BIRDBATH™

CLEAR WATER RINSE SYSTEM



RIVEER™

Engineered Wash Water
Recovery Systems

The Solution is Clear with Riveer℠

BIRDBATH Clear Water Rinse System



- APPROVED FOR FIXED AND ROTARY WING AIRCRAFT
- FULLY AUTOMATIC, NO OPERATOR REQUIRED
- AUTOMATICALLY COMPENSATES FOR WIND SPEED AND DIRECTION
- ENGINEERED FOR EFFICIENCY IN BOTH PRESSURE AND FLOW
- DIFFERENT SPRAY PATTERNS FOR DIFFERENT AIRFRAMES
- RECLAIMS, FILTERS AND REUSES 80% OF WATER
- PERMANENT OR DEPLOYABLE OPTIONS AVAILABLE
- PLUG-AND-PLAY SYSTEM

FIGHT CORROSION BEFORE IT HAPPENS

The Riveer BirdBath is an automatic Clear Water Rinse System (CWRS) that helps prevent aircraft corrosion quickly and effectively by rinsing the aircraft as it taxis back to the flight line or gate. An extensive study in 2001 found that the U.S. Armed Forces spend around $20 billion annually on corrosion-related costs. Frequent clear water rinses in-between scheduled washes remove corrosion-causing agents like salt and dust before they are able to cause any damage. Stringent requirements on rinse frequency can put a strain on resources but Riveer's automatic BirdBath is here to help.

The low-pressure (less than 175 PSI), high-flow (between 800 and 3,000 GPM) process takes 30 seconds to 2 minutes depending on the type of aircraft being rinsed; a specially designed spray pattern is pre-programmed for every airframe that will use the system. Rigorous testing was conducted during the development of this product to ensure that each type of aircraft would be washed as efficiently as possible without ever harming the shell of the aircraft.

The BirdBath CWRS reclaims, filters and reuses up to 80% of the water sprayed during a rinse cycle. A high-flow Riveer Treatment System (RTS) sends the recaptured water through various stages of filtration and then monitors for Total Dissolved Solids (TDS). Once water TDS reaches the limit, it's discharged into a waste tank. Recycling saves roughly 520 gallons per minute or 1,500,000 gallons of water per year (based on 12 aircraft per day 250 days a year).

Like all Riveer systems, the BirdBath CWRS is completely customizable to the unique requirements of your project. Optional features include automatic wind-correction and integrated wash stations with air-powered foaming guns and turbine engine flush.



Adheres to TM 1-1500-344-23-2:

- All aircraft flown at low level (under 3000 ft.) over salt water require a CWR after the last flight of the day.
- All aircraft stationed at bases located within 1.25 miles of salt water shall be CWR'd at least once every 15 days.



Spray pattern are programmed to change depending on the type of airframe coming through.



All equipment is housed below surface level to meet airfield requirements.



Pumps and filtration system can be installed in a building or in 20' all-weather ISO containers.



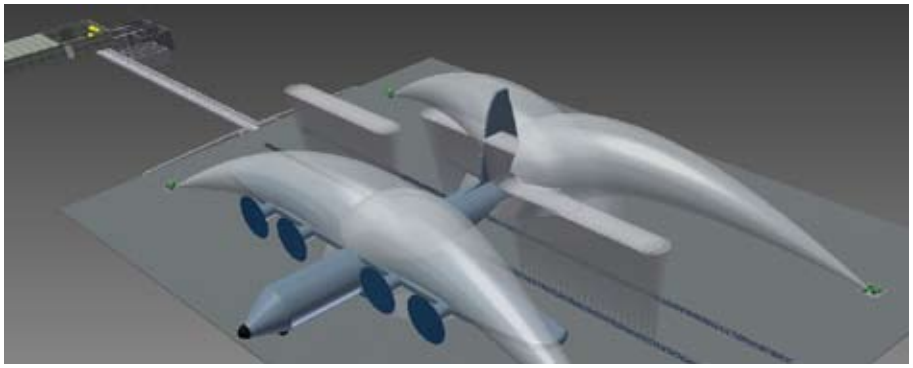
Adheres to T.O. 1-1-691, Aircraft Weapon Systems Cleaning and Corrosion Control (NAVAIR 01-1A-509, TM 1-1500-344-23-2)

High flow, low pressure water cannons are designed specifically for aircraft rinsing

PERMANENT OR DEPLOYABLE

The Riveer BirdBath CWRS can be installed permanently using a poured concrete pad which is typically most economical but often takes time to procure necessary approvals for infrastructure modification. Alternatively, BirdBath is available in a fully deployable package requiring only a large level surface area.

The latter option uses an above-ground, heavy duty steel wash rack to recover dirty wash water along with a couple of all-weather 20' ISO containers which house all of the holding tanks, pumps and water filtration equipment.



In-ground concrete system with pumps, tanks and filtration in concrete building.



Above-ground, deployable, steel wash rack system with pumps, tanks and filtration in ISO containers. Drawing also depicts additional option for two manual wash stations.

CWRS FEATURES

- Fully automated system with unique spray patterns designed for each airframe
- Sprays 800 - 3,000 GPM, always applying a safe-for-aircraft 175 PSI
- Fully rinses aircraft within 30 seconds to 2 minutes
- Optional wind direction and speed correction technology
- Undercarriage spray utilizes FOD-proof nozzles (Foreign Object Damage)
- Reclaims and recycles up to 80% of water used in the spray cycle
- Recycling system is on a continuous 24 hour cycle to keep water fresh and prevent odors
- Saves roughly 520 gallons per minute or 1,500,000 gallons of water per year (based on 12 aircraft per day 250 days a year)
- Installed permanently in-ground or deployable with above-ground wash rack and ISO containers
- Fully customizable based on your unique requirements

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BIRDBATH Clear Water Rinse System



AUTOMATIC OPERATION

BirdBath taxi-through rinses removes dust, salt and other corrosion-causing contaminates from the entire outer structure of the aircraft in less than one minute and can be configured to process almost any number of aircraft per day. The rinse is triggered for automatic operation when an aircraft crosses the BirdBath ramp threshold, or it can be manually initiated by a trained operator.

BIRDBATH TAXI ON-DECK

Constructed of heavy-duty steel, (galvanized for shoreline deployment) the taxi-on rinse deck area is sized to fit the aircraft to be rinsed. From small 27' L x 80' W x 4" H pads for small helicopters to 80' L x 120' W x 4" H for midsized fixed wing aircraft. The approach and departure ramps are 10' x 60' and designed with ultra low, 1.9° compound angles to allow sufficient ground clearance for aircraft with centerline tanks installed. The highest obstruction is a mere 3/8" ridge at the entry to the BirdBath rinse deck area.





ADJUSTABLE PATTERN ADJUSTABLE FLOW NOZZLE

- FOD (Foreign Object Damage)-proof; nothing can become detached after install
- Made of corrosion-proof 303 Stainless Steel
- Mil-spec O-ring seals
- Adjustable spray pattern from 0° - 82°
- Adjustable flow from 1 to 35 gallons per minute
- Adjustments can be made after install in a matter of seconds
- Tamper-proof settings; can only be changed by trained personnel
- Self-cleaning design

Riveer Environmental employs a quality management system that is ISO 9001:2008 certified.

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