

# Millennium Systems

## I n t e r n a t i o n a l

### M A R S

#### MODULAR AIRCRAFT REFUELING SYSTEMS\*

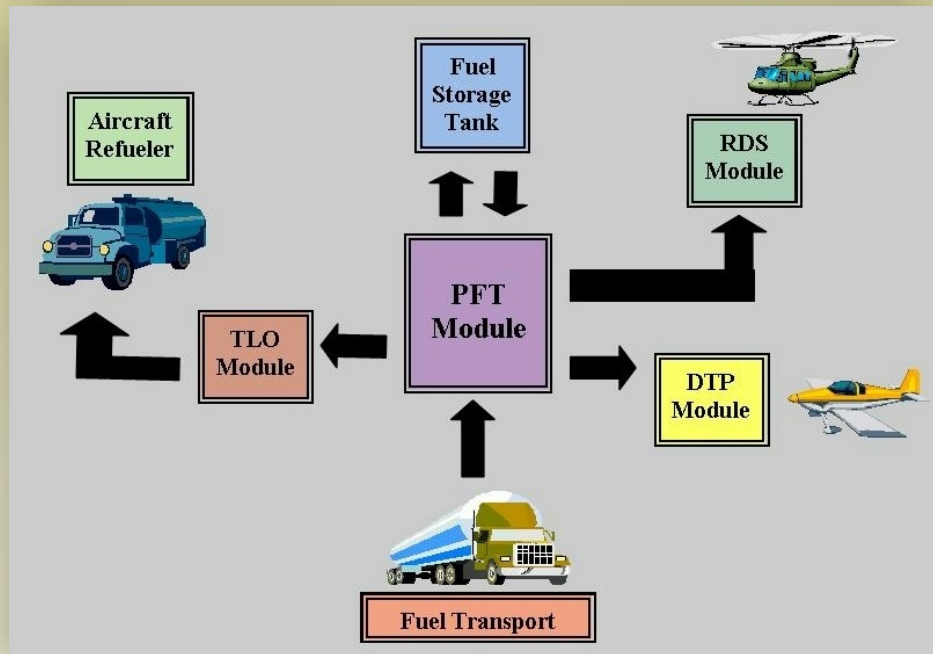
### The New Standard in Aviation Fuel Farm Design



**Millennium Systems International, LLC** specializes in the design, fabrication and integration of precision-engineered, modular fueling systems for military and commercial customers worldwide. The Modular Aircraft Refueling System (**MARS**) is the new standard in Aviation Fuel Farm design with interoperable modules that allow for unmatched flexibility and scalability.

\*MARS and Modular Aircraft Refueling Systems are trademarks owned exclusively by Millennium Systems International, LLC.

# The MARS Modular Concept



The MARS Modular Concept is simple, flexible and scalable.

MSI's family of standardized **MARS** Module configurations simplify specification, procurement, maintenance and spare parts support. Each **MARS** Module is precision engineered with rugged, field-proven components to provide years of trouble free service. Flexible, modular design allows for system expansion as needs change by simply adding modules providing a truly "scalable" aviation fueling system solution. A wide range of options are available including Underwing Refueling, Self-Serve fueling (with Card Reader) and aluminum or stainless steel cabinet enclosures. All MARS Modules are built in accordance with NFPA 30 & 407, ATA 103 and API 1529, 1581, and 1583.

# The MARS Family

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## **PFT (Pump & Filtration) Module:**

- 3" Rotary P.D. or Self-Priming Centrifugal Pump
  - Pump rated at 160-200 USGPM w/10 h.p., XP, 3 phase motor
  - 3" CS Inlet Strainer, CS Piping and D.I./SS Valves (Jet Fuel)
  - 200 USGPM Filter/Monitor w/ Water Absorbing Elements
  - Hannay Static Reel w/50 ft. Plastic-coated cable & clip
  - XP Start/Stop Station
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## **DTP (Direct-to-Plane) Module:**

- 1 1/2" Stainless Steel Flow Control Valve
  - 1 1/2" Liquid Controls M-5-A-2 Meter w/counter
  - 1" Hannay Hose Reel w/alum. internals
  - Hannay Static Reel w/50 ft. Plastic-coated cable & clip
  - 1" x 50 ft. API 1529 Aircraft Refueling Hose
  - 1" Overwing Refueling Nozzle w/swivel & strainer
  - XP Start/Stop Station
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## **RDS (Remote Dispensing) Module:**

- 1 1/2" Stainless Steel Flow Control Valve
  - 1 1/2" Filter/Monitor w/D.P. Gauge, vent and drain
  - 1 1/2" Liquid Controls M-5-A-2 Meter w/counter
  - 1" Hannay Hose Reel w/alum. internals
  - Hannay Static Reel w/50 ft. Plastic-coated cable & clip
  - 1" x 50 ft. API 1529 Aircraft Refueling Hose
  - 1" Overwing Refueling Nozzle w/swivel & strainer
  - XP Start/Stop Station
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## **TLO (Truck Loading) Module:**

- 3" Inlet Butterfly Valve
- 3" Liquid Controls M-15-A-2 Meter w/counter
- 100 USG Static Relaxation Tank w/accessories
- Electronic Deadman Valve (Intrinsically Safe)
- 2 1/2" x 15 ft. API 1529 Aircraft Refueling Hose /swivel
- 2 1/2" Whittaker F116 Single Point Nozzle w/swivel & strainer

# Millennium Systems International

## Markets Served

- FBOs
- Domestic/International Airports
- Airborne Law Enforcement
- Emergency Medical Services
- U.S. & Foreign Military
- Government Agencies
- Oil & Mineral Exploration

## Product Line

- MARS Modular Aircraft Refueling Skid & Cabinet Systems
- STARCART Expeditionary Fueling Cart Systems
- TRITON Shipboard Helicopter Refueling Systems
- Military Truck Fill Stands
- Hot Refueling Pantograph Systems
- Gorman Rupp Self-Priming Centrifugal Pumps
- Facet/Velcon Filter/Separators
- Hannay Fueling, Deadman & Static Reels
- Cla-Val Fueling Control Valves
- Custom Engineered PLC Control Systems



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