

# Advanced Aviation Forward Area Refueling System (AAFARS)

## Refueling the tactical advantage

The Advanced Aviation Forward Area Refueling System (AAFARS) is a modular, lightweight, portable combat refueling system designed for rapid refueling of forward-area military aircraft in support of deep strikes. The system was designed and developed by BAE Systems to U.S. Army specifications and requirements.

AAFARS has a 240-gallon-per-minute pump that provides fuel to four fueling points at a rate of 55 GPM minimum at each point. AAFARS offers significant tactical advantage with its small size, light weight, high reliability,

low noise, and ease of use. This rugged system is helicopter-transportable and soldier-portable. Assembly in 20 minutes and tear-down in 30 minutes have been demonstrated in the field.

AAFARS' key environmental advantage is its use of unisex dry-break couplers to minimize fuel spillage. D-1, CCR, and oil serving nozzles are provided for refueling of practically any aircraft or ground vehicle. Other key features include multiple fuel capability that allows it to run on the same fuel as is being delivered to the aircraft or vehicle, and electric start capability with manual spring starter back-up.

## AAFARS features

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Modular, man-portable 4-point refueling system w/CCR and D-1 nozzles

Rapid, dependable combat refueling (55+ GPM per station)

Lightweight, small size, helicopter-transportable, air-droppable

Integrated unisex dry-break couplings make AAFARS safe and environmentally friendly



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## AAFARS performance overview

Performance parameters	Specifications
Rated flow	55 GPM min. @ 4 points simultaneously
Pump	240 GPM max., self-priming, centrifugal
Recirculation	2 GPM nominal, 100 GPM max.
Filtration	Meets API 1581 requirements @ 240 GPM
Coalescers	Meets API 1581 requirements @ 240 GPM
Engine	17 SHP, air cooled, 2 cylinder diesel
Starter system	28 Vdc electric start w/manual spring starter backup
Fuels	JP-5 and JP-8 (also diesel for the engine only)
Noise output	Hearing protection required
Fire extinguishers	Qty 5, 20 lbs. dry chemical

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### Interfaces

- Hose couplings: 2" and 3" unisex IAW AA59377
- Fuel source: requires qty 4, 500 gallon fuel bladders IAW ATPD 2295 Class II, Type III
- Nozzles: qty 4 each D-1 and CCR oil servicing

### Qualification

- Operating temperature: -25°F to +120°F
- Storage temperature: -28°F to +160°F
- EMI: MIL-STD-461
- MTBF: 210 hours
- Low Velocity Air Drop (LVAD) certified

### Size and weight

- Pump module	28.00"H x 36.25"W x 45.50"L	162 lbs. (fuel transfer pump)
- Engine module	19.00"H x 22.00"W x 23.50"L	166 lbs. (engine)
- Accessory module	22.00"H x 21.75"W x 40.25"L	151 lbs. (control panel and battery)
- Filter separator	24.00"H x 20.00"W x 55.00"L	147 lbs.



## FOR MORE INFORMATION, CONTACT:

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