



### Features

- Full system in one unit
- Compact configuration
- Small footprint
- Easy to install
- Lightweight
- Reduced freight costs

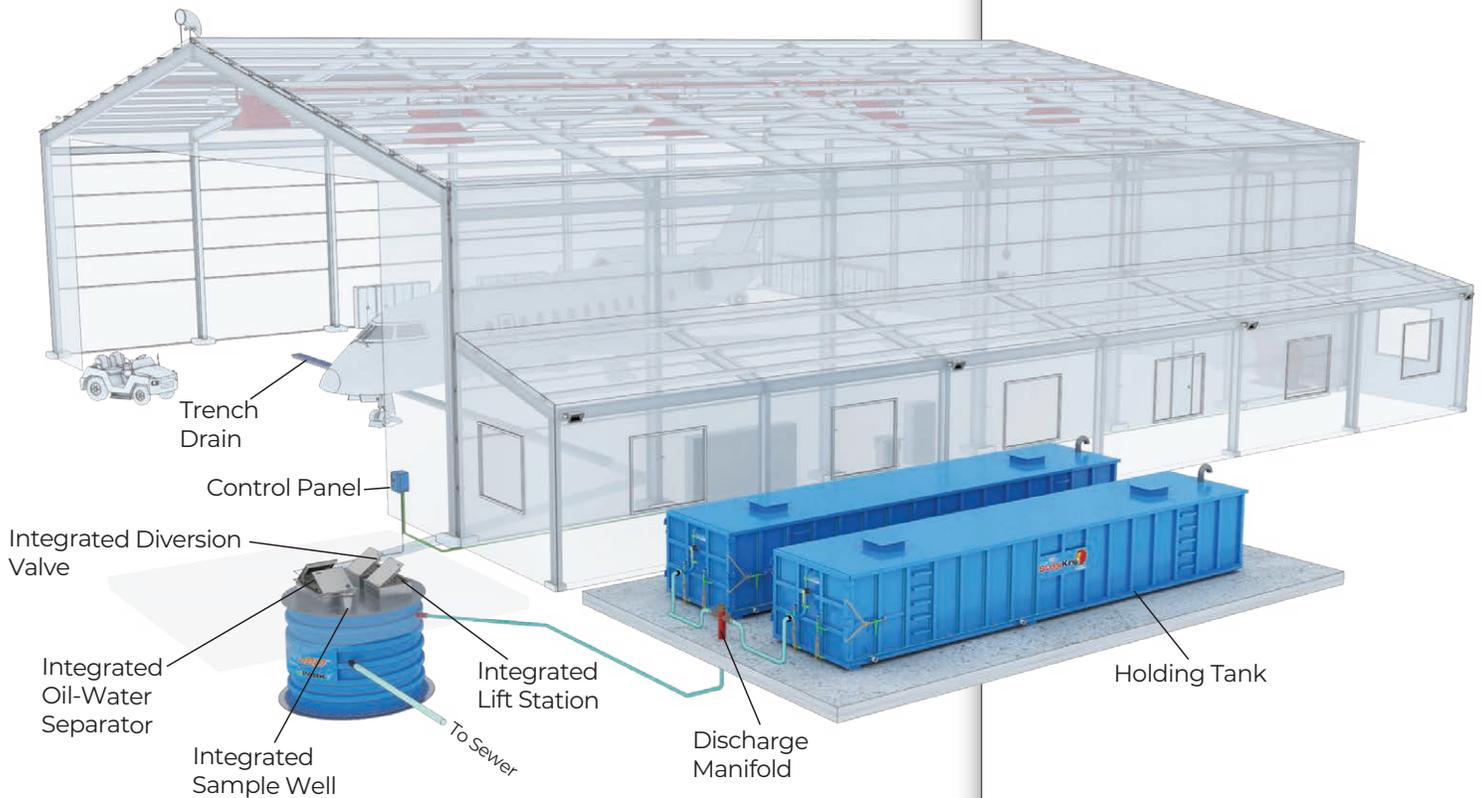
### FoamTrooper UBD - Unibody System

Aqueous film-forming foam (AFFF) solution is used extensively in fire suppression systems for aviation facilities and fire training facilities. AFFF systems are proven and essential to protect these valuable, mission essential aircraft and hangar facilities. However, AFFF foam also consists of fluorosurfactants (PFAS) that are harmful to the environment. AFFF foam discharge should not be allowed to flow untreated into the ecosystem, or into the sewage systems in large quantities. Many states are facing remediation challenges for their water resources. Although foam suppression systems are still being used and deployed, their discharge issues remains unsolved.

The FoamTrooper UBD is the ultimate solution for this problem. The FoamTrooper enables for treatment, diversion, storage, and management of fire foam suppression wastewater systems, all integrated into a single unit. ParkUSA has designed the FoamTrooper UBD to enable the practical use of existing fire suppression technology, but in an ecofriendly and sustainable way.



**WW** | FOAMTROOPER UNIBODY  
Standard



## How it Works

The floor drain system is in the area protected by fire suppression system, usually a hangar or helipad. The flooring is sloped to the floor drains or trench drain. All fluids that hit the hangar floor, drain into the trench drain. Piping connects the trench drain to the Foam Trooper Uni body System consisting of a diverter valve system, oil water separator and lift station. The diverter valve assembly has one incoming pipe and two exiting pipes; one directed to the sanitary sewer (normal condition), and another pipe directed to the containment tank or pond (alarm condition). The diverter valve system can include an automatic control system that will allow the central fire alarm system to activate the diverter valve. The control system will provide valve position status and automatic and manual control.

Upon the activation of the fire suppression system, a signal is sent to the AFFF management panel. The diverter valve changes position and diverts wastewater flow from the oil-water separator, to the containment tank where all the fluids are detained. After activation, the containment tank is eventually emptied by a liquid waste disposal company or can be emptied by managed dosing (pumped at a low flow rate). The dosed flow is directed to the oil-water separator where solids and hydrocarbons are separated and retained. The treated effluent is discharged to the sanitary sewer.

To request a quote or catalog, visit [request.parkusa.com](http://request.parkusa.com).

## Background

New generation AFFF is generally non-hazardous and biodegradable according to the Interstate Technology Regulatory Council. However, the major concern is the large volume of foam solution that can be produced from hangar fire protection systems. Because AFFF is biodegradable the breakdown by bacteria consumes oxygen. Uncontrolled AFFF discharge to the environment can deprive aquatic life of oxygen and causes fish kills.

If allowed to enter wastewater treatment plants (WWTP) in large volumes, AFFF can disrupt the treatment process by killing necessary bacterial cultures within WWTPs. Many WWTPs prohibit the discharge of AFFF laden wastewater unless the AFFF concentration is less than 50 ppm. The AFFF wastewater holding tank can be used to store foam supply or drainage after discharge, and slowly release the spent foam into the sewer system.

## APPLICATIONS



Flammable Storage Facilities



Fueling Depots



Aircraft Hangar Bays



Helidecks



Maintenance Facilities