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.)				1
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

UNCLASSIFIED
Page 1 of 25

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

UNCLASSIFIED Page 2 of 25

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.

UNCLASSIFIED
Page 3 of 25

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Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: M	lay 2017			
<b>Appropriation / B</b> 2035A / 03 / 30	udget A	ctivity /	Budget	Sub Acti	vity:		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	ce Ready):	4						МІ	DAP/MAIS	Code:							
F	Resource	Summa	ary			Prior Ye	ars	FY 20	)16	FY	2017	FY	2018 Bas	se F	Y 2018 (	ОСО	FY 2018	3 Total
Procurement Quantity (Uni	ts in Each)						-		_		(	68		-		-		
Gross/Weapon System Co	ost (\$ in Million	s)					322.548		-		60.12	20		-		-		
Less PY Advance Procure	ment (\$ in Mil	lions)					-		-					-		-		
Net Procurement (P-1) (\$ i	n Millions)						322.548		-		60.12	20		-		-		
Plus CY Advance Procure		ions)					-		-		-			-		-		
Total Obligation Authorit							322.548		-		60.12	20		-		-		
(Ti	ne followina F	Resource Su	ımmarv row	s are for info	rmational i	purposes onl	y. The corres	pondina bud	laet reauest	s are docume	ented elsew	here.)				<u> </u>		
Initial Spares (\$ in Millions)							-		-		_	.		-		-		-
Gross/Weapon System Ur	nit Cost (\$ in 7	housands)					-				884.1	18		-		-		-
					I		<u> </u>			l		l		<u> </u>		I		
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact o	r sum exactly	y due to ro	unding.									1	1		
	Prior Years FY 2016							FY 2017		FY	2018 Bas	e	F	/ 2018 O	co	F	Y 2018 Tot	tal
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																		
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	-	-	-	-	-	0.950	-	-	-	-	-	-	-	-	
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	322.548 <b>322.548</b>	-	-	-	-	-	60.120 <b>60.120</b>	-	-	-	-	-	-	-	-	
Gross/Weapon System	-	-		-	-	-				-	-	-	-	-	-	-	-	
Cost	-	-	322.548	-	-	-	884.118	68	60.120	-	-	-	-	-	-	-	-	
	Sec	ondary Di	stribution				FY	2016		FY 2017		FY 2 Ba	2018 ise		FY 2018 OCO		FY 20 <sup>-</sup> Tota	
Army		Qua	ntity						-		68		-			-		
		Tota	l Obligation A	uthority					-		60.120		-			-		
Total:		Qua									68							

LI MA6000 - Distribution Systems, Petroleum & Water Army

**UNCLASSIFIED** Page 4 of 25

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	Ready): A	MDAP/MAIS Code	MDAP/MAIS Code:						
Secon	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	Date	Date: May 2017				
Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / MA6000 / Distribution Sy	Title: stems, Petroleum & Water		Number / Title [DODIC]: 300 / FUEL SYSTEM SUPPLY NT		
0	Method/Type		ate	Specs Date		

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 dilding veniere	Location of 1 00	Duto	Denvery	(Lacii)	(\$ 14)	11011	Available	Dute
FSSP 300K SIAD		2017	Sierra Army Depot / Herlong	MIPR	TACOM	Jan 2017	Nov 2017	68	814.000	Y		

Procurement Quantity (Units in Each)   191281   16.134   22.253   21.610								UI	NCLAS:	SIFIEL	,									
D Code (	Exhibit P-5, Cost	Analysis	: FY 20	18 Army											Date: N	/lay 2017				
Prior Years   FY 2016   FY 2017   FY 2018 Base   FY 2018 OCO   FY 2018   FY 2018 Base   FY 2018 OCO   FY 2018   FY 2018 Base   FY 2018 OCO   FY 2018 Base   FY 2018 OCO   FY 2018 Base		udget Ac	tivity / I	Budget	Sub Acti	vity:						eum & Wa	ter						FS)	
Procurement Quantity (Unit in Each)   385   286   349   365   .	ID Code (A=Service Read	y, B=Not Service	e Ready) : A	4			l			М	DAP/MAIS	S Code:								
Procurement Quantity (Units in Each)   385   286   348   365	R	esource	Summa	arv		Р	Prior Yea	ars FY 2016		16	FY 2017		FY 2018 Base		se F	FY 2018 OCO		FY 2018 To		
Season   System Cost (s in Millions)								385		286		349	,		365		-		36	
Leas PY Advance Procurement (7-1) (at Milloria)   191281   16.134   22.253   21.610   -			;)											2			-		21.61	
Plus CY Advance Procurement (\$ in Millions)								-				-			-		-			
Total Obligation Authority (5 in Millions)	Net Procurement (P-1) (\$ ir	n Millions)						191.281		16.134		22.253	3	2	1.610		-		21.6	
The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)	Plus CY Advance Procurer	ment (\$ in Milli	ons)					-		-		-			-		-		-	
Initial Spares (8 in Milliona) Gross/Weapon System Unit Cost (8 in Thousands)  A 496,834  A 56,413  B 75,218  B 77,2018 B 5	Total Obligation Authority	y (\$ in Millions)						191.281		16.134		22.253	;	2	1.610		-		21.61	
Gross/Weapon System Unit Cost (s in Thousands)  Note: Subtolates or Totals in this Exhibit P-5 may not be exact: with exactify unit Cost or Subject (g and ) s	(Th	e following R	esource Su	mmary rows	s are for infor	mational pu	rposes only	. The corres	ponding bud	get request	s are docum	ented elsewhe	ere.)						-	
Note: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.    Prior Years   P	Initial Spares (\$ in Millions)							-		-		-			-		-		-	
Prior Years	Gross/Weapon System Un	it Cost (\$ in T	housands)					496.834		56.413		63.762	2	59	9.205		-		59.20	
Prior Years															'					
Cost Elements	Note: Subtotals or Totals in	this Exhibit	P-5 may no	t be exact o	r sum exactly	due to rour	nding.										,			
Cost Elements   Cost		Р	rior Years	i		FY 2016			FY 2017		F۱	Y 2018 Base	)	F	′ 2018 O	СО	F`	FY 2018 Total		
Flyaway Cost   Recurring Cost   Pump Rack   Modules	Cost Elements			Cost			Cost			Cost			Cost			Cost			Total Cost (\$ M)	
Pump Rack Modules (1) 42,000 385 16,170 47,000 286 13,442 50,000 349 17,450 50,000 365 18,250 50,000 365 Engineering Changes 35,000 0,434 0,800 0,456	Flyaway Cost	,,,	, ,	,, ,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	, ,	, , ,	, ,	, ,	,,,,	,,,,	, ,	,,,,	,,,,		1 , ,	, ,	. ,		
Modules <sup>(1)</sup>	Recurring Cost																			
Engineering Changes 35.000 0.434 0.800 0.456		-	-	-	450.000	3	1.350	450.000	3	1.350	-	-	-	-	-	-	-	-	-	
System Engineering/ Program Management   -   -   65.138   -   -   0.508   -   -   1.350   -   -   1.527   -   -   -   -   -   -   -   -   -	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	
Program Management   -   -   -   -   -   -   -   -   -	Engineering Changes	-	-	35.000	-	-	0.434	-	-	0.800	-	-	0.456	-	-	-	-	-	0.45	
Evaluation, Production       -       -       36.79       -	Program Management	-	-	65.138	-	-	0.508	-	-	1.350	-	-	1.527	-	-	-	-	-	1.52	
Data 2.350 0.050 0.090 0.050 0.085		-	-	36.729	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.10	
Support Equipment       -       -       3.150       -       -       0.048       -       -       0.089       - <t< td=""><td>Training</td><td>-</td><td>-</td><td>0.984</td><td>-</td><td>-</td><td>0.050</td><td>-</td><td>-</td><td>0.088</td><td>-</td><td>-</td><td>0.092</td><td>-</td><td>-</td><td>-</td><td>-</td><td>-</td><td>0.09</td></t<>	Training	-	-	0.984	-	-	0.050	-	-	0.088	-	-	0.092	-	-	-	-	-	0.09	
Fielding 31.760 0.252 1.040 1.046		-	-		-	-		-	-		-	-		-	-	-	-	-	0.05	
Subtotal: Recurring Cost       -       191.281       -       -       16.134       -       -       22.253       -       -       21.610       -       -       -       -       -         Subtotal: Flyaway Cost       -       -       191.281       -       -       16.134       -       -       22.253       -       -       21.610       -																			0.08	
Subtotal: Flyaway Cost 191.281 16.134 22.253 21.610 59.205 365  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  FY 2018 FY 2018 FY 2018	· ·				-														1.04	
Gross/Weapon System 496.834 385 191.281 56.413 286 16.134 63.762 349 22.253 59.205 365 21.610 59.205 365 Cost FY 2018 FY 2018 FY 2018																			21.6	
Cost 496.834 385 191.281 56.413 286 16.134 63.762 349 22.253 59.205 365 21.610 59.205 365 FY 2018 FY 2018 FY 2018		-	-	191.281	-	-	16.134	-	-	22.253	-	-	21.610	-	-	-	-	-	21.61	
		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	
		Sacc	ndary Die	stribution				FV	2016		FY 2017							FY 201		
Army Quantity 47 241 195 -	Army	3600						гт		17	1 1 2017	241	Das		5	000	_	iotai	19	
Total Obligation Authority 2.714 15.552 11.545 -	ruiny .			-	uthority														11.54	

LI MA6000 - Distribution Systems, Petroleum & Water Army

Page 7 of 25

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:								
:	Secondary 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	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)

	0		·	Method/Type or		Award	Date of First	04-		Specs Avail	Date Revision	RFP Issue
Cost Elements	o	FY	Contractor and Location	Funding Vehicle	Location of PCO	Date	Delivery	<b>Qty</b> (Each)	Unit Cost	Now?	Available	Date
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	Υ		
Tank Rack Modules		2015	ISOMETRICS - TRM / Reidsville, NC	C / FFP	TACOM	Mar 2015	Nov 2015	385	48.000	Υ		
Tank Rack Modules <sup>(†)</sup>		2016	ISOMETRICS - TRM / Reidsville, NC	C / FFP	TACOM	Mar 2016	Nov 2016	286	47.000	Υ		
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> indicates the presence of a P-21

Ex	hib	it F	P-21, Pro	oducti	ion Sc	hedu	le: F	Y 201	8 Arm	ıy														Date	e: Ma	y 201	7				
			<b>iation</b> / 03 / 30	Budge	et Acti	vity /	Bud	get S	ub Ac	tivity	!	1	<b>Line</b> .6000						oleur	n & V	/ater				<b>Nun</b> 600 /				OIC]: /stem	(MFS	3)
				lements in Each)								Fiscal \	ear 2015)											Fiscal Y	ear 2016						ВА
	ACCEPT PRIOR BAL												C	alendar	Year 20	15								Caler	ndar Yea	2016				L	
0 C 0	M F R #											M A R	A P R	M A Y	J U	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
Tan	k Ra	ck Mc	odules						<u>'</u>							·					·							<u>'</u>			
	1 2	2016	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 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	

E	xhi	ibit	t P	-21, Pro	oducti	on Sc	hedu	le: Fነ	/ 2018	3 Arm	ıy														Date	: May	2017	7				
				ation / I 3 / 30	Budge	et Acti	vity /	Budç	get Su	ıb Ac	tivity		1 -					Title: stems	, Petr	oleur	n & V	/ater			Item R026						(MFS	)
				Cost El (Units i	ements n Each)								Fiscal Ye	ear 2017											Fiscal Ye	ar 2018						B A
						ACCEPT									С	alendar	Year 201	17						Calendar Year 2018 L					L			
0 C 0	R	PRIOR BAL TO 1 DUE O N D J PROC OCT AS OF C O E A							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	N N	J U L	A U G	S E P	A N C E			
Та	ank F	Rack	Mod	lules																		,					'					
	1	201	16	ARMY	286	0	286	-	25	25	25	25	25	25	28	28	28	27	25													0
	2	201	17	ARMY	349	0	349						Α -	-	-	-	-	-	-	-	32	32	32	32	32	32	32	32	32	29	32	0
	2	201	18 /	ARMY	365	0	365												•						A -	-	-	-	-	-	-	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 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	r n	A U G	S E P	

Ext	nib	it P	-21, Pro	ducti	on Sc	hedul	e: F\	2018	8 Arm	у														Date	e: Ma	y 201	7				
			<b>ation / E</b> 3 / 30	Budge	t Acti	vity /	Budg	jet Su	b Ac	tivity		1 -			<b>Num</b> ributio			, Petr	oleun	n & V	/ater				Num 600 /					(MFS	S)
			Cost El (Units ii									Fiscal Ye	ear 2019											Fiscal Y	ear 2020						E
N		ACCEPT PRIOR BAL											C	Calendar	Year 201	9				1				Caler	dar Year	2020				] [	
O F C R O #	₹	FY	SERVICE	PROC QTY	TO 1 OCT 2018	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	1
Tank	Rac	k Mod	dules											'							<u>'</u>			'		<u>'</u>					
1	_	-	ARMY	286	286																										
2	_	_	ARMY ARMY	349 365	349			30	30	30	31	31	31	31	31	30	30	30	30												
	-   -	010	, u 1	000	0	000	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:	P-1 Line Item Number / Title:	Item Number / Title [DODIC]:
2035A / 03 / 30	MA6000 / Distribution Systems, Petroleum & Water	R02600 / Modular Fuel System (MFS)

		Product	tion Rates (Each /	Month)				Procurement Le	adtime (Months)			
MF						Ir	nitial			Red	order	
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
	ISOMETRICS - TRM - Reidsville, NC	15	32	45	0	(	8	14	0	6	8	14
	TBD - TBD	15	32	45	0	(	6 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).

UNCLASSIFIED
Page 13 of 25

Eximple: 0, 000t	, ulaiyolo	20	107 11119										1.		ay =0			
<b>Appropriation / B</b> 2035A / 03 / 30	Budget Ad	ctivity /	Budget	Sub Act	ivity:	I	Line Item 000 / Dis				eum & W	ater ater		R0267	Number / 1 70 / EXPEI AGING SY	DITIONA	RY WAT	ER
ID Code (A=Service Read	dy, B=Not Servi	ce Ready):	A						М	DAP/MAIS	Code:							
F	Resource	Summ	ary		Р	rior Ye	ars	FY 20	016	FY	2017	FY	2018 Bas	se	FY 2018 (	ОСО	FY 2018	3 Total
Procurement Quantity (Un	its 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	lions)					-		-			-		-		-		-
Net Procurement (P-1) (\$	in Millions)						1.615		3.001		3.5	82	3	3.116		-		3.116
Plus CY Advance Procure	CY Advance Procurement (\$ in Millions)						-		-			-		-		-		-
Total Obligation Authori	ty (\$ in Millions	)					1.615		3.001		3.5	82	3	3.116		-		3.116
(T	he following F	Resource S	ummary row	s are for info	rmational pu	rposes only	y. 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	3.000		-		1,558.000
Note: Subtotals or Totals		P-5 may no	-	or sum exactl	y due to rour	nding.		FY 2017		F.	/ 2018 Bas	20	F	/ 2018 (	000	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	Unit Cost	Qty (Each)	Total Cost	Unit Cost	Qty (Each)	Total Cost
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

0.100

3.001

3.001

3.001

1,791.000

0.050

0.050

0.232

3.582

3.582

3.582

-

1,558.000

UNCLASSIFIED
Page 14 of 25

LI MA6000 - Distribution Systems, Petroleum & Water Army

0.500

0.215

1.615

1.615

1.615

1,500.500

Data

Fielding

Subtotal: Flyaway Cost

Gross/Weapon System

Cost

Support Equipment

Subtotal: Recurring Cost

Exhibit P-5, Cost Analysis: FY 2018 Army

P-1 Line #149

-

0.076

3.116

3.116

3.116

**Date:** May 2017

0.076

3.116

3.116

3.116

1,558.000

							UI	NCLAS	SIFIEL	)								
Exhibit P-5, Cost	Analysis	: FY 20	18 Army	,									I	Date: N	May 2017			
<b>Appropriation / B</b> 2035A / 03 / 30	udget Ad	ctivity /	Budget	Sub Acti	vity:	1	<b>Line Item</b> 6000 / Dis			s, Petrole	um & W	ater ater	ļ.	R0269	umber / <sup>-</sup> 0 / EARL\ IBUTION	/ ENTRY	' FLŪID	S)
ID Code (A=Service Read	ly, B=Not Servi	ce Ready):	В						МІ	DAP/MAIS	Code:							
F	Resource	Summ	ary			Prior Ye	ars	FY 20	016	FY	2017	FY	2018 Bas	e l	FY 2018 (	ОСО	FY 2018	3 Total
Procurement Quantity (Uni	ts in Each)						-		-			-		1		-		
Gross/Weapon System Co	ost (\$ in Million:	s)					-		-		0.7	48	5	5.706		-		5.70
Less PY Advance Procure	ment (\$ in Mill	ions)					-		-			-		-		-		-
Net Procurement (P-1) (\$ i	n Millions)	-					-		-		0.7	48	5	5.706		-		5.70
Plus CY Advance Procure	ment (\$ in Milli	ions)					-		_			-		-		-		_
Total Obligation Authori	y (\$ in Millions,	)					-		-		0.7	48	5	5.706		-		5.70
(Ti	ne following F	Resource Si	ummary row	vs are for info	rmational p	urposes onl	y. The corres	sponding bud	get request	s are docume	ented elsew	here.)				<u> </u>		
Initial Spares (\$ in Millions)							-		-			-		-		-		
Gross/Weapon System Ur	nit Cost (\$ in T	housands)					-		_			-	5,706	5.000		-		5,706.00
		-														ı		
Note: Subtotals or Totals i	n this Exhibit	P-5 may no	ot be exact of	or sum exactly	y due to rou	ınding.												
	Р	rior Years	S		FY 2016	_		FY 2017		FY	2018 Bas	se	FY	′ 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 (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(+17)	(====,	(+)	(+.7	(====)	(+)	(4.7)	(====)	(+)	(+1)	(====/	(+)	(+ - 7	(=====	(+)	(+ - 7	(====)	(+)
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	-	-	-	-	<u>-</u>	-	-	-	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	1			FY	2016		FY 2017		FY 2 Ba			FY 2018 OCO		FY 201 Total	
Army		Qua	entity						-		-		1			-		
			al Obligation A	Authority					-		0.748		5.706			-		5.70
Total:			ntity						- I				1					

LI MA6000 - Distribution Systems, Petroleum & Water Army

UNCLASSIFIED
Page 15 of 25

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	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	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

UNCLASSIFIED
Page 17 of 25

							U	ICLAS	SIFIED	)									
Exhibit P-5, Cost	Analysis	s: FY 20	18 Army											Date: N	1ay 2017	,			
<b>Appropriation / B</b> 2035A / 03 / 30					vity:	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water								Item Number / Title [DODIC]: R38000 / Mobile Tactical Refueling System					
ID Code (A=Service Read	y, B=Not Servi	ice Ready):	3						МІ	DAP/MAIS	Code:								
R	Resource	Summa	ary		I	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 Mill	lions)					-		-		-			-		-		-	
Total Obligation Authorit	<b>y</b> (\$ in Millions	s)					5.911		-		1.66	0	4	1.082		-		4.082	
(Th	ne following F	Resource Su	ımmary row	s are for info	rmational p	urposes only	y. The corres	ponding bud	get request	s are docume	ented elsewl	nere.)							
Initial Spares (\$ in Millions)							-		-		-			-		-		-	
Gross/Weapon System Un	nit Cost (\$ in 7	Thousands)					-		-		166.00	0	70	0.379		-		70.379	
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact o	r sum exactl	v due to roi	ındina													
Troto: Gastotale or Fotale II	lote: Subtotals or Totals in this Exhibit P-5 may not be exact or sum exactly due to rounding.  Prior Years FY 2016									FY	2018 Bas	e	F	′ 2018 O	CO	F	Y 2018 Tota	al	
	Unit Cost	Qty	Total Cost	Unit Cost	Qty	Total Cost	Unit Cost	FY 2017 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															<u> </u>				
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	-	-	-	-	-	0.440	
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 Fielding	-	-	0.150	-	-	-	-		0.010	-	-	0.100	-	-	-	-	-	0.10	
Subtotal: Recurring Cost	-	-	5.911	-		-	-	-	1.660	-	-	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	4.082	
	Sacr	ondary Di	stribution				FV ·	2016		FY 2017		FY 2 Ba:			FY 2018 OCO		FY 201 Total	-	
Army	000	Qua						2010		2017	3		18	3		_	iotai	1	

LI MA6000 - Distribution Systems, Petroleum & Water Army

**UNCLASSIFIED** Page 18 of 25

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 Re	ady) : B		MDAP/MAIS Code:						
Seconda	ary 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 9	Sub Act	ivity:	I		<b>Number</b> tribution S		F	Item Number / Title [DODIC]: R38100 / HIPPO WATER DISTRIBUTION SYSTEM							
ID Code (A=Service Read	y, B=Not Servi	ice Ready):/	Ą						М	DAP/MAIS	Code:							
R	esource	Summa	ary		P	rior Yea	ars	FY 2016		FY	2017	FY	FY 2018 Base		Y 2018 (	OCO FY 201		Total
Procurement Quantity (Unit	s in Each)						1,476		-		20	61		56		-		56
Gross/Weapon System Co	st (\$ in Million	ıs)					235.764		14.429		24.9	76	8	.181		-		8.18
Less PY Advance Procure							-		-					-		-		_
Net Procurement (P-1) (\$ in	n Millions)	-					235.764		14.429		24.9	76	8	.181		-		8.18
Plus CY Advance Procurer	CY Advance Procurement (\$ in Millions)  Obligation Authority (\$ in Millions)  (The following Resource Summary rows are for informations)					-		-					-		-			
Total Obligation Authorit	<b>y</b> (\$ in Millions	s)					235.764		14.429		24.9	76	8	.181		-		8.181
(Th	e following I	Resource Su	ımmary row:	s are for info	rmational pu	rposes only	y. The corres	ponding budge	et request	s are docume	ented elsew	here.)						
Initial Spares (\$ in Millions)							-		-		-			-		-		
Gross/Weapon System Un	it Cost (\$ in 7	Thousands)					159.732		-		95.69	93	146	.089		-		146.089
Note: Subtotals or Totals in	this Exhibit	P-5 may no	t be exact or	r sum exactl	y due to rour	nding.							_					
	F	Prior Years	š		FY 2016			FY 2017		FY 2018 Ba				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	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)	Unit Cost	Qty (Each)	Total Cost (\$ M)
Flyaway Cost	(0.9	(2001)	(\$)	(4.9	(2001)	(\$)	(4.9	(200.1)	(\$)	(4.9	(2001)	(\$)	(\$7.9	(2001.)	(\$)	(0.9	(2001)	(\$)
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	-	-	-	-	-	1.82
System Test & Evaluation, Production	-	-	18.950	-	-	0.140	-	-	0.300	-	-	0.400	-	-	-	-	-	0.400
Training	-	-	0.850	-	-	0.075	-	-	0.140	-	-	0.090		-	-	-	-	0.090
Data	-	-	0.850	-	-	0.050		-	0.118	-	-	0.250		-	-	-	-	0.25
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 <b>235.764</b>	-	-	14.429 <b>14.429</b>	-	-	24.976 <b>24.976</b>	-	-	8.181 <b>8.181</b>		<u> </u>	-	-	-	8.18 <sup>1</sup>
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 Di	stribution				FY	2016		FY 2017		FY 2 Ba			FY 2018 OCO		FY 201 Total	
Army		Qua	ntity					-			162		31		_	-		3′
			l Obligation Au	uthority				6.099	)		14.862		4.529			-		4.529
ANG		Quai	ntity					_	1		58		11			-		11

LI MA6000 - Distribution Systems, Petroleum & Water Army

UNCLASSIFIED
Page 20 of 25

P-1 Line #149

Exhibit P-5, Cost Analysis: FY 2018 Army		Date: May 2017
	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 Ready)	ady): 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:	Quantity	-	261	56	-	56			
Secondary Distribution	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	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

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	: FY 20	18 Army										I	Date: M	lay 2017				
<b>Appropriation / B</b> 2035A / 03 / 30	udget A	ctivity /	Budget \$	Sub Acti	ivity:	I	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water							Item Number / Title [DODIC]: R38101 / Unit Water Pod System (Camel)					
ID Code (A=Service Read	y, B=Not Servi	ce Ready):	4						МЕ	DAP/MAIS	Code:								
R	esource	Summa	ary		F	Prior Years		FY 2016		FY	2017	FY 2	2018 Bas	e F	Y 2018 (	OCO FY 2018		Total	
Procurement Quantity (Unit	s in Each)						-		3			33		41		-		4	
Gross/Weapon System Co	st (\$ in Million	s)					83.238		1.817		7.5	57	4	.902		-		4.90	
Less PY Advance Procure	ment (\$ in Mil	lions)					-		-		-			-		-		-	
Net Procurement (P-1) (\$ in	n Millions)						83.238		1.817		7.5	57	4	.902		-		4.90	
Plus CY Advance Procurer	ment (\$ in Mill	ions)					-		-		_			-		-		-	
Total Obligation Authorit	<b>y</b> (\$ in Millions	)					83.238		1.817		7.5	57	4	.902		-		4.90	
			ımmary rows	s are for info	rmational pu	urposes only	. The corres	ponding budge	et request	s are docume	ented elsew	here.)							
Initial Spares (\$ in Millions)							-		-		_			-		-		-	
Gross/Weapon System Un	it Cost (\$ in 7	housands)					-		605.667		91.04	18	119	.561		-		119.56	
					I		-												
Note: Subtotals or Totals in	n this Exhibit	P-5 may no	t be exact or	r sum exactl	y due to rou	nding.													
Prior Years FY 2016								FY 2017		FY	2018 Bas	e	FY	2018 O	co	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	
Flyaway Cost	(\$ K)	(Eacri)	(\$ IVI)	(\$ K)	(Eacri)	(\$ IVI)	(\$ K)	(Eacri)	(\$ IVI)	(\$ K)	(Eacri)	(\$ IVI)	(\$ K)	(Eacri)	(\$ IVI)	(\$ K)	(Eacri)	(\$ IVI)	
Recurring Cost																			
Camel II <sup>(†)</sup>	-	-	-	90.000	3	0.270	90.000	83	7.470	100.000	41	4.100	-	-	_	100.000	41	4.10	
Engineering Changes	-	-	12.891	-	-	0.200	-	-	0.005	-	-	0.050	-	-	-	-	-	0.05	
System Engineering/ Program Management	-	-	13.500	-	-	0.800	-	-	0.030	-	-	0.450	-	-	-	-	-	0.45	
System Test & Evaluation, Production	-	-	12.147	-	-	0.150	-	-	0.010	-	-	0.075	-	-	-	-	-	0.07	
Training	-	-	8.500	-	-	0.050	-	-	0.010	-	-	0.050	-	-	-	-	-	0.05	
Data	-	-	11.050	-	-	0.045	-	-	0.010	-	-	0.061	-	-	-	-	-	0.06	
Support Equipment	-	-	10.150	-	-	0.052	-	-	0.005	-	-	0.016	-	-	-	-	-	0.01	
Fielding	-	-	15.000 83.238	-	-	0.250 1.817	-	-	0.017 7.557	-	-	0.100 4.902	-	-	-	-	-	0.10 4.90	
Subtotal: Recurring Cost Subtotal: Flyaway Cost	-	-	83.238	-	-	1.817	-	-	7.557 <b>7.557</b>	-	-	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	
	Sec	ondary Dis	stribution				FY 2	2016		FY 2017		FY 20 Bas			FY 2018 OCO		FY 201 Total		
Army		Qua	ntity					3	3		50		20			-		2	
			l Obligation Au	ıthority				1.817	7		4.371		2.424			-		2.42	
ANG		Quai	ntity					_	1		33		21	1		-		2	

LI MA6000 - Distribution Systems, Petroleum & Water Army

UNCLASSIFIED
Page 23 of 25

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]: R38101 / Unit Water Pod System (Camel)
ID Code (a control to the control to the code (a control to the code (a control to the code (a	MDAD/MAIS Codo:	

ID Code (A=Service Ready, B=Not Service Re	ady):A		MDAP/MAIS Code	<b>)</b> :					
Seconda	ary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total			
	Total Obligation Authority	-	3.186	2.478	-	2.478			
Total:	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	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)		

	0			Method/Type			Date			Specs	Date	
	С			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
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			