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

Appropriation / Budget Activity / Budget Sub Activity: 2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30: Petroleum Equipment	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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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 (<i>Units in Each</i>)	1,861	291	773	523	-	523	485	501	459	566	Continuing	Continuing
Gross/Weapon System Cost (<i>\$ in Millions</i>)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing
Less PY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Net Procurement (P-1) (<i>\$ in Millions</i>)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing
Plus CY Advance Procurement (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Total Obligation Authority (<i>\$ in Millions</i>)	840.357	35.381	120.896	47.597	-	47.597	49.027	52.589	46.825	36.885	Continuing	Continuing

(The following Resource Summary rows are for informational purposes only. The corresponding budget requests are documented elsewhere.)

Initial Spares (<i>\$ in Millions</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Flyaway Unit Cost (<i>\$ in Thousands</i>)	-	-	-	-	-	-	-	-	-	-	-	-
Gross/Weapon System Unit Cost (<i>\$ in Thousands</i>)	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 casualties associated with line haul distribution; (2) provides inherent safety and health

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

Appropriation / Budget Activity / Budget Sub Activity: 2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30: Petroleum Equipment	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water
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ID Code (A=Service Ready, B=Not Service Ready):	Program Elements for Code B Items: N/A	Other Related Program Elements: N/A
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Line Item MDAP/MAIS Code: N/A

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 50K fuel bags and 2 ea 350 GPM Pumps. The 800K FSSP has 4 ea 210K fuel bags and 2 ea 600 GPM pumps. The Army Acquisition Objective (AAO): FSSP 120K is 178 systems, FSSP 300K is 219 systems, and FSSP 800K is 58 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	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: Secondary Distribution	Quantity	291	773	523	-	523	485	501	459	566
	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:
2035A: Other Procurement, Army / BA 03: Other Support Equipment / BSA 30: Petroleum Equipment

P-1 Line Item Number / Title:
MA6000 / Distribution Systems, Petroleum & Water

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)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)	Quantity / Total Cost (Each) / (\$ M)
P-5	M60300 / FUEL SYSTEM SUPPLY POINT	P-5a	A		- / 322.548	- / -	68 / 60.120	- / -	- / -	- / -
P-5	R02600 / Modular Fuel System (MFS)	P-5a, P-21	A		385 / 191.281	286 / 16.134	349 / 22.253	365 / 21.610	- / -	365 / 21.610
P-5	R02670 / EXPEDITIONARY WATER PACKAGING SYSTEM (EWPS)		A		- / 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	B		- / -	- / -	- / 0.748	1 / 5.706	- / -	1 / 5.706
P-5	R38000 / Mobile Tactical Refueling System		B		- / 5.911	- / -	10 / 1.660	58 / 4.082	- / -	58 / 4.082
P-5	R38100 / HIPPO WATER DISTRIBUTION SYSTEM	P-5a	A		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	A		- / 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	- / -	523 / 47.597

*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: 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]: M60300 / FUEL SYSTEM SUPPLY POINT

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	-	68	-	-	-
Gross/Weapon System Cost (\$ in Millions)	322.548	-	60.120	-	-	-
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	322.548	-	60.120	-	-	-
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	322.548	-	60.120	-	-	-

(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)	-	-	884.118	-	-	-

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
FSSP 300K SIAD ^(†)	-	-	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	-	-	-	-	-	-	-	-	-
<i>Subtotal: Recurring Cost</i>	-	-	322.548	-	-	-	-	-	60.120	-	-	-	-	-	-	-	-	-
<i>Subtotal: Flyaway Cost</i>	-	-	322.548	-	-	-	-	-	60.120	-	-	-	-	-	-	-	-	-
Gross/Weapon System Cost	-	-	322.548	-	-	-	884.118	68	60.120	-	-	-	-	-	-	-	-	-

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	68	-	-	-
	Total Obligation Authority	-	60.120	-	-	-
Total:	Quantity	-	68	-	-	-

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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]: M60300 / FUEL SYSTEM SUPPLY POINT		
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
Secondary Distribution	Total Obligation Authority	-	60.120	-	-	-

(t) 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: 2035A / 03 / 30			P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water				Item Number / Title [DODIC]: M60300 / FUEL SYSTEM SUPPLY POINT					
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
FSSP 300K SIAD		2017	Sierra Army Depot / Herlong	MIPR	TACOM	Jan 2017	Nov 2017	68	814.000	Y		

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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]: R02600 / Modular Fuel System (MFS)

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	385	286	349	365	-	365
Gross/Weapon System Cost (\$ in Millions)	191.281	16.134	22.253	21.610	-	21.610
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	191.281	16.134	22.253	21.610	-	21.610
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	191.281	16.134	22.253	21.610	-	21.610

(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)	496.834	56.413	63.762	59.205	-	59.205

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Pump Rack Modules ^(f)	-	-	-	450.000	3	1.350	450.000	3	1.350	-	-	-	-	-	-	-	-	-
Tank Rack Modules ^(f)	42.000	385	16.170	47.000	286	13.442	50.000	349	17.450	50.000	365	18.250	-	-	-	50.000	365	18.250
Engineering Changes	-	-	35.000	-	-	0.434	-	-	0.800	-	-	0.456	-	-	-	-	-	0.456
System Engineering/ Program Management	-	-	65.138	-	-	0.508	-	-	1.350	-	-	1.527	-	-	-	-	-	1.527
System Test & Evaluation, Production	-	-	36.729	-	-	-	-	-	-	-	-	0.100	-	-	-	-	-	0.100
Training	-	-	0.984	-	-	0.050	-	-	0.088	-	-	0.092	-	-	-	-	-	0.092
Data	-	-	2.350	-	-	0.050	-	-	0.090	-	-	0.050	-	-	-	-	-	0.050
Support Equipment	-	-	3.150	-	-	0.048	-	-	0.085	-	-	0.089	-	-	-	-	-	0.089
Fielding	-	-	31.760	-	-	0.252	-	-	1.040	-	-	1.046	-	-	-	-	-	1.046
<i>Subtotal: Recurring Cost</i>	<i>-</i>	<i>-</i>	<i>191.281</i>	<i>-</i>	<i>-</i>	<i>16.134</i>	<i>-</i>	<i>-</i>	<i>22.253</i>	<i>-</i>	<i>-</i>	<i>21.610</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>21.610</i>
<i>Subtotal: Flyaway Cost</i>	<i>-</i>	<i>-</i>	<i>191.281</i>	<i>-</i>	<i>-</i>	<i>16.134</i>	<i>-</i>	<i>-</i>	<i>22.253</i>	<i>-</i>	<i>-</i>	<i>21.610</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>-</i>	<i>21.610</i>
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	21.610

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	47	241	195	-	195
	Total Obligation Authority	2.714	15.552	11.545	-	11.545

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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]: R02600 / Modular Fuel System (MFS)
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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: Secondary Distribution	Quantity	286	349	365	-	365
	Total Obligation Authority	16.134	22.253	21.610	-	21.610

(†) 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: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R02600 / Modular Fuel System (MFS)
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Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	RFP Issue Date
Pump Rack Modules		2016	DRS - PRM / St. Louis, MO	SS / FFP	TACOM	Nov 2015	Jul 2016	3	450.000	Y		
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 ^(†)		2016	ISOMETRICS - TRM / Reidsville, NC	C / FFP	TACOM	Mar 2016	Nov 2016	286	47.000	Y		
Tank Rack Modules ^(†)		2017	TBD / TBD	C / FFP	TACOM	Mar 2017	Nov 2017	349	50.000	N		
Tank Rack Modules ^(†)		2018	TBD / TBD	C / FFP	TACOM	Mar 2018	Nov 2018	365	50.000	N		

^(†) 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 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R02600 / Modular Fuel System (MFS)
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Cost Elements <i>(Units in Each)</i>							Fiscal Year 2015														Fiscal Year 2016														B A L A N C E		
O C C O	M F R #	FY	SERVICE	PROC QTY	ACCEP T P R I O R T O 1 O C T 2 0 1 4	BAL D U E A S O F 1 O C T	Calendar Year 2015														Calendar Year 2016																
							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							
Tank Rack Modules																																					
	1	2016	ARMY	286	0	286																							A -	-	-	-	-	-	-	-	286
	2	2017	ARMY	349	0	349																															349
	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 L	A U G	S E P							

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Exhibit P-21, Production Schedule: 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]:** R02600 / Modular Fuel System (MFS)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2017													Fiscal Year 2018													BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2016	BAL DUE AS OF 1 OCT	Calendar Year 2017													Calendar Year 2018													
							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			
Tank Rack Modules																																	
	1	2016	ARMY	286	0	286	-	25	25	25	25	25	25	28	28	28	27	25											0				
	2	2017	ARMY	349	0	349							A -	-	-	-	-	-	-	-	32	32	32	32	32	32	32	32	29	32	0		
	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 L	A U G	S E P			

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Exhibit P-21, Production Schedule: 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]:** R02600 / Modular Fuel System (MFS)

Cost Elements <i>(Units in Each)</i>						Fiscal Year 2019													Fiscal Year 2020													BALANCE	
O C C #	M F R #	FY	SERVICE	PROC QTY	ACCEPT PRIOR TO 1 OCT 2018	BAL DUE AS OF 1 OCT	Calendar Year 2019													Calendar Year 2020													
							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			
Tank Rack Modules																																	
	1	2016	ARMY	286	286	0																							0				
	2	2017	ARMY	349	349	0																							0				
	2	2018	ARMY	365	0	365	-	30	30	30	31	31	31	31	31	30	30	30	30										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			

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Exhibit P-21, Production Schedule: FY 2018 Army	Date: May 2017
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Appropriation / Budget Activity / Budget Sub Activity: 2035A / 03 / 30	P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water	Item Number / Title [DODIC]: R02600 / Modular Fuel System (MFS)
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MFR Ref #	Manufacturer Name - Location	Production Rates (Each / Month)			Procurement Leadtime (Months)							
		MSR For 2018	1-8-5 For 2018	MAX For 2018	Initial				Reorder			
					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	6	8	14	0	6	8	14
2	TBD - TBD	15	32	45	0	6	8	14	0	6	8	14

"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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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]: R02670 / EXPEDITIONARY WATER PACKAGING SYSTEM (EWPS)

ID Code (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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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)	1.615	3.001	3.582	3.116	-	3.116
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	1.615	3.001	3.582	3.116	-	3.116
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	1.615	3.001	3.582	3.116	-	3.116

(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)	-	1,500.500	1,791.000	1,558.000	-	1,558.000

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	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	-	-	-	-	-	-	-	-	-
Data	-	-	0.500	-	-	-	-	-	0.050	-	-	-	-	-	-	-	-	-
Support Equipment	-	-	0.215	-	-	-	-	-	0.050	-	-	-	-	-	-	-	-	-
Fielding	-	-	-	-	-	0.100	-	-	0.232	-	-	0.076	-	-	-	-	-	0.076
<i>Subtotal: Recurring Cost</i>	-	-	1.615	-	-	3.001	-	-	3.582	-	-	3.116	-	-	-	-	-	3.116
<i>Subtotal: Flyaway Cost</i>	-	-	1.615	-	-	3.001	-	-	3.582	-	-	3.116	-	-	-	-	-	3.116
Gross/Weapon System Cost	-	-	1.615	1,500.500	2	3.001	1,791.000	2	3.582	1,558.000	2	3.116	-	-	-	1,558.000	2	3.116

Secondary 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

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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]: R02690 / EARLY ENTRY FLUID DISTRIBUTION SYSTEM (E2FDS)

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	-	-	1	-	1
Gross/Weapon System Cost (\$ in Millions)	-	-	0.748	5.706	-	5.706
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	-	-	0.748	5.706	-	5.706
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	-	-	0.748	5.706	-	5.706

(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)	-	-	-	5,706.000	-	5,706.000

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
E2FDS System ^(†)	-	-	-	-	-	-	-	-	-	2,950.000	1	2,950	-	-	-	2,950.000	1	2,950
Engineering Changes	-	-	-	-	-	-	-	-	-	-	-	0.500	-	-	-	-	-	0.500
System engineering/ Program management	-	-	-	-	-	-	-	-	0.748	-	-	0.956	-	-	-	-	-	0.956
System Test & Evaluation, Production	-	-	-	-	-	-	-	-	-	-	-	0.450	-	-	-	-	-	0.450
Training	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
Data	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
Support Equipment	-	-	-	-	-	-	-	-	-	-	-	0.200	-	-	-	-	-	0.200
Fielding	-	-	-	-	-	-	-	-	-	-	-	0.250	-	-	-	-	-	0.250
<i>Subtotal: Recurring Cost</i>	-	-	-	-	-	-	-	-	0.748	-	-	5.706	-	-	-	-	-	5.706
<i>Subtotal: Flyaway Cost</i>	-	-	-	-	-	-	-	-	0.748	-	-	5.706	-	-	-	-	-	5.706
Gross/Weapon System Cost	-	-	-	-	-	-	-	-	0.748	5,706.000	1	5.706	-	-	-	5,706.000	1	5.706

Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	-	-	1	-	1
Total:	-	0.748	5.706	-	5.706

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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]: R02690 / EARLY ENTRY FLUID DISTRIBUTION SYSTEM (E2FDS)		
ID Code (A=Service Ready, B=Not Service Ready) : B			MDAP/MAIS Code:			
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

(t) 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: 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)					
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue Date
E2FDS System		2018	DRS / White Plains, IL	C / FFP	Warren, MI	Jun 2019	Dec 2019	1	2,950.000	Y	Feb 2016	Feb 2016

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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]: R38000 / Mobile Tactical Refueling System

ID Code (A=Service Ready, B=Not Service Ready) : B	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	-	10	58	-	58
Gross/Weapon System Cost (\$ in Millions)	5.911	-	1.660	4.082	-	4.082
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	5.911	-	1.660	4.082	-	4.082
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	5.911	-	1.660	4.082	-	4.082

(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)	-	-	166.000	70.379	-	70.379

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Mobile Tactical Refueling System	-	-	-	-	-	-	150.000	10	1.500	49.000	58	2.842	-	-	-	49.000	58	2.842
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	-	-	-	-	-	0.100
Data	-	-	4.000	-	-	-	-	-	0.005	-	-	0.600	-	-	-	-	-	0.600
Support Equipment	-	-	0.150	-	-	-	-	-	0.010	-	-	-	-	-	-	-	-	-
Fielding	-	-	-	-	-	-	-	-	0.025	-	-	0.100	-	-	-	-	-	0.100
<i>Subtotal: Recurring Cost</i>	-	-	<i>5.911</i>	-	-	-	-	-	<i>1.660</i>	-	-	<i>4.082</i>	-	-	-	-	-	<i>4.082</i>
<i>Subtotal: Flyaway Cost</i>	-	-	<i>5.911</i>	-	-	-	-	-	<i>1.660</i>	-	-	<i>4.082</i>	-	-	-	-	-	<i>4.082</i>
Gross/Weapon System Cost	-	-	5.911	-	-	-	166.000	10	1.660	70.379	58	4.082	-	-	-	70.379	58	4.082

Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	3	18	-
					18

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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]: R38000 / Mobile Tactical Refueling System

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

Secondary 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

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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 Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	1,476	-	261	56	-	56
Gross/Weapon System Cost (\$ in Millions)	235.764	14.429	24.976	8.181	-	8.181
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	235.764	14.429	24.976	8.181	-	8.181
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	235.764	14.429	24.976	8.181	-	8.181

(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)	159.732	-	95.693	146.089	-	146.089

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
HIPPO ^(†)	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	-	-	-	-	-	0.400
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
<i>Subtotal: Recurring Cost</i>	-	-	235.764	-	-	14.429	-	-	24.976	-	-	8.181	-	-	-	-	-	8.181
<i>Subtotal: Flyaway Cost</i>	-	-	235.764	-	-	14.429	-	-	24.976	-	-	8.181	-	-	-	-	-	8.181
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

Secondary Distribution		FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity	-	162	31	-	31
	Total Obligation Authority	6.099	14.862	4.529	-	4.529
ANG	Quantity	-	58	11	-	11

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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 Ready) : A **MDAP/MAIS Code:**

Secondary 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

(t) 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: 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	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty <i>(Each)</i>	Unit Cost <i>(\$ K)</i>	Specs Avail Now?	Date Revision Available	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.

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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 (A=Service Ready, B=Not Service Ready) : A	MDAP/MAIS Code:
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Resource Summary	Prior Years	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Procurement Quantity (Units in Each)	-	3	83	41	-	41
Gross/Weapon System Cost (\$ in Millions)	83.238	1.817	7.557	4.902	-	4.902
Less PY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Net Procurement (P-1) (\$ in Millions)	83.238	1.817	7.557	4.902	-	4.902
Plus CY Advance Procurement (\$ in Millions)	-	-	-	-	-	-
Total Obligation Authority (\$ in Millions)	83.238	1.817	7.557	4.902	-	4.902

(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)	-	605.667	91.048	119.561	-	119.561

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

Cost Elements	Prior Years			FY 2016			FY 2017			FY 2018 Base			FY 2018 OCO			FY 2018 Total		
	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)	Unit Cost (\$ K)	Qty (Each)	Total Cost (\$ M)
Flyaway Cost																		
Recurring Cost																		
Camel II ^(†)	-	-	-	90.000	3	0.270	90.000	83	7.470	100.000	41	4.100	-	-	-	100.000	41	4.100
Engineering Changes	-	-	12.891	-	-	0.200	-	-	0.005	-	-	0.050	-	-	-	-	-	0.050
System Engineering/Program Management	-	-	13.500	-	-	0.800	-	-	0.030	-	-	0.450	-	-	-	-	-	0.450
System Test & Evaluation, Production	-	-	12.147	-	-	0.150	-	-	0.010	-	-	0.075	-	-	-	-	-	0.075
Training	-	-	8.500	-	-	0.050	-	-	0.010	-	-	0.050	-	-	-	-	-	0.050
Data	-	-	11.050	-	-	0.045	-	-	0.010	-	-	0.061	-	-	-	-	-	0.061
Support Equipment	-	-	10.150	-	-	0.052	-	-	0.005	-	-	0.016	-	-	-	-	-	0.016
Fielding	-	-	15.000	-	-	0.250	-	-	0.017	-	-	0.100	-	-	-	-	-	0.100
<i>Subtotal: Recurring Cost</i>	-	-	83.238	-	-	1.817	-	-	7.557	-	-	4.902	-	-	-	-	-	4.902
<i>Subtotal: Flyaway Cost</i>	-	-	83.238	-	-	1.817	-	-	7.557	-	-	4.902	-	-	-	-	-	4.902
Gross/Weapon System Cost	-	-	83.238	605.667	3	1.817	91.048	83	7.557	119.561	41	4.902	-	-	-	119.561	41	4.902

Secondary Distribution	FY 2016	FY 2017	FY 2018 Base	FY 2018 OCO	FY 2018 Total
Army	Quantity 3	50	20	-	20
	Total Obligation Authority 1.817	4.371	2.424	-	2.424
ANG	Quantity -	33	21	-	21

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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 (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
	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

(t) 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: 2035A / 03 / 30			P-1 Line Item Number / Title: MA6000 / Distribution Systems, Petroleum & Water					Item Number / Title [DODIC]: R38101 / Unit Water Pod System (Camel)				
Cost Elements	O C O	FY	Contractor and Location	Method/Type or Funding Vehicle	Location of PCO	Award Date	Date of First Delivery	Qty (Each)	Unit Cost (\$ K)	Specs Avail Now?	Date Revision Available	RFP Issue 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			