

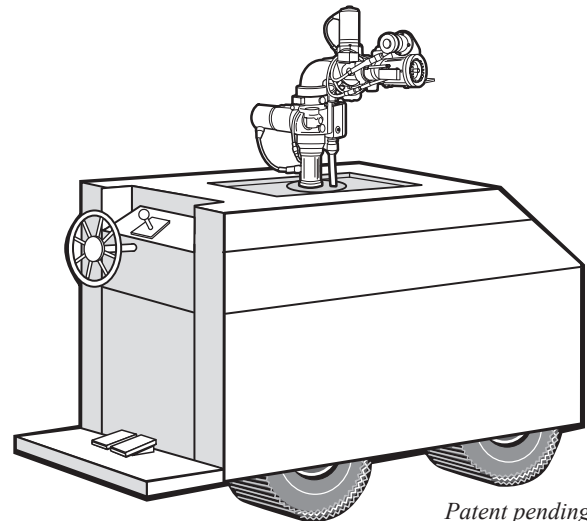
# WRS Roving Vehicle



(PRELIMINARY)

## Emergency Inmate/Crowd Control System

- Rapid deployment
- Resistant to tip-over or riot damage
- Moves easily through personnel gates
- Self-contained
- Remote or on-board manual operation



### Description

The following describes a new compact movable pepper spray delivery system that supports rapid deployment and rapid response. The system can be manually driven or operated by remote control.

### Construction

The overall construction is a heavy duty and low-slung vehicle that is self-contained and impervious to damage by rioters or inmates. The top and sides are metal plate. The tires are protected by removable panels. The controls for driving and nozzle control are located under an access panel at the rear of the vehicle. The nozzle is retracted when not being used and stored under a sliding panel located on top of the vehicle.

### Manual Driving Operations

A driver operating the RV-WRS manually stands on the platform at the rear of the unit. The driving controls are located under a panel that can only be unlocked if allowed by a wireless command from a remotely located control panel. Under the panel are two handgrip multi-axis control

sticks. The right handgrip controls the movement. The left handgrip controls the nozzle operation. The driver starts the vehicle by a key-operated starter. The maximum speed when being manually driven is 20 MPH.

### Remote Driven Operations

Remote operations always take precedence over manual operations. Therefore, a remote controller can stop any activity that is not allowed by a manual operator or an inmate takeover. The maximum speed when being remotely driven is 8 MPH. Remote control is operated with a handgrip control located on the remote control panel and very similar to the control mounted on the unit.

### Manual Chemical Operations

The on-board operator can aim and fire the nozzle using the handgrip control. The operator can also operate the countermeasures system using a key operated control.

### Remote Chemical Operations

All chemical operations can be operated remotely. On command, the unit will open the roof panel over the nozzle, extend the nozzle and begin spraying operations. All operations will be the same as for a manual operator except that the movement speed is reduced to 8 MPH maximum for safety reasons.

### On-board Video System

The on-board video system consists of two cameras: one located on the nozzle and one looking forward from the vehicle. A character generator displays key system information superimposed on the video display.

### Built-in Countermeasures

The on-board countermeasures system consists of six spray nozzles located on the sides, front, and top of the vehicle. On command, either manual or remote control, the nozzles spray a fog of high potency OC. The countermeasures fog potency is much higher than normal pepper spray strength to discourage vehicle damage from an attack.

## Construction

#### Size:

Width: 38 inches, able to pass through standard personnel gates and sally ports.

Length: 7 feet

Weight (Approximate): 5000 pounds

Breakdown: Water: 2300 lbs.

Fuel: 30 lbs.

Vehicle: 2670 lbs.

Height: Approximately 60 inches

Water tank: 250 gallons

#### Power:

Power plant is a 50-horsepower combustion engine, propane fueled.

Power unit is used to move vehicle and power pumping system.

Water-cooled.

#### Performance:

Forward speed when being manually driven: 20 MPH (29.3 ft/sec.)

Driver stands on fold-down shelf at back of unit.

Forward speed when being driven via remote control: 8 MPH (11.7 ft/sec.)

Reverse performance/speed: same as forward direction

Turning radius: 8 feet

Braking: Hydraulic

Nozzle can deliver chemical approximately 165 ft.

Nozzle can deliver chemical at approximately 125 gallons/minute.

Storage provides up to 83 three-gallon chemical pulses.

Driving controls: Handgrip control stick for movement and turning.

Shooting controls: Handgrip control stick for aiming and firing.

#### Security:

Unit cannot be started without a remote control radio signal.

Security cover over controls locked/release only by remote control.

Remote radio control takes precedence over local manual control.

Local countermeasures; remote activation or by internal security system.

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