N/A

Seconda	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	132	74	66	2	68	75	83	73	80
	Total Obligation Authority	13.656	16.737	20.224	7.500	27.724	15.160	16.741	14.160	21.265
ANG	Quantity	932	500	525	-	525	539	409	379	384
	Total Obligation Authority	18.040	10.435	8.797	-	8.797	12.628	5.897	14.574	14.080
AR	Quantity	232	125	67	-	67	134	356	331	325
	Total Obligation Authority	4.491	2.609	1.123	-	1.123	1.975	5.133	5.144	5.147
Total: Secondary Distribution	Quantity	1,296	699	658	2	660	748	848	783	789
	Total Obligation Authority	36.187	29.781	30.144	7.500	37.644	29.763	27.771	33.878	40.492

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 80: Test MB4000 / Integrated Family Of Test Equipment (IFTE)

Measure and Dig Equipment (TMD) ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604746A

Line Item MDAP/MAIS Code: N/A

	Exhibits Schedule		,		Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)						
P-5	MB4002 / Maintenance Support Device	P-5a	Α		1,435 / 580.228	1,293 / 25.028	695 / 14.493	652 / 10.925	- / -	652 / 10.925	
P-5	MB4004 / Next Generation Automatic Test System (NGATS)	P-5a, P-21	В		2 / 114.364	3 / 11.159	4 / 15.288	6 / 19.219	2 / 7.500	8 / 26.719	
P-40	Total Gross/Weapon System Cost				1,437 / 694.592	1,296 / 36.187	699 / 29.781	658 / 30.144	2 / 7.500	660 / 37.644	

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$30.144 million support acquisition of 6 Next Generation Automatic Test Systems (NGATS) and 652 Maintenance Support Devices (MSD) to satisfy critical test and diagnostic requirements of Army warfighting systems and to support a balanced investment strategy for the Army's approved force structure requirements. Acquisition of the NGATS will continue deployment of a multi-purpose, multi-echelon off-platform automatic test and diagnostic capability to support many of the Army's weapons platforms such as Abrams, Bradley, Counter Radio-Controlled Improvised Explosive Device (RCIED) Electronic Warfare (CREW) Duke, Stryker, Common Remotely Operated Weapons Station (CROWS) M777, Paladin Integrated Management (PIM), Tube-launched Optically-tracked Wire-quided (TOW), Avenger and Multiple Launch Rocket System and to achieve the stated Department of Defense (DoD) goal of replacing multiple single function, aging, obsolete and costly automatic test systems with a single tester capable of supporting all weapons systems at field, sustainment and depot maintenance levels. This funding implements the net-centric logistics capability ensuring maintenance data is leveraged at all support levels through a closed loop data sharing architecture that supports the future logistics concepts as well as improved diagnostics by linking embedded diagnostics and condition-based maintenance. Acquisition of the MSDs will satisfy approved Army force structure requirements. This equipment provides critical test and diagnostics support for weapons and support systems such as the Abrams, Bradley, Stryker, Blackhawk, Chinook, Apache, Patriot, Mine-Resistant Ambush-Protected (MRAP) vehicle, and the Army's diesel-powered tactical wheeled vehicles.

FY 2018 Overseas Contingency Operations (OCO) procurement dollars in the amount of \$7.500 million supports acquisition of 2 NGATS in support of acceleration of Army Prepositioned Stocks-2 (APS-2).

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

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Exhibit P-5, Cost Analysis: FY 2018 Army **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: 2035A / 03 / 80 MB4000 / Integrated Family Of Test Equipment (IFTE) MB4002 / Maintenance Support Device MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): A **FY 2016 FY 2018 Base Prior Years** FY 2017 **FY 2018 OCO** FY 2018 Total Resource Summary Procurement Quantity (Units in Each) 1.435 1.293 695 652 Gross/Weapon System Cost (\$ in Millions) 580.228 25.028 14.493 10.925 10.925 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 580.228 25.028 14.493 10.925 10.925 \_ Plus CY Advance Procurement (\$ in Millions) \_ Total Obligation Authority (\$ in Millions) 580.228 25.028 14.493 10.925 10.925 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) \_ Gross/Weapon System Unit Cost (\$ in Thousands) 404.340 19.357 20.853 16.756 16.756 Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. **Prior Years** FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total Total Total Total Total Total Total **Unit Cost Unit Cost** Qty Cost **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty **Unit Cost** Qty Qty Cost Cost Cost Cost Cost Cost Elements (Each) (\$ M) (\$ K) (Each) (Each) (\$ M) (Each) (Each) (Each) (\$ M) (\$ K) (\$ M) (\$ K) (\$ K) (\$ M) (\$ K) (\$ M) (\$ K) Hardware Cost Recurring Cost MSD/MSD Internal Combustion Engine 15.700 21,489 337.374 11.725 1.293 15.160 11.164 695 7.759 11.270 3.674 11.270 326 3.674 326 (ICE) (Rugged)<sup>(†)</sup> MSD/MSD ICE 8.558 326 2.790 8.558 326 2.790 (Light)<sup>(†)</sup> Subtotal: Recurring Cost 337.377 15.160 6.464 7.759 6.464 Non Recurring Cost Support Equipment/ 1.480 Accessories Subtotal: Non Recurring 1.480 Cost 6.464 Subtotal: Hardware Cost 337.377 16.640 7.759 6.464 Package Fielding Cost Recurring Cost New Equipment Training/Fielding 3.908 0.532 0.525 0.594 0.594 Support Shipping Equipment to 0.486 0.110 0.060 0.056 0.056 the Field Subtotal: Recurring Cost 4.394 0.642 0.585 0.650 0.650 -\_ -\_ Subtotal: Package Fielding 4.394 0.642 0.585 0.650 0.650 Cost Logistics Cost

LI MB4000 - Integrated Family Of Test Equipment (IFT... Army

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P-1 Line #175

Exhibit P-5, Cost Analysis: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 80

P-1 Line Item Number / Title:

MB4000 / Integrated Family Of Test Equipment (IFTE)

MB4002 / Maintenance Support Device

ID Code (A=Service Ready, B=Not Service Ready): A

MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total **Prior Years** Total Total Total Total Total Total **Unit Cost** Qtv Cost **Unit Cost** Qtv Cost **Unit Cost** Qtv Cost **Unit Cost** Qtv Cost Unit Cost Qtv Cost **Unit Cost** Qtv Cost Cost Elements (\$ K) (Each) (\$ M) Recurring Cost Technical and Logistics Data/ 0.190 0.190 Services Technical Publications 0.138 0.138 Subtotal: Recurring Cost --\_ -0.328 \_ -0.328 Subtotal: Logistics Cost 0.328 0.328 Support - Initial Spares and Repair Parts Cost Initial Spares and Repair 0.296 0.176 0.179 0.179 Parts Subtotal: Support - Initial Spares and Repair Parts 0.296 0.176 0.179 0.179 Cost Support - Production Engineering Cost Production Engineering 10.905 4.811 4.437 0.520 0.520 Subtotal: Support -10.905 4.811 4.437 0.520 0.520 Production Engineering Cost Support - Program Management Cost Government 7.134 0.779 0.417 0.706 0.706 Management Subtotal: Support - Program 7.134 0.779 0.417 0.706 0.706 Management Cost Support - Quality Assurance Cost Quality Assurance 0.463 0.087 0.070 0.071 0.071 Subtotal: Support - Quality 0.463 0.087 0.070 0.071 0.071 Assurance Cost Support - System Engineering Cost System Engineering 219.955 1.773 0.806 -1.018 1.018 Subtotal: Support - System 219.955 1.773 0.806 1.018 1.018 Engineering Cost Support - System Technical Support (STS) Cost System Technical 0.141 0.141 Support (STS) Subtotal: Support - System Technical Support (STS) 0.141 0.141 Support - System Test and Evaluation Cost Test and Evaluation 0.243 0.848 0.848 Support

LI MB4000 - Integrated Family Of Test Equipment (IFT... Army

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P-1 Line #175

Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 80

P-1 Line Item Number / Title:
MB4000 / Integrated Family Of Test Equipment (IFTE)

MB4002 / Maintenance Support Device

ID Code (A=Service Ready, B=Not Service Ready): A MDAP/MAIS Code:

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

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	Prior Years			FY 2016			FY 2017		FY 2018 Base			FY 2018 OCO			FY 2018 Total			
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)									
Subtotal: Support - System Test and Evaluation Cost	-	-	-	-	-	-	-	-	0.243	-	-	0.848	-	-	-	-	-	0.848
Gross/Weapon System Cost	404.340	1,435	580.228	19.357	1,293	25.028	20.853	695	14.493	16.756	652	10.925	-	-	-	16.756	652	10.925

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	129	70	60	-	60
	Total Obligation Authority	2.497	1.449	1.005	-	1.005
ANG	Quantity	932	500	525	-	525
	Total Obligation Authority	18.040	10.435	8.797	-	8.797
AR	Quantity	232	125	67	-	67
	Total Obligation Authority	4.491	2.609	1.123	-	1.123
Total:	Quantity	1,293	695	652	=	652
Secondary Distribution	Total Obligation Authority	25.028	14.493	10.925	-	10.925

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018	Army	Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 80	MB4000 / Integrated Family Of Test Equipment (IFTE)	MB4002 / Maintenance Support Device

			, , , , , , , , , , , , , , , , , , , ,										
Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date	
MSD/MSD Internal Combustion Engine (ICE) (Rugged)		2016	Miltope Corporation / Hope Hull, AL	C / FFP	ACC-New Jersey	Jul 2016	Sep 2016	1,293	11.730	Y			
MSD/MSD Internal Combustion Engine (ICE) (Rugged)		2017	TBS (1) / TBD (1)	C / FFP	ACC-New Jersey	Jan 2017	Jul 2017	695	11.164	Y		Apr 2016	
MSD/MSD Internal Combustion Engine (ICE) (Rugged)		2018	TBS (1) / TBD (1)	C / FFP	ACC-New Jersey	Jun 2018	Jan 2019	326	11.270	Y		Jun 2017	
MSD/MSD ICE (Light)		2018	TBS (2) / TBD (2)	C / FFP	ACC-New Jersey	Jun 2018	Sep 2018	326	8.560	Y		Jun 2017	

#### Remarks:

Unit costs vary from year to year depending upon the configurations purchased to meet projected fielding requirements. Maintenance Support Device (MSD) systems are costed and programmed normally with 60 percent of the MSD fleet equipped with an Internal Combustion Engine (ICE) test adapter kit (MSD-ICE).

UNCLASSIFIED **Date:** May 2017 Exhibit P-5, Cost Analysis: FY 2018 Army Appropriation / Budget Activity / Budget Sub Activity: Item Number / Title [DODIC]: P-1 Line Item Number / Title: MB4004 / Next Generation Automatic 2035A 1 03 1 80 MB4000 / Integrated Family Of Test Equipment (IFTE) Test System (NGATS) MDAP/MAIS Code: ID Code (A=Service Ready, B=Not Service Ready): B **Resource Summary Prior Years** FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total Procurement Quantity (Units in Each) Gross/Weapon System Cost (\$ in Millions) 114.364 11.159 15.288 19.219 7.500 26.719 Less PY Advance Procurement (\$ in Millions) Net Procurement (P-1) (\$ in Millions) 114.364 11.159 15.288 19.219 7.500 26.719 Plus CY Advance Procurement (\$ in Millions) Total Obligation Authority (\$ in Millions) 114.364 11.159 15.288 19.219 7.500 26,719 (The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.) Initial Spares (\$ in Millions) Gross/Weapon System Unit Cost (\$ in Thousands) 3,719.667 57,182.000 3,822.000 3,203.167 3,750.000 3,339.875 Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding. FY 2016 FY 2017 **FY 2018 Base FY 2018 OCO** FY 2018 Total **Prior Years** Total Total Total Total Total Total Qty **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Unit Cost** Cost **Unit Cost** Qty Cost **Unit Cost** Qty Cost **Cost Elements** (\$ K) (Each) (\$ M) (\$ K) (Each) (\$ M) (\$ K) (Each) (\$ M) (Each) (\$ M) (\$ K) (Each) (\$ M) (Each) (\$ M) (\$ K) (\$ K) Hardware Cost Recurring Cost Next Generation Automatic Test 2.275.889 20.483 2.500.000 7.500 2.500.000 10.000 2.500.000 6 15.000 2.500.000 2 5.000 2.500.000 20.000 System<sup>(†)</sup> 44.363 Support Equipment Subtotal: Recurring Cost 64.846 7.500 -10.000 -15.000 \_ 5.000 20.000 Subtotal: Hardware Cost 64.846 7.500 10.000 15.000 5.000 20.000 Software Cost Recurring Cost Test Program Set 13.629 0.347 0.346 0.346 Support Subtotal: Recurring Cost 0.347 0.346 13.629 \_ -\_ 0.346 Subtotal: Software Cost 13.629 0.347 0.346 0.346 Logistics Cost Recurring Cost Technical and Logistics Data/ 1.277 1.200 0.500 0.300 0.800 Services Subtotal: Recurring Cost 1.277 1.200 0.500 0.300 0.800 0.300 0.800 Subtotal: Logistics Cost 1.277 1.200 0.500 Support - Initial Spares and Repair Parts Cost

LI MB4000 - Integrated Family Of Test Equipment (IFT... Army

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Exhibit P-5, Cost Analysis: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 80

P-1 Line Item Number / Title:
MB4000 / Integrated Family Of Test Equipment (IFTE)

MB4004 / Next Generation Automatic Test System (NGATS)

ID Code (A=Service Ready, B=Not Service Ready): B

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	ı	Prior Years	3		FY 2016			FY 2017		F	1 2018 Ba	se	F'	Y 2018 OC	0	F`	Y 2018 Tot	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Initial Spares and Repair Parts	-	-	14.184	-	-	-	-	-	1.831	-	-	2.000	-	-	1.000	-	-	3.000
Subtotal: Support - Initial Spares and Repair Parts Cost	-	-	14.184	-	-	-	-	-	1.831	-	-	2.000	-	-	1.000	-	-	3.000
Support - Production Enginee	ering Cost																	
Production Engineering	-	-	16.629	-	-	1.030	-	-	1.061	-	-	0.777	-	-	0.273	-	-	1.050
Subtotal: Support - Production Engineering Cost	-	-	16.629	-	-	1.030	-	-	1.061	-	-	0.777	-	-	0.273	-	-	1.050
Support - Program Managem	ent Cost			,														
Government Management	-	-	5.076	-	-	0.828	-	-	0.849	-	-	0.450	-	-	0.150	-	-	0.600
Subtotal: Support - Program Management Cost	-	-	5.076	-	-	0.828	-	-	0.849	-	-	0.450	-	-	0.150	-	-	0.600
Support - System Technical S	Support (STS)	Cost		,														
System Technical Support (STS)	-	-	-	-	-	0.524	-	-	-	-	-	0.492	-	-	0.431	-	-	0.923
Subtotal: Support - System Technical Support (STS) Cost	-	-	-	-	-	0.524	-	-	-	-	-	0.492	-	-	0.431	-	-	0.92
Gross/Weapon System Cost	57,182.000	2	114.364	3,719.667	3	11.159	3,822.000	4	15.288	3,203.167	6	19.219	3,750.000	2	7.500	3,339.875	8	26.719

Sec	ondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	3	4	6	2	8
	Total Obligation Authority	11.159	15.288	19.219	7.500	26.719
Total:	Quantity	3	4	6	2	8
Secondary Distribution	Total Obligation Authority	11.159	15.288	19.219	7.500	26.719

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	rmy	Date: May 2017
		Item Number / Title [DODIC]: MB4004 / Next Generation Automatic Test System (NGATS)

	00			Method/Type or		Award	Date of First	Qty	Unit Cost	Specs Avail	Date Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Next Generation Automatic Test System <sup>(†)</sup>		2016	Boeing Company / St. Louis	C / FFP	ACC-Picatinny	Jan 2016	Jan 2017	3	2,500.000			
Next Generation Automatic Test System <sup>(†)</sup>		2017	Boeing Company / St. Louis	C / FFP	ACC-Picatinny	Jan 2017	Jan 2018	4	2,500.000	Y		
Next Generation Automatic Test System <sup>(†)</sup>		2018	Boeing Company / St. Louis	C / FFP	ACC-Picatinny	Jan 2018	Jan 2019	8	2,500.000	Y		

<sup>&</sup>lt;sup>(†)</sup> indicates the presence of a P-21

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Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 80	P-1 Line Item Number / Title:  MB4000 / Integrated Family Of Test Equipment (IFTE)	Item Number / Title [DODIC]: MB4004 / Next Generation Automatic Test System (NGATS)

		Produc	ction Rates (Each	/ Year)				Procurement Lea	adtime (Months)			
MFR						Init	tial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
1	Boeing Company - St. Louis	1	10	30	8	8	12	20	0	4	12	16

#### Remarks:

Production rates are annual rates.

Note: Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 10,000 and 999,999 all quantities are shown in thousands. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

**UNCLASSIFIED** LI MB4000 - Integrated Family Of Test Equipment (IFT...

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 80: Test N11000 / Test Equipment Modernization (TEMOD)

Measure and Dig Equipment (TMD) ID Code (A=Service Ready, B=Not Service Ready): A

Program Elements for Code B Items: N/A

Other Related Program Elements: 0604746A

Line Item MDAP/MAIS Code: N/A

Line item inda /inale code: 11//												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	616	409	593	790	-	790	391	300	293	157	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	315.085	9.383	7.482	7.771	-	7.771	12.034	10.758	9.917	10.060	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	315.085	9.383	7.482	7.771	-	7.771	12.034	10.758	9.917	10.060	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	315.085	9.383	7.482	7.771	-	7.771	12.034	10.758	9.917	10.060	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request:	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	511.502	22.941	12.617	9.837	-	9.837	30.777	35.860	33.846	64.076	Continuing	Continuing

# Description:

The Test Equipment Modernization (TEMOD) program improves the materiel readiness of Army weapon systems; minimizes general-purpose Test, Measurement, and Diagnostic Equipment (TMDE) proliferation and obsolescence; and also reduces the Army's operations and support costs. These objectives are accomplished through the cost-effective acquisition of state-of-the-art test equipment that is employed for verifying accuracy, operability and safety of Army weapon systems and for supporting those systems at all maintenance levels. The TEMOD program procures general-purpose TMDE that supports all Army commodities and is essential to the continued support of weapon system platforms such as the Abrams Tank, Bradley Fighting Vehicle, Apache Helicopter, Patriot, and Single-Channel Ground and Airborne Radio System (SINCGARS), as well as other weapon systems scheduled for fielding to the current and future forces.

Army Acquisition Objective (AAO): Telecommunications System Test Set - 412; Oscilloscope (High End) - 495; Oscilloscope (Low End) - 1294; Radio Frequency (RF) Power Meter Test Set - 586

Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	176	397	337	-	337	167	128	125	67
	Total Obligation Authority	4.035	3.804	3.318	-	3.318	5.138	4.594	4.220	4.296
ANG	Quantity	152	128	295	-	295	146	112	109	59
	Total Obligation Authority	3.472	2.394	2.899	-	2.899	4.489	4.013	3.693	3.752
AR	Quantity	81	68	158	-	158	78	60	59	31
	Total Obligation Authority	1.876	1.284	1.554	-	1.554	2.407	2.151	2.004	2.012
Total:	Quantity	409	593	790	-	790	391	300	293	157
Secondary Distribution	Total Obligation Authority	9.383	7.482	7.771	-	7.771	12.034	10.758	9.917	10.060

Justification:

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Exhibit P-40, Budget Line Item Justification: FY 2018	3 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity 2035A: Other Procurement, Army / BA 03: Other Support (TMD)		P-1 Line Item Nu N11000 / Test Eq	
D Code (A=Service Ready, B=Not Service Ready): A	Program Elements for Code B Ite	ems: N/A	Other Related Program Elements: 0604746A
Line Item MDAP/MAIS Code: N/A			
End Oscilloscope and the Low End Oscilloscope. The Telecommunic Oscilloscope will be used to test, adjust, repair and align communicational electronic systems. The RF Power Meter Test Set is a solid-state low-power transmitter, signal generator, standing wave ratio and return the standard set of the stand	cations System Test Set analyzes signons and electronic systems. The Loe, microprocessor based RF microword loss measurements with directionals and incur unnecessary risks for A	gnal quality between co ow End Oscilloscope w att meter. It has the ab al couplers and slotted	nications System Test Set, the Radio Frequency (RF) Power Meter, the High communication systems to ensure data exchange accurately. The High End ill be a hand-held portable device used to adjust, repair, and align communications polity to measure oscillator power, gain, insertion loss, RF attenuation, and antenna, lines on radios, satellite communication systems and RADAR systems (Sentinel uipment. By using a streamlined acquisition process, the TEMOD program realizes
In accordance with Section 1815 of the FY 2008 National Defense Audefense missions, domestic emergency responses, and providing mili	,	tem is necessary for us	se by the active and reserve components of the Armed Forces for homeland

LI N11000 - Test Equipment Modernization (TEMOD) Army

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

M62550 / M25 STABILIZED BINOCULAR

Other Support Equipment

oort Equipment

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ID Code (A=Service Ready, B=Not Service Ready): A
Line Item MDAP/MAIS Code: N/A

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	378	447	-	447	348	453	460	472	-	2,558
Gross/Weapon System Cost (\$ in Millions)	13.288	-	3.149	3.956	-	3.956	3.717	4.000	4.000	4.000	-	36.110
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	13.288	-	3.149	3.956	-	3.956	3.717	4.000	4.000	4.000	-	36.110
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	13.288	-	3.149	3.956	-	3.956	3.717	4.000	4.000	4.000	-	36.110
(The following	Resource Sumr	nary rows are fo	or informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	8.331	8.850	-	8.850	10.681	8.830	8.696	8.475	-	14.116

# **Description:**

The Stabilized Binocular provides the Soldier, both mounted and dismounted, with enhanced target acquisition capability. The M25 is a high powered (14X magnification), hand held binocular which uses a gyro stabilizer to compensate for resolution degrading effects of using a hand held high powered optic and/or certain moving vehicular scenarios. The M25A1 is a smaller, lighter weight stabilized binocular which will allow the warfighter to more effectively perform mission than with the heavier version of the M25. The authorized Army Acquisition Objective (AAO) is 11,654.

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	378	447	-	447	348	453	460	472
	Total Obligation Authority	-	3.149	3.956	-	3.956	3.717	4.000	4.000	4.000
Total:	Quantity	-	378	447	-	447	348	453	460	472
Secondary Distribution	Total Obligation Authority	-	3.149	3.956	-	3.956	3.717	4.000	4.000	4.000

#### Justification:

FY 2018 Base procurement dollars in the amount of \$3.956 million supports the Active Army by procuring 447 M25A1 Stabilized Binoculars.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

M80101 / Rapid Equipping Soldier Support Equipment

Other Support Equipment

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

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Ellic Itelli IIIDAI /IIIAlo Gode: 11// (												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	2,901.343	30.403	26.503	5.000	8.500	13.500	10.000	10.000	10.000	10.000	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	2,901.343	30.403	26.503	5.000	8.500	13.500	10.000	10.000	10.000	10.000	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	2,901.343	30.403	26.503	5.000	8.500	13.500	10.000	10.000	10.000	10.000	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	d elsewhere.)			ĺ	
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

The Rapid Equipping Force (REF) supports Combatant Command (COCOM)/Army Service Component Command (ASCC) based on emerging rapid equipment requirements. The REF is an enduring organization (Base funded) per Memorandum, Under Secretary of the Army, 30 Jan 2014, subject: Implementation Plan for Stabilization of the Rapid Equipping Force (REF).

The REF is the Army's Quick Reaction Capability (QRC) with the ability to acquire, integrate and sustain Commercial-Off-The Shelf (COTS), Government Off-The-Shelf (GOTS), Non-Developmental Item (NDI), and non-standard equipment solutions to meet urgent combat requirements for globally employed forces. It inserts selected future force technologies, capabilities, and surrogate material solutions into deployed, deploying, select-prepared to deploy, and transformational forces for operational evaluation, assessment, and evolutionary development. The REF assesses the provided capabilities to improve future solutions to inform material development for the future Army capability requirements and to potentially transition the capability to an Army acquisition program.

The REF bridges the gap between the Army's traditional acquisition process and immediate equipping needs. The REF pursues tangible solutions that can be equipped rapidly with a goal of 180 days. The REF focuses on finding immediate and effective game-changing capabilities to increase U.S. Army Force readiness, effectiveness, protection, and lethality in any operational environment. The REF 10-Liner process provides the ability to react quickly to an ever-changing enemy who changes in days and months, not years in a complex world. The REF coordinates with the COCOMs/ASCCs in theater to fully understand their urgent needs, for which the REF acquisition capability may identify, procure, deliver, and sustain solutions to the deployed units. Although the REF works directly with Operational Commanders at all levels, it focuses on Brigade level and below to equip solutions to identified capability gaps.

The Army Acquisition Executive designated Program Executive Office (PEO) Soldier as the Milestone Decision Authority (MDA) to institutionalize the acquisition authorities in support of the REF and to provide proper acquisition oversight while enhancing visibility of these efforts. The MDA will ensure flexibility and speed focused on the needs of Soldiers serviced by the dedicated REF Program Management Office (PMO). This establishes a formal acquisition reporting chain that leverages existing reporting venues to ensure appropriate Assistant Secretary of the Army /Acquisition Logistics/Technology (ASA (ALT) visibility, oversight, and direction.

Secondary	Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	30.403	26.503	5.000	8.500	13.500	10.000	10.000	10.000	10.000
	•									

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

M80101 / Rapid Equipping Soldier Support Equipment

Other Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Secondary	/ Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	30.403	26.503	5.000	8.500	13.500	10.000	10.000	10.000	10.000

#### Justification:

FY18 procurement dollars in the amount of \$5.000 million (Base) and \$8.500 million (OCO) meets urgently needed state-of-the-art technology for immediate warfighter needs for deployed and pre-deploying forces across all ASCCs of the COCOMs and the Global Response Force (GRF).

The FY18 OCO funding is required to support emerging requirements to meet capability gaps in Operation Freedom Sentinel (OFS), Operation Inherent Resolve (OIR), Operation Atlantic Resolve (OAR), Horn of Africa (HOA), and all other OCO funded operations/regions.

The REF may purchase technologies to support: Tactical Satellite Communications (SATCOM) and communications systems; tactical and small Combat Out Post/Forward Operating Base (COP/FOB) Intelligence, Surveillance, and Reconnaissance (ISR) and Force Protection systems; Counter Unmanned Aerial Systems (CUAS); Electronic Warfare (EW); Non-Tactical Vehicles (NTV); Persistent Duration UAS, and Subterranean (SubT) Operations capabilities.

The REF capabilities cross all Warfighter Functions:

- 1. Mission and Command
- 2. Movement and Maneuver
- 3. Intelligence
- 4. Fires
- Sustainment
- 6. Protection

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Page 2 of 2

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA0780 / Physical Security Systems (OPA3)

Other Support Equipment

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

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Line item inda milato ocae: 11/7												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	10	11	16	19	-	19	20	26	20	26	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	1,846.347	52.100	44.082	60.047	-	60.047	53.902	60.814	62.627	79.962	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	=	-	-	-	-	-	-	=	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1,846.347	52.100	44.082	60.047	-	60.047	53.902	60.814	62.627	79.962	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1,846.347	52.100	44.082	60.047	-	60.047	53.902	60.814	62.627	79.962	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	184,634.700	4,736.364	2,755.125	3,160.368	-	3,160.368	2,695.100	2,339.000	3,131.350	3,075.462	Continuing	Continuing

# **Description:**

Physical Security Systems (MA0780) protect vulnerable critical assets and infrastructure from determined, highly motivated and skilled intruders. Physical Security Systems include the Standard Intrusion Detection Systems (SIDS) (MA0781), the Commercial Intrusion Detection System (CIDS) (MA0782) and Other Physical Security Measures Equipment (MA0783). SIDS includes the Integrated Commercial Intrusion Detection System (ICIDS) program. Other Physical Security Measures Equipment includes the Automated Installation Entry (AIE) program and other efforts consistent with Office of Provost Marshal General (OPMG) security measures.

The Physical Security program's goal is to provide enhanced security to Units, Installations and Facilities. The Physical Security/Force Protection programs minimize risks and vulnerabilities by providing Commanders with the appropriate levels of protection through the use of available technology to safeguard personnel and Army assets. By increasing protection to personnel, facilities and equipment, the program supports unit readiness and deployment by reducing the vulnerability of Units and Installations from intruder and terrorist threats.

The ICIDS program consists of commercially available interior and exterior sensors, response, entry control, electronic surveillance and command and control devices. ICIDS protects critical national assets, special compartmented information facilities, conventional munitions storage areas, non-nuclear missiles and rockets in a ready to fire configuration, sensitive munitions and other mission essential assets. ICIDS provides the capability for Commanders to detect, assess and respond to unauthorized entry or attempted intrusion into their facilities. The system provides security to Units, Installations and Facilities while minimizing the number of security guards required. Additionally, the item includes ICIDS at new or modified facilities. ICIDS supports a balanced investment strategy for the Army approved force structure and requirements.

CIDS provides security measures for conventional arms, ammunition and explosive storage facilities, sensitive compartment information facilities, areas designed as mission essential and vulnerable and other high risk targets. Risks and vulnerabilities are minimized by providing Commanders with the appropriate levels of protection through the use of available technology to safeguard personnel and Army assets. Equipment also protects personnel, facilities and equipment from terrorist or criminal threats. The program supports unit readiness and deployment by reducing Unit and Installation vulnerability and supports the upgrades of the IDS for arms, ammunition and explosives arms vaults and ammunition supply point bunkers for National Guard Facilities that are non-compliant with current Army Directives. Additionally, the item includes IDSs at new or modified facilities. CIDS supports a balanced investment strategy for the Army's approved force structure and requirements. Equipment further protects personnel, facilities and equipment from terrorist or criminal threats. The program supports Unit readiness and deployment by reducing Unit and Installation vulnerability.

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA0780 / Physical Security Systems (OPA3)

Other Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

P-1 Line #179

Line Item MDAP/MAIS Code: N/A

Other Physical Security Measures Equipment includes the Automated Installation Entry (AIE) system which complies with DTM 09-012 for Access Control Standards that includes identity proofing and vetting to determine fitness of an individual requesting and/or requiring access to Installations and issuance of local access credentials. AIE satisfies the OPMG's Automated Access Control Standards. Installation of AIE will also meet recommendation 3.9 of the DOD Independent Review related to Ft Hood, TX.

Secondar	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	11	16	19	-	19	20	26	20	26
	Total Obligation Authority	52.100	44.082	60.047	-	60.047	53.902	60.814	62.627	79.962
Total:	Quantity	11	16	19	-	19	20	26	20	26
Secondary Distribution	Total Obligation Authority	52.100	44.082	60.047	-	60.047	53.902	60.814	62.627	79.962

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA0780 / Physical Security Systems (OPA3)

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)					
P-5	MA0781 / Standardized Intrusion Detection Systems	P-5a, P-21	Α		- / 309.750	2 / 10.778	2 / 10.218	5 / 19.552	- / -	5 / 19.552
P-5	MA0782 / Commercial Intrusion Detection Systems (IDS)	P-5a			7 / 246.241	3 / 5.134	6 / 5.490	6 / 6.325	- / -	6 / 6.325
P-5	MA0783 / Other Physical Security Measures Equip	P-5a, P-21			3 / 1,290.356	6 / 36.188	8 / 28.374	8 / 34.170	- / -	8 / 34.170
P-40	Total Gross/Weapon System Cost				10 / 1,846.347	11 / 52.100	16 / 44.082	19 / 60.047	- 1 -	19 / 60.047

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding.

#### Justification:

FY18 Base procurement funding in the amount of \$60.047 million provides funding for SIDS (MA0781) in the amount of \$19.552 million, CIDS (MA0782) in the amount of \$6.325 million and Other Physical Security Measures Equipment in the amount of \$34.170 million.

FY18 Base procurement funding the amount of \$19.552 million provides installation of ICIDS (MA0781) at five (5) sites: Iowa AAP, IA; Camp Parks, CA; Devens, MA; Richardson, AK; and Blue Grass AD, KY. Funding supports a balanced investment strategy for the Army approved force structure and requirements. All quantities and funding is for Active Components.

FY18 Base procurement funding in the amount of \$6.325 million for CIDS (MA0782) supports procuring six (6) sites of modernized integrated physical security equipment for intrusion detection and assessment, access control, electronic surveillance and force protection equipment at Army Reserve and National Guard Facilities and some Active Army locations. Funding provides security measures for conventional arms. ammunition and explosive storage facilities, sensitive compartment information facilities and other areas containing assets for which policy requires Intrusion Detection Systems. Risks and vulnerabilities are minimized by providing Commanders with the appropriate levels of protection through the use of available technology to safeguard personnel and Army assets. Funding supports a balanced investment strategy for the Army's approved force structure and requirements. All quantities and funding is for Active Components.

FY18 Base procurement funding in the amount of \$34.170 million procures AIE (MA0783) systems at eight (8) sites: Pine Bluff, AR; Redstone Arsenal, AL; Dugway PG, UT; Ft. Huachuca, AZ; Ft. Lee, VA; Ft. Campbell, KY: Ft. Riley, KS: and Rivanna Station, VA: and Access Control Point Equipment Program (ACPEP). The AIE systems will be installed to protect Army force projection platforms and high priority Installations. The system complies with DTM 09-112 for Access Control Standards that include identity validation and vetting to determine fitness of an individual requesting and/or requiring access to installations. The AIE system satisfies the OPMG's Automated Access Control Standards. Installation of AIE will also meet recommendation 3.9 of the DOD Independent Review related to Ft. Hood, TX. ACPEP provides standardized access control point configurations. All quantities and funding is for Active Components.

In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), these items are necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestic emergency responses, and providing military support to civil authorities.

							Ur	ICLAS	SIFIEL	)											
Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: N	May 2017						
<b>Appropriation / B</b> 2035A / 03 / 90	11 1 5 7 5								P-1 Line Item Number / Title: MA0780 / Physical Security Systems (OPA3)								Item Number / Title [DODIC]: MA0781 / Standardized Intrusion Detection Systems				
ID Code (A=Service Read	y, B=Not Servi	ce Ready) :	A						МІ	DAP/MAIS	Code:		l.								
F	Resource	Summ	ary			Prior Yea	ars	FY 20	16	FY	2017	FY	2018 Bas	e	FY 2018 (	осо	FY 2018	Total			
Procurement Quantity (Uni	ts in Each)						-		2			2		5		-					
Gross/Weapon System Co	st (\$ in Million	s)					309.750		10.778		10.	218	19	0.552		-		19.55			
Less PY Advance Procure	ment (\$ in Mil	lions)					-					-		-		-					
Net Procurement (P-1) (\$ i	n Millions)						309.750		10.778		10.	218	19	0.552		-		19.55			
Plus CY Advance Procure		lions)					-					-		-		-		-			
Total Obligation Authorit	•						309.750		10.778		10.	218	19	.552		-		19.55			
(TI	ne followina l	Resource Si	ummary row	s are for info	rmational p	urposes only	The corresi	nondina hud	aet reauest	s are docume	ented else	where )									
Initial Spares (\$ in Millions)	· · · · · · · · · · · · · · · · · · ·					,	-	g	-			-		-		-		_			
Gross/Weapon System Ur	nit Cost (\$ in 7	Thousands)					-		5,389.000		5,109.	000	3.910	0.400		-		3.910.40			
	(,				l				-,	l	-,		-,-					-,-			
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	ot be exact o	r sum exactl	y due to rou	ınding.							-		1						
	F	rior Years	S		FY 2016			FY 2017		FY	/ 2018 Ba	ase	FY	′ 2018 C	СО	F	Y 2018 Tot	al			
Cost Elements	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost			
	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)	(\$ K)	(Each)	(\$ M)			
Flyaway Cost  Recurring Cost																					
Hardware <sup>(†)</sup>	_		20.298	4,561.000	2	9.122	3,576.000	2	7.152	3,190.000		15.950	) -			3,190.000	5	15.95			
Government Program									0.900			1.393									
Management Support SETA Contract	-	-	4.233	-	-	0.508	-	-	0.900	-	-	1.393	-	-	-	-	-	1.39			
Support	-	-	1.856	-	-	0.257	-	-	1.199	-	-	1.223	-	-	-	-	-	1.22			
Prime Contractor PM	-	-	1.934	-	-	0.891	-	-	0.967	-	-	0.986		-	-	-	-	0.98			
Subtotal: Recurring Cost	-	-	28.321	-	-	10.778	-	-	10.218	-	-	19.552		-	-	-	-	19.55			
Subtotal: Flyaway Cost	-	-	28.321	-	-	10.778	-	-	10.218	-	-	19.552	?  -	-	-	-	-	19.55			
Support - Data Cost			281.429	_				_				T				_					
Support Data Data Subtotal: Support - Data	-	-	281.429	-		-	-	-	-	-		-	-	-	-	-	-	-			
Cost	-	-	201.429	-	-	-	-	-	-	-		-	-	-	-	-	-	-			
Gross/Weapon System Cost	-	-	309.750	5,389.000	2	10.778	5,109.000	2	10.218	3,910.400		19.552	-	-	-	3,910.400	5	19.55			
	Sec	ondary Di	stribution				FY	2016		FY 2017			2018 ise		FY 2018 OCO		FY 201 Total				
Army		Qua	ntity						2		2			5		-					
			al Obligation A	uthority				10.7	_		10.218		19.552			-		19.55			
Total:		Qua	intity						2		2			5		-					

LI MA0780 - Physical Security Systems (OPA3) Army

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Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 90	MA0780 / Physical Security Systems (OPA3)	MA0781 / Standardized Intrusion
		Detection Systems
ID Code (A-Samine Book), B-Not Samine Book) : A	MDAP/MAIS Codo:	

ID Code (A=Service F	Ready, B=Not Service Ready) : A	WIDAP/WAIS CODE	MDAP/MAIS Code:						
	Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
Secondary Distribution	Total Obligation Authority	10.778	10.218	19.552	-	19.552			

<sup>(†)</sup> indicates the presence of a P-5a

Exhibit P-5a, Procurement History and Planning: FY 2018 A	<b>Date:</b> May 2017	
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 90	MA0780 / Physical Security Systems (OPA3)	MA0781 / Standardized Intrusion
		Detection Systems

Cost Elements	0 0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
Hardware <sup>(†)</sup>		2016	Minuteman Security Solutions / New Bern, NC	C / IDIQ	NATICK, MA	Mar 2016	Dec 2017	2	4,561.000	Y		
Hardware <sup>(†)</sup>		2017	Minuteman Security Solutions / New Bern, NC	C / IDIQ	NATICK, MA	Mar 2017	Sep 2018	2	3,576.000	Y		
Hardware <sup>(†)</sup>		2018	Minuteman Security Solutions / New Bern, NC	C / IDDQ	Natick, MA	Mar 2018	Jul 2019	5	3,190.000	Y		

<sup>&</sup>lt;sup>(†)</sup> indicates the presence of a P-21

Ext	nib	oit P	P-21, Pro	oduct	ion Sc	hedu	le: F	<b>/</b> 201	8 Arm	ıy														Date	e: Ma	y 201	7				
			i <b>ation</b> / 1 03 / 90	Budge	et Acti	vity /	Bud	get Si	ub Ac	tivity	•	1			Num sical				s (OP	PA3)				MAC	)781 <i>I</i>		dardiz	[DOI zed In	DIC]: ntrusio	n	
				lements in Each)								Fiscal Y	ear 2016	1							,			Fiscal Y	ear 2017	,					В
					ACCEPT									(	Calendar	Year 201	16								Caler	ndar Year	r 2017				Ĺ
O F C R O #	1 =    -	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2015	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	n n	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U	J U	A U G	S E P	A N C E
Hard	lwar	re			<u>'</u>		·						<u>'</u>		·		<u> </u>	<u>'</u>	·	·					·						
1	1 2	2016	ARMY	2	0	2						Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	1 2	2017	ARMY	2	0	2																		Α -	-	-	-	-	-	-	
1	1 2	2018	ARMY	5	0	5																									
•							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J J	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

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Exh	nik	it P	P-21, Pro	oduct	ion Sc	hedu	le: F	Y 2018	3 Arm	y														Date	e: Ma	y 201	7				
			iation / 1 03 / 90	Budge	et Acti	vity /	Bud	get Sı	ıb Ac	tivity	:						<b>Title:</b> ity Sy	stems	(OP	'A3)				MAC		Stan	dardiz	[DOE zed In	OIC]: trusion	n	
				lements in Each)								Fiscal Y	ear 2018											Fiscal Y	ear 2019						В
					ACCEPT									C	alendar	Year 201	8								Caler	ndar Yea	r 2019				L
O F	Λ =    -	FY	SERVICE	PROC QTY	PRIOR TO 1 OCT 2017	BAL DUE AS OF 1 OCT	0 C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J J	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	A N C E
Hard	lwar	е	'										,	,	,			<u> </u>			,	'						,			
1	1 2	2016	ARMY	2	0	2	-	-	1	-	-	-	-	-	1																0
1	1 2	2017	ARMY	2	0	2	-	-	-	-	-	-	-	-	-	-	-	2												ĺ	0
1	1 2	2018	ARMY	5	0	5		,				Α -	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	2
							O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	

Ex	hil	oit F	P-21, Pro	oducti	on Sc	hedu	le: F\	/ 201	8 Arm	ıy														Date	e: Ma	y 201	7				
			iation / 03 / 90	Budge	et Acti	vity /	Budç	get S	ub Ac	tivity	<b>':</b>		<b>Line</b> .0780		-				s (OP	PA3)				MAC		Stan	dardiz	[DOI zed In		n	
	Cost Elements																														
	(Units in Each) Fiscal Year 2020 Fiscal Year 2021 A  ACCEPT   Calendar Year 2020 Calendar Year 2021 L  PRIOR BAL   ACCEPT   A A A																														
0   C   O	F R	FY	SERVICE	PROC QTY	J A N	F E B	M A R	A P R	M A Y	J U N	J U L	A U G	S E P	O C T	N O V	D E C	J A N	F E B	M A R	A P R	M A Y	N N	n n	A U G	S E P						
Har	dwa	re																													
	_		ARMY	2		0																									
4	_	2017	ARMY	2		0			1	1 .	1																				
	1	2018	ARMY	5	3	2	1	-	-	1			1 .		1 .					1											+
							O C T	N O V	E C	A N	F E B	M A R	P R	M A Y	U	U L	U G	S E P	O C T	N O V	E C	A N	F E B	M A R	A P R	M A Y	N N	n n	A U G	S E P	
																															_

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity:		Item Number / Title [DODIC]:
2035A / 03 / 90	MA0780 / Physical Security Systems (OPA3)	MA0781 / Standardized Intrusion
		Detection Systems

		Product	tion Rates (Each /	Month)				Procurement Lea	adtime (Months)			
MFR						In	itial			Reo	rder	
Ref #	Manufacturer Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1	ALT Prior to Oct 1	ALT After Oct 1	Manufacturing PLT	Total After Oct 1
	Minuteman Security Solutions - New Bern, NC	1	1	10	0	4	6	10	0	0	0	0

#### Remarks:

Contract Option years are awarded in Mar of the FY. ICIDS Installations take approximately 12 to 18 months to complete from award of Task Order, extremely large installations can take up to 30 months to complete. A = Active Component (COMPO1)ANG = National Guard (COMPO2)AR = Army Reserve (COMPO3)

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 90	P-1 Line Item Number / Title: MA0780 / Physical Security Systems (OPA3)	Item Number / Title [DODIC]: MA0782 / Commercial Intrusion Detection Systems (IDS)
ID Code (A=Service Ready, R=Not Service Ready)	MDAP/MAIS Code:	

Resource Summary	Prior fears	F1 2016	F1 2017	F1 2018 Base	F 1 2018 OCO	F 1 2018 10tai
Procurement Quantity (Units in Each)	7	3	6	6	-	6
Gross/Weapon System Cost (\$ in Millions)	246.241	5.134	5.490	6.325	-	6.325
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	246.241	5.134	5.490	6.325	-	6.325
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	246.241	5.134	5.490	6.325	-	6.325
(The following Resource Summary rows are for informati	ional purposes only. The cor	responding budget requests	are documented elsewher	re.)		
Initial Spares (\$ in Millions)	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	35,177.286	1,711.333	915.000	1,054.167	-	1,054.167

Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.

	F	Prior Years	;		FY 2016			FY 2017		F	/ 2018 Bas	se	F	7 2018 OC	0	F	/ 2018 Tot	al
Cost Elements	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	<b>Qty</b> (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Hardware <sup>(†)</sup>	35,177.286	7	246.241	1,711.333	3	5.134	915.000	6	5.490	1,054.167	6	6.325	-	-	-	1,054.167	6	6.325
Subtotal: Recurring Cost	-	-	246.241	-	-	5.134	-	-	5.490	-	-	6.325	-	-	-	-	-	6.325
Subtotal: Flyaway Cost	-	-	246.241	-	-	5.134	-	-	5.490	-	-	6.325	-	-	-	-	-	6.325
Gross/Weapon System Cost	35,177.286	7	246.241	1,711.333	3	5.134	915.000	6	5.490	1,054.167	6	6.325	-	-	-	1,054.167	6	6.325

Secondar	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	3	6	6	-	6
	Total Obligation Authority	5.134	5.490	6.325	-	6.325
Total:	Quantity	3	6	6	=	6
Secondary Distribution	Total Obligation Authority	5.134	5.490	6.325	-	6.325

<sup>(†)</sup> indicates the presence of a P-5a

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Exhibit P-5a, Procurement History and Planning: FY 2018 A	rmy	<b>Date</b> : May 2017
	P-1 Line Item Number / Title: MA0780 / Physical Security Systems (OPA3)	Item Number / Title [DODIC]: MA0782 / Commercial Intrusion Detection Systems (IDS)

	0		•	Method/Type			Date			Specs	Date	
	C			or		Award	of First	Qtv	Unit Cost	Avail	Revision	RFP Issue
Cost Elements	0	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	(Each)	(\$ K)	Now?	Available	Date
Hardware		2018	TBS / TBS	C / Various	Various	Mar 2018	Dec 2018	6	1,054.170	Y		

#### Remarks:

Procurement items are Commercial Off The Shelf (COTS) from various vendors TBD.

Exhibit P-5, Cost	Analysis	: FY 20	18 Army										1	Date: Ma	ay 2017			
<b>Appropriation / B</b> 2035A / 03 / 90	Budget Ad	ctivity /	Budget 9	Sub Acti	vity:			Number / sical Secu			DPA3)		ľ		/ Other	•	DIC]: Security	
ID Code (A=Service Read	dy, B=Not Servi	ce Ready):							М	DAP/MAIS	Code:							
F	Resource	Summa	ary		Р	rior Yea	irs	FY 201	6	FY	2017	FY 2	2018 Bas	e F	Y 2018 (	oco	FY 2018	Total
Procurement Quantity (Un	its in Each)						3		6			3		8		-		
Gross/Weapon System C	ost (\$ in Million	s)				1,	290.356		36.188		28.37	1	34	.170		-		34.17
Less PY Advance Procure	ement (\$ in Mill	ions)					-		-		-			-		-		
Net Procurement (P-1) (\$	in Millions)	-				1,	290.356		36.188		28.37	1	34	.170		-		34.17
Plus CY Advance Procure	ement (\$ in Mill	ions)					-		-		-			-		-		
Total Obligation Authori	ty (\$ in Millions	)				1,	290.356		36.188		28.37	1	34	.170		-		34.17
(T	he following F	Resource Su	ımmary rows	s are for info	rmational pui	rposes only	. The corresp	onding budge	t requests	s are docum	ented elsewh	ere.)						
Initial Spares (\$ in Millions)						<u>-</u>	-		-		-			-		-		
Gross/Weapon System U	nit Cost (\$ in T	housands)				430,	118.667	6,	031.333		3,546.75	)	4,271	.250		-		4,271.25
Note: Subtotals or Totals	in this Exhibit	P-5 may no	t be exact o	r sum exactly	due to roun	dina.												
		rior Years			FY 2016	g-		FY 2017		FY	/ 2018 Base	•	FY	2018 OC	0	F	Y 2018 Tota	al
Cost Elements	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost		Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
Flyaway Cost	(\$7.9	(2007.)	(4)	(0.19	(200.1)	(\$)	(#19	(2001)	(\$)	(\$1.9	(2001)	(\$)	(\$1.9	(200.1)	(4)	(#19	(2001)	(\$)
Recurring Cost																		
AIE Hardware <sup>(†)</sup>	320,135.000	4	1,280.540	5,181.000	6	31.086	2,770.375	8	22.163	3,465.375	8	27.723	-	-	-	3,465.375	8	27.72
Government Program Management Support	-	-	3.991	-	-	2.808	-	-	2.829	-	-	2.997	-	-	-	-	-	2.99
SETA Contract Support	-	-	1.873	-	-	1.264	-	-	2.349	-	-	2.396	-	-	-	-	-	2.39
	_	-	3.952	-	-	1.030	-	-	1.033	-	-	1.054	-	-	-	-	-	1.0
ACPEP	-				I						I .	34.170	_	_	_	-	-	34.17
Subtotal: Recurring Cost	-	-	1,290.356	-	-	36.188	-	-	28.374	-	-		-					34.17
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	1,290.356 1,290.356	-	-	36.188 <b>36.188</b>	-	-	28.374 28.374	-	-	34.170	-	-	-	-	-	34.11
Subtotal: Recurring Cost	-		,											-	-	4,271.250		34.17
Subtotal: Recurring Cost Subtotal: Flyaway Cost Gross/Weapon System	430,118.667	3	1,290.356 1,290.356	-	-	36.188	3,546.750	8	28.374	4,271.250	-	34.170 34.170 FY 2	- 018	-	- -Y 2018		FY 201	34.17
Subtotal: Recurring Cost Subtotal: Flyaway Cost Gross/Weapon System Cost	430,118.667	3 ondary Di	1,290.356 1,290.356 stribution	-	-	36.188	-	8	28.374	-	8	34.170 34.170	- - 018 Se	-   	-		8	34.17
Subtotal: Recurring Cost Subtotal: Flyaway Cost Gross/Weapon System	430,118.667	andary Dis	1,290.356 1,290.356 stribution	6,031.333	-	36.188	3,546.750	8 2016	28.374	4,271.250	-	34.170 34.170 FY 2	- 018	F	- -Y 2018	4,271.250	FY 201	34.1 <sup>1</sup>
Subtotal: Recurring Cost Subtotal: Flyaway Cost Gross/Weapon System Cost	430,118.667	andary Dis	1,290.356 1,290.356 stribution ntity Obligation Au	6,031.333	-	36.188	3,546.750	- 8 2016	28.374	4,271.250	8	34.170 34.170 FY 2	- - 018 se	F	- -Y 2018	4,271.250	FY 201	34.1

LI MA0780 - Physical Security Systems (OPA3) Army

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Exhibit P-5a, Procurement History and Planning: FY 2018	Army	<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 90	P-1 Line Item Number / Title: MA0780 / Physical Security Systems (OPA3)	Item Number / Title [DODIC]: MA0783 / Other Physical Security
		Measures Equip

Cost Elements	0 0	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost	Specs Avail Now?	Date Revision Available	RFP Issue Date
AIE Hardware <sup>(†)</sup>		2016	Leidos Inc. / Reston, VA	C / IDIQ	Natick, MA	Jul 2016	Mar 2017	6	5,181.000	_	Available	Date
AIE Hardware <sup>(†)</sup>		2017	Leidos Inc. / Reston, VA	C / IDIQ	Natick, MA	Jul 2017	Mar 2018	8	2,770.375	Y		
AIE Hardware <sup>(†)</sup>		2018	Leidos Inc / Reston, VA	C / IDDQ	Matocl, MA	Jul 2018	Mar 2019	8	3,465.380	Y		

<sup>(†)</sup> indicates the presence of a P-21

OPA3)	Date: May 2017  Item Number / Title [DODIC]:  MA0783 / Other Physical Security Measures Equip  Fiscal Year 2017
OPA3)	MA0783 / Other Physical Security Measures Equip
	Fiscal Year 2017
	Calendar Year 2017
O N D J C O E A T V C N	
	1 1 1
	A -   -
O N D J C O E A T V C N	
	E

Date: May 2017													UN	ICL/	ASSI	FIED	)													
2035A / 03 / 90  MA0780 / Physical Security Systems (OPA3)  MA0783 / Other Physical Security Measures Equip  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year 2019  Fiscal Year 2018  Fiscal Year	Exhibit	P-21, Pro	oducti	on Sc	hedul	e: FY	2018	3 Arm	ıy														Date	: Ma	y 201	7				
Column   Fiscal Year 2018   Fiscal Year 2018   Fiscal Year 2018   Fiscal Year 2019   Fi			Budge	et Acti	vity /	Budg	et Su	ıb Ac	tivity	:								s (OP	'A3)				MA0	783 <i>I</i>	Othe	r Phy			rity	
Calendar Year 2018    ACCEPT   PRIOR   TO 1   DUE   O N D J F M A M J J J A S OF C O O E A E A F A P A U U U U E C N B R R Y N L G P T V C N B R R Y N L G T T V C N T T V C N T T V C N T T V C N T T V C N T T T V C N T T T T T T T T T T T T T T T T T T									,		Fiscal V	ear 2018											Fiscal Ye	ar 2019			,			В
O         F         N         PROC QTY         TO1 OCT AS OF QTY         DUE AS OF CQTY         O         N         D         A         PROC QTY         N         B         R         N         D         B         R         N         D         B         R         N         D         B         R         N         D         B         R         N         D         B         R         N         D         B         R         N         D         B         R         N         D         D         D         B         N		ACCEPT									1100011			Calendar	Year 20	18							11000110			2019				L
Prior Years Deliveries: 4  1 2016 ARMY 6 3 3 1 2  1 2017 ARMY 8 0 8 0 8 1 2 1 1 1 2  2 2018 ARMY 8 0 8 0 8 1 2 2 1  3 2018 ARMY 8 0 8 0 8 1 2 2 1  4 2018 ARMY 8 0 8 0 8 1 2 2 1  4 2018 ARMY 8 0 8 0 8	O F C R	SERVICE		TO 1 OCT	DUE AS OF	С	0	E	Α	E	Α	P	Α		J U	U	E	С	0	E	A	E	Α	Р	A		J U L	U	S E P	A N C
1     2016     ARMY     6     3     3     1     2       1     2017     ARMY     8     0     8     -     -     -     -     1     1     1     1     2       2     2018     ARMY     8     0     8     -	AIE Hardward	re																												
1     2017     ARMY     8     0     8     -     -     -     -     1     -     2     1     1     1     2       2     2018     ARMY     8     0     8     -	Prior Years D	Deliveries: 4																												
2 2018 ARMY 8 0 8 A 1 2 2 2 1						1	2		1	I		1	T -																	
				-	-	-		-	-	-	1	-	2	1	1	<u> </u>							1	2	2		1	1		
C	2 2016	5 ARMY	0	U	0										J	A U	S	0	N O	D E	J A	F E		A P	M A	J	J	A U G	S E P	

Exhibit P-21, Production Schedule: FY 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 90	P-1 Line Item Number / Title: MA0780 / Physical Security Systems (OPA3)	Item Number / Title [DODIC]: MA0783 / Other Physical Security
		Measures Equip

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MFR						lni	tial			Reo	rder	
Ref	Manufacturer				ALT	ALT	Manufacturing	Total	ALT	ALT	Manufacturing	Total
#	Name - Location	MSR For 2018	1-8-5 For 2018	MAX For 2018	Prior to Oct 1	After Oct 1	PLT	After Oct 1	Prior to Oct 1	After Oct 1	PLT	After Oct 1
1	Leidos Inc Reston, VA	1	1	20	0	8	0	8	0	0	0	0
2	Leidos Inc - Reston, VA	1	1	20	0	8	0	8	0	0	0	0

<sup>&</sup>quot;A" in the Delivery Schedule indicates the Contract Award Date.

**Note:** Due to space limitations, quantities in the Exhibit P-21 delivery calendar are truncated and rounded based on the maximum quantity in the calendar as follows. If the maximum quantity is less than or equal to than 9,999, all quantities are shown as each. If the maximum quantity is between 1,000,000 and 999,999,999 all quantities are shown in millions (rounded to the nearest thousand). If the maximum quantity is equal or greater than 1,000,000,000 all quantities are shown in billions (rounded to the nearest million).

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MB7000 / Base Level Common Equipment

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Line item widar/wais code. N/A												
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
resource ourimary	10015	1 1 2010	1 1 2017	Dasc		iotai	1 1 2010	1 1 2020		1 1 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	545.106	1.870	2.168	13.239	-	13.239	6.716	14.517	14.607	14.699	-	612.922
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	545.106	1.870	2.168	13.239	-	13.239	6.716	14.517	14.607	14.699	-	612.922
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	545.106	1.870	2.168	13.239	-	13.239	6.716	14.517	14.607	14.699	-	612.922
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

This program procures Base-level commercially available equipment from a list authorized by the Table of Distribution and Allowances (TDA) for Army activities but is not Army centrally managed or purchased. Equipment unit cost must meet the currently approved Expense-Investment threshold of \$250,000.00. The equipment supports recurring and generic activities typically performed by garrisons, such as material and cargo handling, engineering and public works, port and terminal operations support. Procures new investment items or replacements for existing equipment that is over-aged, obsolete, or beyond economical repair.

Installation Management Commands existing BCE fleet is fifteen to forty years old and exceeds overall programmed life expectancy and Army set Maintenance Expenditure Limits (MEL). Equipment is becoming more difficult to repair after years of continual heavy use and repair parts are limited or not available due to discontinuation by the manufacture causing longer and more frequent down times. Continued maintenance is increasingly cost prohibitive and competes with other critical Base Operations Services for resources. When new procurement is not possible, garrisons turn to leasing equipment at an extremely high cost, over 45% more expensive over the life of the vehicle, to meet mission requirements. If resources do not keep pace with IMCOM's aging fleet, safety risks rise, equipment readiness suffers, and mission support will be compromised as equipment continues to fail.

A Scanning Electron Microscope is one of the most advanced pieces of forensic equipment in a Criminal Investigation Command laboratory. It one of the most sensitive instruments for elemental analysis of materials. The majority of examinations are geared to the analysis of crystalline materials. It serves multiple functions in scientific investigations of materials associated with sexual assaults, assaults, homicides, suicides, arsons, burglaries, shooting investigations, IED investigations, etc. In conjunction with the elemental analysis using SEM/EDS/WDS, the XRD is able to conclusively identify the manner in which elements in a compounds are associated (bonded). The impact to the laboratory of not completing the life cycle replacement would be to significantly limit the laboratory's ability to conduct investigations which require explosives analysis, soil analysis, and most significantly the identification of molecular structure of crystalline materials. The requirement must be obtained in order to meet electrical, mechanical and other installation requirements. If not funded, the completion, occupation, relocation, and ability to complete mission functions will be adversely effected. If the current microscope is not replaced, the aging instrument could fail or result in evidence pertaining to homicides and sexual assault cases not being analyzed in a timely manner due to outdated software and incompatibility with Army networks.

	Secondary	Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Α	rmy	Quantity	-	-	-	-	-	-	-	-	-
		Total Obligation Authority	1.870	2.168	13.239	-	13.239	6.716	14.517	14.607	14.699

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MB7000 / Base Level Common Equipment

Other Support Equipment

ID Code (A=Service Ready, B=Not Service Ready):

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

Secondary	y Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	1.870	2.168	13.239	-	13.239	6.716	14.517	14.607	14.699

#### Justification:

FY 2018 funding in the amount of \$13.239 million procures the following:

In FY18, Installation Management Command (IMCOM) will use \$12.768 million to procure 32 essential equipment items. This includes Bulldozers (5), Cranes (3), Dump Trucks (1), Excavators (2), Front End Loaders (2), Road Graders (11), Scrapers (3), Snow Plow/Blowers (2), Tractors (1) and Tub Grinders (2). These items will be used to meet the immediate/daily needs of 10 Installations. Increase from FY17 acknowledges need to reconstitute aging fleet.

Army Criminal Investigation Command requires life cycle replacement for a Scanning Electron Microscope (\$0.471 million) with Energy Dispersive X-ray Spectrometer w/Wavelength Dispersive Spectrometer (SEM-EDS/WDS). The requirement is part of the US Army Criminal Investigation Laboratories continuing effort to modernize and advance its forensic capability. This instrument allows for the investigation of elemental and crystalline structure compounds. By using x-rays, the instrument is able to develop patterns of the x-ray bending properties of compounds, better known as "diffraction patterns". This instrument combines the areas of high magnification microscopy with the ability to conduct analysis of detectable energies in the form of x-rays.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

Other Support Equipment

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

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	57.866	70.661	63.521	65.033	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	57.866	70.661	63.521	65.033	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	57.866	70.661	63.521	65.033	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	budget request	s are documente	d elsewhere.)	•			
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

# **Description:**

This budget line funds Modifications of In-Service Equipment programs. It is used to develop material solutions and also to procure hardware, materials, and the hardware installation cost required to complete the modification. Modifications are performed to correct safety deficiencies; increase mission capabilities and interoperability; extend the useful life; improve supportability; upgrade existing technology; increase efficiency; improve readiness; modernization of legacy communications equipment and links; address obsolescence issues; and to meet new and/or changing statutory 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.

Army Watercraft Systems are categorized under Landing Craft, Towing and Terminal Operations, Ship-to-Shore Enablers and Watercraft Operations Support. Landing Craft consist of 8 Logistic Support Vessels (LSV), 34 Landing Craft Utility 2000 (LCU-2000), 30 Landing Craft Mechanized 8 (LCM-8) MOD 1, and 6 LCM-8 MOD 2 (Watercraft Operations Support). Towing and Terminal Operations consist of 6 Large Tug 800 (LT-800), 16 Small Tug 900 (ST-900), and 4 Barge Derrick Crane 115-ton (BD-115). Ship-to-Shore Enablers consist of 3 Modular Causeway Systems (MCS) [each MCS includes 2 Roll-On/Roll-Off Discharge Facilities (RRDF), 5 Modular Warping Tugs (MWT), 1 Causeway Ferry (CF), 1 Floating Causeway (FC)]. Landing Craft discharge combat equipment or troops to austere beaches, undeveloped coastlines and operate in a non-permissive environment. Towing and Terminal Operations and Ship-to-Shore Enablers support ocean and port/harbor towing/salvage operations. Both are critical in denied/degraded ports, Joint Logistics Over-the-Shore (JLOTS) operations, and operations throughout the littorals.

In addition to the base description above, the Construction Equipment (CE) Modification of In-Service Equipment program funds system modifications and modernization initiatives across the CE portfolio, to include the High Mobility Engineer Excavator, Engineer Rapid Airfield Construction Capability (ERACC), dozers, graders, scrapers, and Hydraulic Excavators (HYEX). These improvements will decrease rising sustainment costs and bridge the gap until new system procurement in future years.

In addition to the base description above, the Material Handling Equipment (MHE) Modification of In-Service Equipment program funds system modifications and modernization initiatives across the MHE portfolio, to include the Rough Terrain Container Handler (RTCH); All-Terrain Lifter, Army System (ATLAS); and Light Capability Rough Terrain Forklift (LCRTF). These improvements will decrease rising sustainment costs and bridge the gap until new system procurement in future years.

Modification kits provide proven capabilities to reduce logistical, resource and operational energy burdens in forward deployed Force Provider base camps resulting in a significant impact on Soldier safety by reducing dangerous and risky resupply missions that result in casualties. In addition to saving lives, this is a fiscally responsible investment as these capabilities have a short return on investment in sustained operations. For example: Energy Efficiency modifications to shelters reduce solar loading by 85% and cooling and heating demands in turn reducing the fuel demand by 35% to power environmental control-ROI

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

is within 180 days; the Power distribution Micro-grid component provides auto on/off capabilities for generators based upon load demand, reducing fuel consumed by over 30%-ROI is with 150 days; and the solid waste disposal piece will provide a safe and efficient capability to dispose of waste generated in the base camp.

The Food Sanitation Center (FSC) will correct safety and operational shortfalls identified by the user and combat developer by retrofitting older FSCs with improvements from the current version. The modification kit includes automatic thermostatic water temperature control and a transfer pump. These modifications will improve operator safety, and overall sanitation effectiveness while reducing water consumption and environmental impact.

The Explosive Ordnance Disposal (EOD) Modification of In-Service Equipment is a new start in FY 2017 and will be used to modify tool kits approved for EOD use. The EOD Response Tool Kit has not been modified or upgraded for more than 25 years. The kits contain special tools and equipment that EOD units use to render safe explosive ordnance. The modification will include adding the capability to provide decontamination for teams, as well as individuals, during suspected or confirmed exposure to chemical elements, adding the capability to locate and render safe Improvised Explosive Devices (IEDs), and modifying the kit packaging into smaller, mission unique kits to provide EOD technicians the ability to perform dismounted operations. The tool kits will be fielded throughout the active Army and National Guard units. The Army Acquisition Objective (AAO) for the EOD Response Tool Kit modification is 548.

The AN/PSS-14 (HSTAMIDS) upgrade will correct safety and reliability/maintainability shortfalls of the system identified by the combat developer and depot operations responsible for the reset and overhaul of this system. The modifications will include new electronic boards, hand controller hardware, and updated software to address the safety performance of the system. These upgrades will require training/fielding of the system to address changes in the system operation from current software/hardware configuration.

The upgrade to the Husky Mounted Detection System (HMDS) Ground Penetrating Radar (GPR) panel (antenna) skins will decrease cuts and abrasions resulting from ground contact and improve the ability of the panels to shed water during heavy rain, which will enhance detection performance and operational availability during inclement weather.

The M41 Protection Assessment Test System (PATS) is a military version of a commercial device - TSI's "Model 8020M Portacount respirator Fit Tester" with the addition of an accessory kit, supplies, and a Nuclear, Biological, and Chemical (NBC) survivable carrying case to comprise a system, and designed to check the readiness of protective masks. The M41 PATS is one man portable, approximately 200 cubic inches in size, weighs 4 pounds, and is based on a miniature Condensation Nucleus Counter that continuously samples and counts individual particles that occur naturally in the surrounding air. The M41 PATS measures the concentration of these particles inside and outside the mask and calculates a Fit Factor (FF). The PATS is designed to verify that a protective mask, while worn by a soldier, is capable of providing a minimum Army requirement FF of 1667. The PATS verifies that: (1) the fit of the mask to the soldiers' face is acceptable, and (2) there are no critical leaks in the mask system. In addition to these features, the PATS can also be used to help screen for unserviceable masks, assist in determining if Preventive Maintenance Checks and Services (PMCS) have been conducted properly on critical components, and assist in training personnel on the proper wearing of the mask. A modernized PATS is needed as the legacy system is no longer manufacturable due to technological obsolescence of critical calibration components. The modernized M41 PATS will have redesigned circuit boards, modern technologies, and updated components so they are producible and manufacturable and can be maintained into FY2035.

The Dry Support Bridge (DSB) is a mobile, rapidly erected, modular military bridging system used by the MRBC. The 40 Meter DSB can span a 40-meter gap or two 20-meter gaps. The 46 Meter DSB can span a 46-meter gap or two 28-meter gaps (with the 46-meter retrofit upgrade). Both have a crossing capability of MLC 96 normal/120 under caution (Wheeled) and MLC 80 (Tracked). The DSB has a road width of 4.3 meters and an emplacement time of 90 minutes or less, with little or no site preparation. The DSB will support the Joint Force Commander's ability to employ and sustain forces throughout the global battle space.

The Rapidly Emplaced Bridge System (REBS) is a self-deployable/retrievable bridge that provides the SBCT, and potentially IBCTs, an organic tactical gap crossing capability. The REBS can be employed by two Soldiers in less than ten minutes and is air transportable by C-130. The system is transported across the battlefield by a CBT and is comprised of two bridge halves and a pallet that is utilized to launch and retrieve the bridge. REBS is capable of crossing a 13 meter gap with an MLC of 40 normal and 50 caution.

Comments: In accordance with Section 1815 of the FY 2008 National Defense Authorization Act (P.L. 110-181), this item is necessary for use by the active and reserve components of the Armed Forces for homeland defense missions, domestics emergency responses, and providing military support to civil authorities.

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Exhibits Schedule				Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-3a	MA4500 / Various (Equipment Upgrade/Technical Insertion/ Modernization/Tactical Bridging)				- / 901.196	- / 64.219	- / 67.367	- / 60.192	- / -	- / 60.192
P-40	Total Gross/Weapon System Cost				- / 901.196	- / 64.219	- / 67.367	- / 60.192	- 1 -	- / 60.192
	Exhibits Schedule				FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Exhibit Type	Title*	Subexhibits	ID CD	MDAP/ MAIS Code	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) I (\$ M)				
P-3a	MA4500 / Various (Equipment Upgrade/Technical Insertion/ Modernization/Tactical Bridging)				- / -	- / -	- / -	- / -	- / -	- / -
P-40	Total Gross/Weapon System Cost				- / 57.866	- / 70.661	- / 63.521	- / 65.033	Continuing	Continuing

<sup>\*</sup>Title represents 1) the Number / Title for Items; 2) the Number / Title [DODIC] for Ammunition; and/or 3) the Number / Title (Modification Type) for Modifications.

#### Justification:

FY 2018 Base procurement dollars in the amount of \$60.192 million supports the following efforts:

Modification Item #1 Army Watercraft Systems - FY 2018 Base procurement dollars in the amount of \$10.281 million primarily supports the correction of safety and regulatory deficiencies. Also supports Program Management/Matrix Support, and upgrades/modifications to Army Watercraft Systems which are completed as required to resolve any safety and/or sustainability issues. Force Protection - lethal and nonlethal Escalation of Force (EoF) issues, technical insertions and other watercraft modifications. These modifications will gain critically required operational improvements or maintain compliance with new and/or changing federal statutory and regulatory mandates in the areas of safety of life at sea (SOLAS) and environmental compliance. Program Management/Matrix Support includes Program Management and System Engineering oversight required to manage the program and provide contractor oversight. Salaries, Benefits, Travel, Personnel Training and other government costs are included for retaining a professional acquisition workforce.

Modification Item #2 Force Provider - FY2018 Base procurement dollars in the amount of \$8,902 million, support production of key modification kits identified as a result of feedback from continued operations over the last 12 years. These requirements are identified in the Capability Production Document (CPD) for Force Provider (Expeditionary)(FPE)). Capabilities include: Resource and Operational Energy efficiency upgrades, micro-grid kits, solid waste disposal, and waste water reuse capability. These modifications significantly decrease sustainment requirements; improve Soldier safety; and provide significant capability. that will allow the base camps to be more effective, adaptable, and more capable in sustaining Soldiers in remote areas. Funding includes production and installation of 32 Microgrid Kits; 8 Solid Waste Disposal Kits; 3 Containerized Ice Making Systems; and 1 Expeditionary Shelter Protection System. Modifications support energy stewardship initiatives in the Army Strategic Plan and integrate threshold operational requirements identified in the Force Provider CPD.

Modification Item #3 Food Sanitation Center - There is no FY2018 funding for this modification item.

Modification Item #4 Explosive Ordnance Disposal Equipment - FY 2018 Base procurement dollars in the amount of \$2.000 million procures modifications to 43 Explosive Ordnance Disposal (EOD) Response Tool Kits. This modernized equipment will increase operational capabilities of EOD units, as well as enhance the safety of EOD soldiers.

Modification Items #5 MHE Technical Insertion - FY 2018 Base Material Handling Equipment (MHE) funding in the amount of \$0.143 million provides upgrades modifications, like new control units, to the ATLAS, RTCH and other MHE systems and supports Program Management/Matrix Support.

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Note: Totals in this Exhibit P-40 set may not be exact or sum exactly due to rounding

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Exhibit P-40, Budget Line Item Justification: FY 201	8 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activit 2035A: Other Procurement, Army / BA 03: Other Support Other Support Equipment			n Number / Title: odification Of In-Svc Equipment (OPA-3)
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B I	tems: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
in accordance with Armor Strategy; Airborne Scraper and Water Dist Transportation requirements. Blade Leveling System for Earthmovin	tributor - modification to meet testing ng Equipment to include Graders, Do	g and armor require ozers and Scrapers	nt of \$5.172 million provides for Armor Kits to support Construction Equipment vehicles ements. Modifications of current Construction Equipment systems to meet Airborne s which will increase the accuracy and efficiency of engineer capability. Mods make s funding is also used for the Item Unique Identification (IUID) Program.
			ridging upgrades: The Dry Support Bridge (DSB) 46 meter retrofit upgrade kits enabling 15%. The Rapidly Emplaced Bridge System (REBS) technical manuals to support
			upports the following: Petroleum and Water Systems (PAWS) will perform updates and This will ensure all systems in the field are the same configuration and have the most up
	itly used in theater. Additionally, FY		million procures modifications to Countermine Clearing Equipment for AN/PSS-14C ement dollars in the amount of \$8.869 million procures new Husky Mounted Detection
Modification Item #10 CBRN Soldier Protection M41 PATS - FY2018 providing rapid instant chemical and biological protection mask fit as:		nount of \$4.783 mil	illion supports the production of 476 M41 Protection Assessment Test System (PATS),
In accordance with Section 1815 of the FY 2008 National Defense A defense missions, domestic emergency responses, and providing missions.		item is necessary f	for use by the active and reserve components of the Armed Forces for homeland

Appropriation / Budget Activity / Budget Sub Activity:  P-1 Line Item Number / Title:  Modification Number / Title:	Exhibit P-3a, Individual Modification: FY 2018 Army		Date: May 2017
2035A 7 03 7 90   MA4500 7 Modification Of In-SVC Equipment (OPA-3)   MA4500 7 Various	1	P-1 Line Item Number / Title: MA4500 / Modification Of In-Svc Equipment (OPA-3)	Modification Number / Title: MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready):  MDAP/MAIS Code:												
Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	-	-	-	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	-	-	-	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	901.196	64.219	67.367	60.192	-	60.192	-	-	-	-	-	-
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	ne corresponding	budget request	s are documente	ed elsewhere.)		:		
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

#### **Description:**

This budget line funds Modifications of In-Service Equipment programs. It is used to develop material solutions and also to procure hardware, materials, and the hardware installation cost required to complete the modification. Modifications are performed to correct safety deficiencies; increase mission capabilities and interoperability; extend the useful life; improve supportability; upgrade existing technology; increase efficiency; improve readiness; modernization of legacy communications equipment and links; address obsolescence issues; and to meet new and/or changing statutory 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.

Exhibit P-3a, Individual Modification: FY 2018 Army **Date:** May 2017 Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: MA4500 / Modification Of In-Svc Equipment (OPA-3) 2035A / 03 / 90 MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

- /10.169

1,696 / 10.169

- /2.420

415 / 2.420

- /2.123

367 / 2.123

Models of Systems Affected: Army Watercraft Systems (AWS), CE/, MHE, Bridging, FSS, PAWS, Countern

Subtotal: Recurring

Subtotal: Food Sanitation Center

**Modification Type:** Equipment Upgrade/Technical

Insertion/Modernization/Tactical Bridging

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Procurement												
Modification Item 1 of 10: Army Watercraft Systems												
A Kits												
Recurring												
Safety/Environmental MWO's//ECP's/TSR's	0 / 8.599	0 / 1.020	0 / 3.964	0 / 2.053	0 / 0.000	0 / 2.053	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Program Management	0 / 2.145	0 / 0.430	0 / 1.183	0 / 1.295	0 / 0.000	0 / 1.295	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Matrix Support	0 / 5.827	0 / 4.661	0 / 3.898	0 / 3.670	0 / 0.000	0 / 3.670	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
C4ISR (Network) Modernization	0 / 22.030	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- / -	- / -	- / -	- 1 -	- 1 -
Training Equipment	0 / 608.689	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /647.290	- /6.111	- /9.045	- /7.018	- /0.000	- /7.018	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Army Watercraft Systems	0 / 647.290	0 / 6.111	0/9.045	0/7.018	0 / 0.000	0 / 7.018	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 2 of 10: Force Provider												,
A Kits												
Recurring												
Kit Quantity	101 / 138.456	386 / 26.504	122 / 14.179	44 / 7.137	0 / 0.000	44 / 7.137	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Engineering Change Orders	0 / 0.900	0 / 0.675	0 / 0.425	0 / 0.250	0 / 0.000	0 / 0.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Data	0 / 0.000	0 / 0.120	0 / 0.120	0 / 0.060	0 / 0.000	0 / 0.060	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Training Equipment	0 / 0.500	0 / 0.200	0 / 0.100	0 / 0.200	0 / 0.000	0 / 0.200	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Support Equipment	0 / 0.000	0 / 0.516	0 / 0.460	0 / 0.125	0 / 0.000	0 / 0.125	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Pm Support	0 / 0.950	0 / 0.870	0 / 0.520	0 / 0.500	0 / 0.000	0 / 0.500	- / -	- / -	- 1 -	- / -	- 1 -	- 1 -
Subtotal: Recurring	- /140.806	- /28.885	- /15.804	- /8.272	- /0.000	- /8.272	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Force Provider	101 / 140.806	386 / 28.885	122 / 15.804	44 / 8.272	0 / 0.000	44 / 8.272	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 3 of 10: Food Sanitation Center												
A Kits												
Recurring												
Kit Quantity	1,696 / 9.238	415 / 2.418	367 / 1.903	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
PM Support	0 / 0.931	0 / 0.002	0 / 0.220	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

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**Related RDT&E PEs:** 

- / -

- / -

Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 90

P-1 Line Item Number / Title:
MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Models of Systems Affected: Army Watercraft Systems (AWS),CE/,MHE,Bridging, FSS, PAWS, Countermine, Explosive Ordnance Disposal

Modification Type: Equipment Upgrade/Technical

Insertion/Modernization/Tactical Bridging

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Modification Item 4 of 10: Explosive Ordnance Disposal (EOD) Equipment R01121												
A Kits												
Recurring												
EOD Response Tool Kit	0 / 0.000	0 / 0.000	256 / 5.048	43 / 1.952	0 / 0.000	43 / 1.952	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /0.000	- /0.000	- /5.048	- /1.952	- /0.000	- /1.952	- / -	- / -	- / -	- / -	- / -	- / -
Non-Recurring					'	'					'	
EOD Response Tool Kit	0 / 0.000	0 / 0.000	0 / 0.068	0 / 0.048	0 / 0.000	0 / 0.048	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Non-Recurring	- /0.000	- /0.000	- /0.068	- /0.048	- /0.000	- /0.048	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Explosive Ordnance Disposal (EOD) Equipment R01121	0 / 0.000	0 / 0.000	256 / 5.116	43 / 2.000	0 / 0.000	43 / 2.000	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 5 of 10: MHE Technical Insertion				1					1	1	-	
A Kits												
Recurring												
Other	0 / 0.359	0 / 0.182	0 / 0.180	0 / 0.143	0 / 0.000	0 / 0.143	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /0.359	- /0.182	- /0.180	- /0.143	- /0.000	- /0.143	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: MHE Technical Insertion	0 / 0.359	0/0.182	0 / 0.180	0/0.143	0 / 0.000	0 / 0.143	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 6 of 10: Construction Equipment Tech Insertion				I				ı	I		1	
A Kits												
Recurring												
Kit Quantity	1,600 / 25.709	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Other	0 / 0.000	0 / 3.207	0 / 4.785	0 / 5.172	0 / 0.000	0 / 5.172	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /25.709	- /3.207	- /4.785	- /5.172	- /0.000	- /5.172	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Construction Equipment Tech Insertion	1,600 / 25.709	0/3.207	0 / 4.785	0/5.172	0 / 0.000	0 / 5.172	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 7 of 10: Bridging												
A Kits												
Recurring												
DSB 46 Meter Bridge	25 / 16.868	10 / 6.500	13 / 8.474	8 / 5.434	0 / 0.000	8 / 5.434	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
M9 ACE	6 / 0.852	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

LI MA4500 - Modification Of In-Svc Equipment (OPA-3) Army

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P-1 Line #181

Related RDT&E PEs:

**Date:** May 2017 Exhibit P-3a, Individual Modification: FY 2018 Army Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title: 2035A / 03 / 90 MA4500 / Modification Of In-Svc Equipment (OPA-3) MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready): MDAP/MAIS Code:

Models of Systems Affected: Army Watercraft Systems (AWS),CE/,MHE,Bridging, FSS, PAWS, Modification Type: Equipment Upgrade/Technical

Insertion/Modernization/Tactical Bridging

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)	Qty (Each) I Total Cost (\$ M										
Subtotal: Recurring	- /17.720	- /6.500	- /8.474	- /5.434	- /0.000	- /5.434	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Bridging	31 / 17.720	10 / 6.500	13 / 8.474	8 / 5.434	0/0.000	8 / 5.434	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 8 of 10: Petroleum/Water Systems			'						'			
A Kits												
Recurring												
Support Equipment	0 / 2.586	0 / 0.204	0 / 0.205	0 / 0.151	0 / 0.000	0 / 0.151	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /2.586	- /0.204	- /0.205	- /0.151	- /0.000	- /0.151	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: Petroleum/Water Systems	0/2.586	0/0.204	0 / 0.205	0 / 0.151	0 / 0.000	0 / 0.151	- / -	- / -	- / -	- / -	- / -	- / -
Modification Item 9 of 10: AN/PSS-14 (HSTAMIDS) and HMDS		I			1	I						
A Kits												
Recurring												
AN/PSS-14	3,406 / 21.941	1,832 / 10.477	754 / 8.076	921 / 11.935	0 / 0.000	921 / 11.935	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
HMDS	0 / 0.000	0 / 0.000	0 / 2.804	0 / 8.426	0 / 0.000	0 / 8.426	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /21.941	- /10.477	- /10.880	- /20.361	- /0.000	- /20.361	- / -	- / -	- / -	- / -	- / -	- / -
Non-Recurring												
AN/PSS-14	0 / 1.104	0 / 1.289	0 / 0.425	0 / 2.272	0 / 0.000	0/2.272	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
HMDS	0 / 0.000	0 / 0.000	0 / 0.148	0 / 0.443	0 / 0.000	0 / 0.443	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Non-Recurring	- /1.104	- /1.289	- /0.573	- /2.715	- /0.000	- /2.715	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: AN/PSS-14 (HSTAMIDS) and HMDS	3,406 / 23.045	1,832 / 11.766	754 / 11.453	921 / 23.076	0/0.000	921 / 23.076	- / -	- / -	- / -	- / -	- / -	- / -
<b>Modification Item 10 of 10:</b> CBRN Soldier Protection - M41 PATS												
A Kits												
Recurring												
Kit Quantity	0 / 0.000	0 / 0.000	330 / 3.000	476 / 4.250	0 / 0.000	476 / 4.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Tech Data	0 / 0.000	0 / 0.000	0 / 0.250	0 / 0.130	0 / 0.000	0 / 0.130	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Program Management	0 / 0.000	0 / 0.000	0 / 0.450	0 / 0.250	0 / 0.000	0 / 0.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
First Article Testing	0 / 0.000	0 / 0.000	0 / 0.358	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Subtotal: Recurring	- /0.000	- /0.000	- /4.058	- /4.630	- /0.000	- /4.630	- / -	- / -	- / -	- / -	- / -	- / -
Subtotal: CBRN Soldier Protection - M41 PATS	0/0.000	0/0.000	330 / 4.058	476 / 4.630	0/0.000	476 / 4.630	- / -	- / -	- / -	- / -	- / -	- / -

LI MA4500 - Modification Of In-Svc Equipment (OPA-3) Army

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P-1 Line #181

Related RDT&E PEs:

Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 90

Date: May 2017

Modification Number / Title:
MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

**Models of Systems Affected:** Army Watercraft Systems (AWS),CE/,MHE,Bridging, FSS, PAWS, Countermine, Explosive Ordnance Disposal

**Modification Type:** Equipment Upgrade/Technical Insertion/Modernization/Tactical Bridging

Related RDT&E PEs:

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Financial Plan	Qty (Each) I Total Cost (\$ M)											
Subtotal: Procurement, All Modification Items	6,834 / 867.684	2,643 / 59.275	1,842 / 61.243	1,492 / 55.896	0 / 0.000	1,492 / 55.896	- / -	- / -	- / -	- / -	- / -	- / -
Installation												
Modification Item 1 of 10: Army Watercraft Systems	0 / 7.149	0 / 3.194	0 / 4.237	0 / 3.263	- 1 -	0 / 3.263	- 1 -	- 1 -	- 1 -	- 1 -	- / -	- 1 -
Modification Item 2 of 10: Force Provider	101 / 0.930	386 / 0.950	122 / 0.650	44 / 0.630	- 1 -	44 / 0.630	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 3 of 10: Food Sanitation Center	1,696 / 0.932	415 / 0.300	367 / 0.347	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 4 of 10: Explosive Ordnance Disposal (EOD) Equipment R01121	0 / 0.000	0 / 0.000	256 / 0.000	43 / 0.000	- 1 -	43 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 5 of 10: MHE Technical Insertion	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 6 of 10: Construction Equipment Tech Insertion	489 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 7 of 10: Bridging	24 / 24.501	18 / 0.500	10 / 0.250	13 / 0.250	- 1 -	13 / 0.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 8 of 10: Petroleum/Water Systems	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Modification Item 9 of 10: AN/PSS-14 (HSTAMIDS) and HMDS	2,172 / 0.000	3,066 / 0.000	0 / 0.000	1,675 / 0.000	- 1 -	1,675 / 0.000	- 1 -	- / -	- 1 -	- 1 -	- 1 -	- / -
Modification Item 10 of 10: CBRN Soldier Protection - M41 PATS	0 / 0.000	0 / 0.000	330 / 0.640	310 / 0.153	- / -	310 / 0.153	- 1 -	- 1 -	- 1 -	- / -	- 1 -	- 1 -
Subtotal: Installation	4,482 / 33.512	3,885 / 4.944	1,085 / 6.124	2,085 / 4.296	- / -	2,085 / 4.296	- / -	- / -	- / -	- / -	- / -	- / -
Total	,											
Total Cost (Procurement + Support + Installation)	901.196	64.219	67.367	60.192	-	60.192	-	-	-	-	-	-

Exhibit P-3a, Indiv	vidual Modification: F	Y 2018 Army				<b>Date</b> : May 2017	
Appropriation / Bu 2035A / 03 / 90	udget Activity / Budge	et Sub Activity:	P-1 Line Item Nu MA4500 / Modific	mber / Title: ation Of In-Svc Equipme	ent (OPA-3)	Modification Numb MA4500 / Various	er / Title:
ID Code (A=Service Ready	, B=Not Service Ready):			MDAP/MAIS C	ode:	•	
Modification Item 1 of	10: Army Watercraft System	S					
Manufacturer Informat	tion						
Manufacturer Name: Va	rious			Manufacturer Location: V	/arious		
Administrative Leadtime	e (in Months): 5			Production Leadtime (in	Months): 6		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates							
Delivery Dates							

### Installation Information

Method of Implementation: Full and open competition

monitor of milpromontation : all all a op	en componici											
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 7.149	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- / -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	0 / 3.194	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	0 / 4.237	0 / 0.000	- 1 -	0 / 0.000	- / -	- 1 -	- / -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	0 / 3.263	- 1 -	0 / 3.263	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 7.149	0 / 3.194	0 / 4.237	0 / 3.263	- 1 -	0 / 3.263	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

## Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	021			FY 2	022			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot																
In	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Out	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1

Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 90

P-1 Line Item Number / Title:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Modification Item 2 of 10: Force Provider

#### Manufacturer Information

Manufacturer Name: Lette	erkenny Army Depot			Manufacturer Location: Ch	nambersburg, PA		
Administrative Leadtime (i	in Months): 2			Production Leadtime (in M	fonths): 9		
Dates	EV 2016	EV 2017	EV 2018	EV 2019	EV 2020	EV 2021	EV 2022

Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates	Dec 2014	Dec 2015	Dec 2016				
Delivery Dates	Aug 2015	Aug 2016	Aug 2017				

#### Installation Information

Method of Implementation: MIPR

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	22 / 0.630	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- / -	- / -	- / -	- 1 -	- / -	- / -
FY 2016	79 / 0.300	386 / 0.950	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	122 / 0.650	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	44 / 0.630	- 1 -	44 / 0.630	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	101 / 0.930	386 / 0.950	122 / 0.650	44 / 0.630	- 1 -	44 / 0.630	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

				FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	021			FY 2	2022			
	1	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In		260	386	0	0	0	122	0	0	0	44	0	0	0	36	0	0	0	43	0	0	0	36	0	0	0	36	0	0	0	0	963
Ou	t	128	66	66	0	96	96	97	97	30	30	31	31	11	11	11	11	9	9	9	9	10	11	11	11	9	9	9	9	9	27	963

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Exhibit P-3a, Individual Modification: FY 2018 Army		<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity:	P-1 Line Item Number / Title:	<b>Modification Number / Title:</b>
20354 / 03 / 90	MA4500 / Modification Of In-Syc Equipment (OPA-3)	MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Modification Item 3 of 10: Food Sanitation Center

### Manufacturer Information

Manufacturer Name: Sotera Defense	Manufacturer Location: Easton, MD
Administrative Leadtime (in Months): 1	Production Leadtime (in Months): 7

Administrative Leadtime	(III WOIRIS). I			T Toddction Leadtime (III N	nonuis). i		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates	Jan 2015	Jan 2016	Jan 2017				
Delivery Dates	Oct 2015	Oct 2016	Oct 2017				

### Installation Information

Method of Implementation: C/FP

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	1,238 / 0.700	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	458 / 0.232	415 / 0.300	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	367 / 0.347	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	1,696 / 0.932	415 / 0.300	367 / 0.347	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

### Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019	_		FY 2	2020	_		FY 2	2021			FY 2	2022	_		
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	1,934	0	415	0	0	0	367	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Out	1,696	60	60	59	59	104	104	104	103	92	92	92	91	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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Exhibit P-3a, Individual Modification: FY 2018 Army

Date: May 2017

Appropriation / Budget Activity / Budget Sub Activity: P-1 Line Item Number / Title: Modification Number / Title:

2035A / 03 / 90 MA4500 / Modification Of In-Svc Equipment (OPA-3) MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Modification Item 4 of 10: Explosive Ordnance Disposal (EOD) Equipment R01121

#### Manufacturer Information

Manufacturer Name: TBS

Administrative Leadtime (in Months): 8

Manufacturer Location: TBS

Production Leadtime (in Months): 7

 Dates
 FY 2016
 FY 2017
 FY 2018
 FY 2019
 FY 2020
 FY 2021
 FY 2022

 Contract Dates
 May 2017
 May 2018
 Teb 2019
 Teb 20

#### Installation Information

Method of Implementation: TBD

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	256 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	43 / 0.000	- 1 -	43 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	256 / 0.000	43 / 0.000	- 1 -	43 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	018			FY 2	019			FY 2	2020			FY 2	2021			FY 2	022			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	-	0	0	0	0	0	0	64	64	64	64	11	11	11	10	4	4	4	3	4	4	3	3	4	3	3	3	8	8	16	373
Out	-	0	0	0	0	0	0	0	0	0	0	64	64	64	64	11	11	11	10	4	4	4	3	4	4	3	3	4	3	38	373

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Exhibit P-3a, Individual Modification: FY 2018 Army		<b>Date</b> : May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 90	P-1 Line Item Number / Title: MA4500 / Modification Of In-Svc Equipment (OP	Modification Number / Title: A-3) MA4500 / Various
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	
Modification Item 5 of 10: MHE Technical Insertion		
Manufacturer Information		
Manufacturer Name: VARIOUS	Manufacturer Location: VARIOUS	

Administrative Leadtime (	in Months): 4			Production Leadtime (in N	Nonths): 6		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates		Dec 2016	Dec 2017				
Delivery Dates		Jun 2017	Jun 2018				

### Installation Information

Method of Implementation: VARIOUS

motriou or impromontation via troot												
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

## Installation Schedule

Army

LI MA4500 - Modification Of In-Svc Equipment (OPA-3)

			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	1	0	0	0	0	0	0	0	0	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	,	
Out	1	0	0	0	0	0	0	0	0	0	1	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:
2035A / 03 / 90

P-1 Line Item Number / Title:
MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready):

MDAP/MAIS Code:

Modification Item 6 of 10: Construction Equipment Tech Insertion

### Manufacturer Information

Manufacturer Name: VARIOUS	Manufacturer Location: VARIOUS
Administrative Leadtime (in Months): 4	Production Leadtime (in Months): 3

	/				/ -		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates	Dec 2015	Dec 2016	Dec 2017				
Delivery Dates	Jun 2016	Jun 2017	Jun 2018				

#### Installation Information

Method of Implementation: VARIOUS

monitor of majoritoritoritoritoritoritoritoritoritorit												
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	162 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- / -	- / -	- / -	- 1 -	- 1 -	- / -
FY 2016	172 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	155 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	489 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	2021			FY 2	2022			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	1,600	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	,	
Out	1,600	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 90

P-1 Line Item Number / Title:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Modification Item 7 of 10: Bridging

#### Manufacturer Information

- 1	<b>.</b>	E)/ 0040	E)/ 00/E	EV 0040	EV 0040	E)/ 0000	E)/ 0004	E)/ 0000
	Administrative Leadtime (i	n Months): 8			Production Leadtime (in M	fonths): 7		
	Manufacturer Name: Vario				Manufacturer Location: Va	arious		

	<u> </u>			·			
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates	May 2015	May 2016	May 2017				
Delivery Dates	Mar 2016	Mar 2017	Mar 2018				

#### Installation Information

Method of Implementation: Various

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 23.059	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2016	4 / 0.592	18 / 0.500	10 / 0.250	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	20 / 0.850	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	13 / 0.250	- 1 -	13 / 0.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	24 / 24.501	18 / 0.500	10 / 0.250	13 / 0.250	- 1 -	13 / 0.250	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

### Installation Schedule

		-	FY 2	2016			FY 2	017			FY 2	2018			FY 2	2019			FY 2	2020			FY 2	021			FY 2	022			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	тс	Tot
In	58	0	0	10	0	0	0	13	0	0	0	8	0	0	0	4	0	0	0	15	0	0	0	15	0	0	0	15	0	0	138
Out	30	0	28	0	0	0	10	0	0	0	13	0	0	0	8	0	0	0	4	0	0	0	15	0	0	0	15	0	0	15	138

Exhibit P-3a, Indivi	dual Modification: F	7 2018 Army				<b>Date:</b> May 2017	
<b>Appropriation / Bud</b> 2035A / 03 / 90	dget Activity / Budge	t Sub Activity:	P-1 Line Item Num MA4500 / Modificat	iber / Title: ion Of In-Svc Equipme	ent (OPA-3)	Modification Numb MA4500 / Various	er / Title:
ID Code (A=Service Ready, B	B=Not Service Ready):			MDAP/MAIS C	ode:		
Modification Item 8 of 1	0: Petroleum/Water System	s					
Manufacturer Information	on						
Manufacturer Name: VAF	RIOUS			Manufacturer Location: V	ARIOUS		
Administrative Leadtime (	in Months):			Production Leadtime (in I	Months):		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates							
Delivery Dates							

#### Installation Information

Method of Implementation: VARIOUS

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

## Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	2018			FY 2	2019	-		FY 2	2020			FY 2	2021			FY 2	2022			
	PYS	Q1	Q2	Q3	Q4	тс	Tot																								
In	151	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	,	
Out	151	0	0	0	0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		

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Exhibit P-3a, Individual Modification: FY 2018 Army		<b>Date:</b> May 2017
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 90	P-1 Line Item Number / Title: MA4500 / Modification Of In-Svc Equipment (OPA-3)	Modification Number / Title: MA4500 / Various
ID Code (A=Service Ready, B=Not Service Ready) :	MDAP/MAIS Code:	

Modification Item 9 of 10: AN/PSS-14 (HSTAMIDS) and HMDS

## **Manufacturer Information**

Manufacturer Name: L-3 S	ecurity & Detection System	ns CyTerra Division	Manufacturer Location: Or	rlando, Florida	
Administrative Leadtime (ii	n Months): 8		Production Leadtime (in N	Months): 6	

		/ -				/ -		
Da	ates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Da	ates	Jun 2016	Jul 2018	Jul 2018				
Delivery Da	ites	Jan 2017	Jan 2019	Jan 2019				

### Installation Information

Method of Implementation: TBD

Method of implementation. 100												
	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	2,172 / 0.000	1,234 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2016	0 / 0.000	1,832 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	0 / 0.000	754 / 0.000	- 1 -	754 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	921 / 0.000	- 1 -	921 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	2,172 / 0.000	3,066 / 0.000	0 / 0.000	1,675 / 0.000	- 1 -	1,675 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

### Installation Schedule

			FY 2	2016			FY 2	2017			FY 2	018			FY 2	2019			FY 2	2020		-	FY 2	2021			FY 2	022			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	2,172	0	1,234	1,832	0	0	0	0	0	0	0	0	1,675	0	1,020	0	0	0	826	0	0	0	813	0	0	0	813	0	0	0	10,385
Out	2,172	0	0	0	309	309	766	766	458	458	0	0	0	0	419	419	674	673	255	255	207	207	206	206	204	203	203	203	204	609	10,385

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Exhibit P-3a, Individual Modification: FY 2018 Army

Appropriation / Budget Activity / Budget Sub Activity:

2035A / 03 / 90

P-1 Line Item Number / Title:

MA4500 / Modification Of In-Svc Equipment (OPA-3)

MA4500 / Various

ID Code (A=Service Ready, B=Not Service Ready) : MDAP/MAIS Code:

Modification Item 10 of 10: CBRN Soldier Protection - M41 PATS

#### Manufacturer Information

Manufacturer Name: TSI, Inc.	Manufacturer Location: Shoreview, MN
Administrative Leadtime (in Months): 14	Production Leadtime (in Months): 2

Administrative Leadtime (	III WOIIII3). 14			i roduction Leadtime (iii ii	nontris). Z		
Dates	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Contract Dates		Feb 2017	Nov 2017				
Delivery Dates		Apr 2017	Jan 2018				

#### Installation Information

Method of Implementation: Contract

	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022	To Complete	Total
Installation Cost	Qty (Each) I Total Cost (\$ M)											
Prior Years	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- / -
FY 2016	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2017	0 / 0.000	0 / 0.000	330 / 0.640	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2018	0 / 0.000	0 / 0.000	0 / 0.000	310 / 0.153	- 1 -	310 / 0.153	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2019	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2020	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2021	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
FY 2022	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
To Complete	0 / 0.000	0 / 0.000	0 / 0.000	0 / 0.000	- 1 -	0 / 0.000	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -
Total	0 / 0.000	0 / 0.000	330 / 0.640	310 / 0.153	- 1 -	310 / 0.153	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -	- 1 -

#### Installation Schedule

			FY 2	2016			FY 2	017			FY 2	018			FY 2	2019			FY 2	020			FY 2	021			FY 2	022			
	PYS	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	TC	Tot
In	1	0	0	0	0	0	330	0	0	315	0	0	0	796	0	0	0	852	0	0	0	756	0	0	0	0	0	0	0	0	3,050
Out	1	0	0	0	0	0	0	107	107	107	108	108	108	199	199	199	199	213	213	213	213	189	189	189	189	0	0	0	0	0	3,050

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Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

: P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA0450 / Production Base Support (OTH)

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	237.947	1.525	1.528	2.271	-	2.271	2.330	2.373	2.441	2.509	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	237.947	1.525	1.528	2.271	-	2.271	2.330	2.373	2.441	2.509	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	237.947	1.525	1.528	2.271	-	2.271	2.330	2.373	2.441	2.509	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	ne corresponding	g budget request	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

### **Description:**

This program provides funding to the Army Test and Evaluation Command (ATEC) to establish, modernize, expand or replace test facilities used in production testing of General Support Equipment (including trucks, trailers, generators, soldier support equipment, etc.). It sustains Army production test capabilities through upgrade and replacement of instrumentation and equipment that is technologically and/or economically obsolete. Modernization of test instrumentation and equipment provides increased automation and efficiencies, improved data quality and quantity and cost avoidances to Army Program Managers. Programmed funding will be used to upgrade or replace production test instrumentation and equipment at Aberdeen Test Center (ATC), Aberdeen Proving Ground, MD; and Yuma Test Center (YTC), Yuma Proving Ground, AZ (including YTCs Cold Regions Test Center (CRTC), Fort Greely, AK).

#### Justification:

FY 2018 Base procurement dollars in the amount of \$2.271 million support the following: At ATC, procures modern industrial shop equipment (welding and cutting machines) used in fabrication of support items required for Production Qualification Testing (such as rotors, stands, sleighs, camera mounts and instrumentation brackets); replaces old surveying equipment with modern digital systems used for surveying test sites; provides lifecycle replacement of analytical chemistry laboratory equipment used to characterize test item materials and support failure analysis and procures new robust laptop PCs to provide data collectors with the capability to support activities involving the acquisition, review, and processing of reliability, availability and maintainability (RAM), Integrated Logistics Support (ILS) and performance test data. PCs will give ATC the capability to use "State-of-the-Art" technologies to streamline the process involved in the acquisition, processing, and distribution of test data At YTC, procures replacement transducers used to collect performance data during automotive tests (including sensors, load cells, thermocouple amplifiers, pressure transducers, embedded wireless sensors, strain gages, current transducers and thermocouples); replaces obsolete air delivery aircraft and airdrop load instrumentation in the areas of aircraft telemetry, aircraft on board video, payload telemetry, and payload data recorders and purchases on board data acquisition and recording equipment for collecting vehicle performance data in harsh desert environments.

The majority of the instrumentation being upgraded or replaced is obsolete and has met or exceeded its economic life. This instrumentation is required to ensure complete and accurate test data is collected and safety and environmental hazards are minimized. Benefits of this project include increased test efficiencies and decreased costs and risks to Army Program Managers.

.All funding goes to the Active Army Component.

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P-1 Line #182

Exhibit P-40, Budget Line Item Justification: FY 2018 Army

**Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA6700 / Special Equipment For User Testing

Other Support Equipment

Program Elements for Code B Items: N/A

Other Related Program Elements: N/A

Line Item MDAP/MAIS Code: N/A

ID Code (A=Service Ready, B=Not Service Ready):

Line tem MBAI /MAIO COGE: 11// (												
	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	5	2	7	11	-	11	12	12	19	9	Continuing	Continuing
Gross/Weapon System Cost (\$ in Millions)	627.158	6.268	8.289	5.319	-	5.319	12.443	8.205	38.183	38.337	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	627.158	6.268	8.289	5.319	-	5.319	12.443	8.205	38.183	38.337	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	627.158	6.268	8.289	5.319	-	5.319	12.443	8.205	38.183	38.337	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	or informational p	urposes only. Th	e corresponding	budget requests	s are documente	d elsewhere.)				
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	125,431.600	3,134.000	1,184.143	483.545	-	483.545	1,036.917	683.750	2,009.632	4,259.667	Continuing	Continuing

### Description:

Special Equipment for User Testing is comprised of multiple programs for the Major Operational Testing Instrumentation and Army Threat Simulator Program. Program provides funding for Major Operational Testing Instrumentation, Major Field Instrumentation for Operational Testing (OT), Force Development Testing and Experimentation (FDTE), and Army Warfighting Experiments (AWE). Initiatives are tied to tactical and instrumentation systems that support each of the five joint functional concepts outlined in the Army Modernization Plan (Force Application; Protection; Focused Logistics; Battlespace Awareness; Command and Control). The Army Threat Simulator Program procures actual foreign hardware and Non-Developmental Items (NDI) (e.g., chassis, subsystems, commercial equipment, or actual threat weapons), which are integrated into a threat simulator design for user testing and training. Budget Item procures a variety of Special Equipment for User Testing, such as Integrated Threat Force, Threat Signal Injection Jammer (TSIJ), Threat Operations and Advanced Jammer Suite.

Special Equipment for User Testing programs provides support at: Army Test and Evaluation Command (ATEC) and Operational Test Command (OTC) facilities include Transformation Technology Directorate (TTD) at Fort Hood, TX; Fire Support Test Directorate (FSTD) at Fort Sill, OK; Airborne Special Operations Test Directorate (ABSOTD) at Fort Bragg, NC; Air Defense Artillery Test Directorate (ADATD) and Electronic Proving Ground (EPG) at Fort Huachuca, AZ; Aberdeen Test Center (ATC); Redstone Test Center (RTC); White Sands Test Center (WSTC); and Yuma Test Center (YTC).

				FY 2018	FY 2018	FY 2018				
Secondar	ry Distribution	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	2	7	11	-	11	12	12	19	9
	Total Obligation Authority	6.268	8.289	5.319	-	5.319	12.443	8.205	38.183	38.337
Total:	Quantity	2	7	11	-	11	12	12	19	9
Secondary Distribution	Total Obligation Authority	6.268	8.289	5.319	-	5.319	12.443	8.205	38.183	38.337

#### Justification:

FY 2018 Base procurement dollars in the amount of \$5.319 million procures multiple threat systems (Electronic Warfare (EW), Command, Control, and Communications, and Advanced Jamming) required to support developmental and operational testing and training of network centric threat scenarios. These threat scenarios are critical to integrating digital battlefield data collection and analysis tools that support the establishment of robust command and control capabilities. These tools will collect, store and analyze data from this new dimension of digital command and control battlefield warfare capabilities. The Army will

	UNCL	ASSIFIED	
Exhibit P-40, Budget Line Item Justification: FY	′ 2018 Army		Date: May 2017
Appropriation / Budget Activity / Budget Sub A 2035A: Other Procurement, Army / BA 03: Other S Other Support Equipment		P-1 Line Item N MA6700 / Speci	lumber / Title: ial Equipment For User Testing
ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B	Items: N/A	Other Related Program Elements: N/A
Line Item MDAP/MAIS Code: N/A			
are a critical element to maintaining threat EW density and rea	alism required by Director, Operational Te	st and Evaluation to pro	Assessments and Network Integration Evaluation events. Validated threat jammers ovide operationally relevant environments for Test and Evaluation (T&E) and training. It of Army T&E activities, such as the Network Integration Evaluation.
(			

LI MA6700 - Special Equipment For User Testing Army

P-1 Line #183

Exhibit P-40, Budget Line Item Justification: FY 2018 Army **Date:** May 2017

Appropriation / Budget Activity / Budget Sub Activity:

P-1 Line Item Number / Title:

2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 90:

MA8975 / TRACTOR YARD

Other Support Equipment

Other Related Program Elements: N/A ID Code (A=Service Ready, B=Not Service Ready): Program Elements for Code B Items: N/A

Line Item MDAP/MAIS Code: N/A

	Prior			FY 2018	FY 2018	FY 2018					То	
Resource Summary	Years	FY 2016	FY 2017	Base	oco	Total	FY 2019	FY 2020	FY 2021	FY 2022	Complete	Total
Procurement Quantity (Units in Each)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost (\$ in Millions)	114.785	7.191	6.888	5.935	-	5.935	4.956	4.957	5.000	5.000	Continuing	Continuing
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	114.785	7.191	6.888	5.935	-	5.935	4.956	4.957	5.000	5.000	Continuing	Continuing
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	114.785	7.191	6.888	5.935	-	5.935	4.956	4.957	5.000	5.000	Continuing	Continuing
(The following	Resource Sumi	mary rows are fo	r informational p	urposes only. Th	e corresponding	g budget request	s are documente	ed elsewhere.)				1
Initial Spares (\$ in Millions)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (\$ in Thousands)	-	-	-	-	-	-	-	-	-	-	-	-

## **Description:**

This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress

Secondar	ry Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total	FY 2019	FY 2020	FY 2021	FY 2022
Army	Quantity	-	-	-	-	-	-	-	-	-
	Total Obligation Authority	7.191	6.888	5.935	-	5.935	4.956	4.957	5.000	5.000
Total:	Quantity	-	-	-	-	-	-	-	-	-
Secondary Distribution	Total Obligation Authority	7.191	6.888	5.935	-	5.935	4.956	4.957	5.000	5.000

#### Justification:

This program is reported in accordance with Title 10, United States Code, Section 119(a)(1) in the Special Access Program Annual Report to Congress.

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P-1 Line #184