SJPD Command Vehicle Driver's Manual

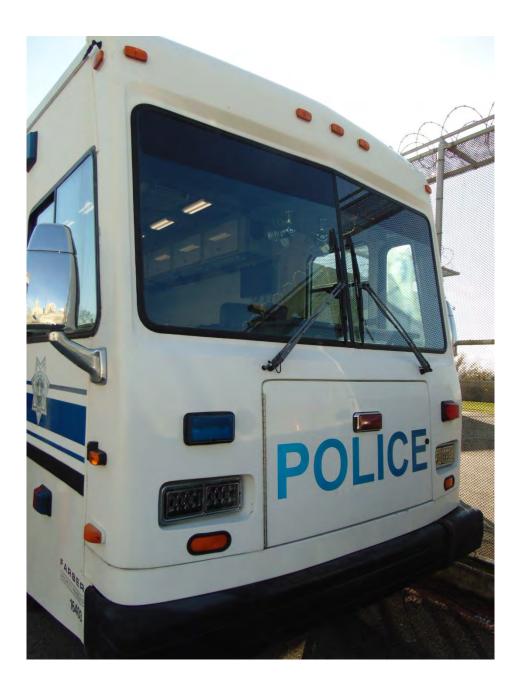


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Command Vehicle Facts Sheet

2002 Freightliner/FSV/Command

Fuel: Diesel Only

13' Tall by 38' Long

31,000 Lbs

40 Gal. Fresh Water System

45 Gal. Holding Grey Water System

100 Gallon Fuel Tank

Onboard Restroom, Coffee Maker, Microwave, Refrigerator, and Sinks.

Exterior mounted scene lights are 9,000 Lumans each; two on each side and one rear.

Exterior pole mounted lights are 16,000 Lumans each; one on each side of the Command Vehicle.

AIR 3 downlink compatible

Satellite TV

2 Full GTAC computer systems

6 San Jose Police Department radios, 1 dedicated San Jose Fire Department radio, and 1 dedicated Santa Clara County Sheriff's radio

8 TV screens

AC/Heater

Airbrake System

Because of the overall size and weight of the Command Vehicle, the vehicle has been equipped with an air brake system. Air brakes are different than conventional braking systems. Unlike conventional braking systems, air brakes require that air pressure be built up in the lines each time before operation. There are two air gauges on the dashboard to the right of the steering wheel, one for the front brakes and one for the rear brakes.



Before you attempt to move the Command Vehicle these gauges must read 110° PSI. Failure to achieve 110° PSI before moving the vehicle could result in a <u>failure</u> in the <u>braking system</u>. When first starting the vehicle, it will take several minutes to build pressure in the system. By depressing the gas pedal slightly and increasing RPM at idle, the pressure will build quicker.

Alarms and Warning Lights

Alarms

The Command Vehicle is equipped with a variety of audible alarms that will sound to warn you of different issues.

- The back up alarm will sound every time the vehicle's reverse gear is activated.
- The 12 volt low voltage alarm. This alarm will sound when the power load on the 12 volt system is too great. This alarm will continue to sound until the load on the panel is reduced. To reduce the power load to this panel, turn off some of the breakers on the 12 volt panel or activate a different power source (activate the vehicle's generator or plug the vehicle into an external power source) or start the main engine.
- Due to the size and overall weight of the Command Vehicle, the vehicle has been equipped with an air brake system. The air brake system has an alarm associated with it. This alarm will sound as you decrease pressure from the vehicle's brake pedal in either of the following conditions;
 - If the vehicle is in 'N' (Neutral) and the emergency brake is not set, the alarm will sound.
 - The alarm will sound in this condition to alert you of the potential of the vehicle moving. Because of it's weight, the vehicle has the potential to roll if not in gear, or if the emergency brake is not set.
 - If the emergency brake is set when you activate the 'D' (Drive), the alarm will sound.
 - The alarm will sound in this condition to alert you that the vehicle is in gear and that the emergency brake is still set. Again, because of its weight, you run risk of damaging the vehicle's transmission or its air brake system if you attempt to move the vehicle with both systems activated.
- The "Low Air Pressure" alarm will sound when activating the HWH Leveling System. The jacks use air pressure to lift the coach using the air pressure from the front tank. <u>Note: Main Engine must be running when deploying the jacks.</u>

Warning Lights

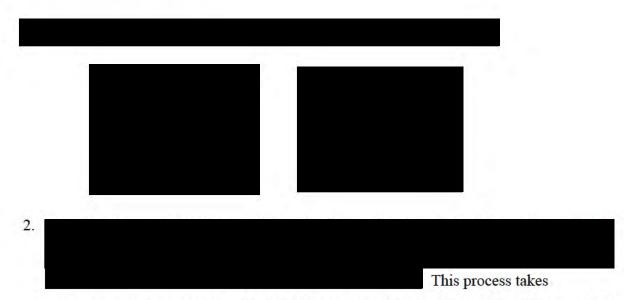
As an additional indicator, the Command Vehicle has been equipped with a variety of warning lights. All of these warning lights are designed to alert you of a potential hazard that exists that if not addressed could cause damage to the vehicle.

- To the right of the steering wheel, located near the top of the dashboard are two black switches. One of the switches is marked "Step Out Front" and the other is marked "Step Out Rear". Below each of these switches are two red lights.
 - These red lights will glow when the entrance steps to the vehicle are out. You should never attempt to move the vehicle with either of these two steps in the out position. Moving the vehicle with the entrance steps in the down position may cause damage to the vehicle and potentially to other objects that you pass.
 - To retract the entrance steps simply depress the switch until the red light stops glowing. When the red light is off, the step is in/secured.
- Immediately to the left of the steering wheel, there is a panel that has a schematic of the vehicle *(see page 15.)* This panel controls the auto leveling system for the vehicle. Before you attempt to move the vehicle all lights should be off on this panel.
- In the middle of the dashboard is a bank of lights that, when any one is lit, will warn you of various issues that could be wrong with the vehicle. The three most common lights that may be illuminated when you turn the ignition key to the right are:



- 1. Transmission Oil
 - The 'Transmission Oil' light will usually go out after the vehicle is started. If the light does not go out after you have started the vehicle, you will need to check the level of the oil in the rear compartment of the vehicle. The vehicle should be idling when you check oil level. If oil is low advise the police garage and have oil added.
- 2. Parking Brake
 - This light will remain on until you dis-engage the parking brake. The parking brake is the yellow switch located in the upper left corner of the dashboard.
- 3. Low Brake Air Pressure
 - The 'Low Brake Air Pressure' light will usually go out almost immediately after you start the vehicle. The air pressure in the braking system starts to build as the vehicle's engine begins to run. The pressure must build to 110° in the air brake system before you move the vehicle.
 - It may also illuminate if you use the HWH Leveling System. This system uses air pressure from the front brakes to level the Command Vehicle.

Pre Deployment Checklist



approximately 5-10 seconds. During this time, the "Wait to start" alarm will sound. This will flash before turning off. Once the light goes out, you can start the Command Van. *(See below for photo of "Wait to Start.")* Turn the key to the right to start the Command Vehicle. Once the Command Vehicle has started, allow the engine to warm up while you conduct the 360 degree check of the exterior and interior.



360 Degree Walk Through Checklist:

- 1. Remove cones from side of Command Vehicle.
- 2. Remove tire chocks and place them in the rear stairwell of the Command Vehicle.

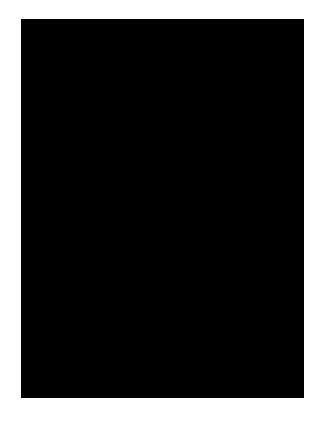


 Disconnect the Yellow/Black passenger side Shore Power Cord located near the front of the Command Vehicle door. Drag it to the fence of Juvenile Hall and place it along the bottom of the fence. <u>ENSURE THAT YOU DO NOT DRIVE OVER ANY PORTION</u> <u>OF THE PLUG OR CORD</u>.





- 4. Walk to the driver's side of the Command Vehicle and disconnect the Green power plug and place it alongside the fence with the shore power plug.
 - a. Both cords should be aligned with the fence. (See below.)



 Confirm that the Satellite dish on the roof is stowed and secure. This can be done from the exterior. <u>IF</u> the Satellite dish is <u>NOT</u> stowed, it will be visible.



6. Confirm that the leveling jacks are not deployed and are raised.



If jacks are deployed:

- a. Find the HWH Computerized Leveling Panel located on left side of the steering wheel.
- b. Press the "Store" button once to energize the system.
- c. Press and hold the "Store" button for 2-3 seconds to engage the system; the jacks will raise. A GREEN travel light will illuminate indicating all jacks have risen.
 See page 15 for more on the HWH System.
- 7. Confirm that the awnings are locked and secured and not deployed.

8. Make sure you bring the steps in before travel. An alarm will sound and red idicator lights will activate if the steps are out.



Interior Checklist

- 1. Walk through the cabin and ensure that no loose items are on the counter tops.
- 2. Check that all chairs are secured via the bungee cords.
- 3. Check that all cabinet doors are shut and secured.
- 4. Turn on the GTAC Computer and log on the Command Vehicle.

Command Vehicle Call Signs

8000-8009

Before you attempt to move the Command Vehicle, the air gauges must read 110 PSI. Failure to achieve 110 PSI before moving the vehicle, could result in a failure in the braking system. When first starting the vehicle, it will take several minutes to build pressure in the system. By depressing the gas pedal slightly and increasing RPM at idle, the pressure will build quicker.

Generator Start Up

 Switch From Shore Main to Generator Power. Flip the Shore main power toggle down. Move the Black slider to the left and flip the Generator power toggle up.



- 2. Press and hold the Stop button for approximately 5-10 seconds *(See arrow 1.)* Similar to the main engine, the generator also has glow plugs that need to warm up. Then press and hold start button until the generator starts. *(see arrow 2.)*
- You can now turn on the internal HVAC Thermostats, heaters, and/or AC units. You <u>can</u> drive with the generator active.

Things to think about before leaving PAB:

• This is a large vehicle...plan accordingly. Make sure there is space for the vehicle once you arrive at your destination and make sure it is in a safe area. Once you arrive, survey the area designated for the Command Vehicle to make sure the Command Vehicle will fit, the Command Vehicle is far enough away from the incident, etc. If the predesignated area is not ideal move the location for the Command Vehicle.

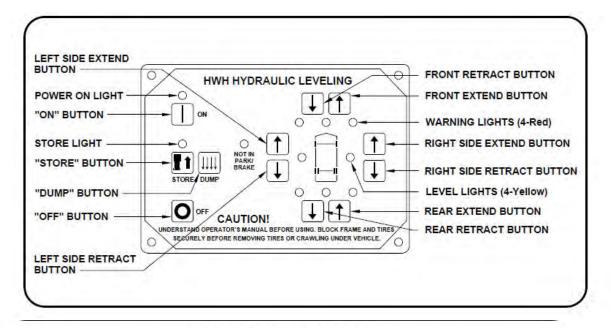
Keep in mind that on the passenger side of the Command Vehicle is the external television. This extends out approximately 6-10inches. Be mindful of low hanging branches, Stop Signs and/or Road Signs, or other obstacles that may strike this unit.

This unit is specifically made for being mounted to exteral surfaces and is waterproof and glare resistent.



HWH Computerized Leveling System

To use this system, the Main Engine must be on as the air pressure compressor runs on the main engine.



CONTROL FUNCTIONS

CONTROL BUTTONS

ON (I) BUTTON: This is the on button for the leveling system. The on indicator light is above the (I) button.

"OFF" BUTTON: Push the "OFF" button to stop hydraulic operation.

"STORE" BUTTON: The store indicator light is above the "STORE" button. This button is used to automatically retract the jacks.

EXTEND BUTTONS (UP ARROWS): These buttons will extend their respective jack pairs to lift the vehicle.

RETRACT BUTTONS (DOWN ARROWS): These buttons will retract their respective jack pairs to lower the vehicle.

DUMP BUTTON: (IF APPLICABLE) This button will dump the air from the vehicle suspension.

INDICATOR LIGHTS

HYDRAULIC OPERATIONS (I) LIGHT: This light indicates that the panel is active.

"NOT IN PARK/BRAKE" LIGHT: This indicator will light when the hand/auto brake is not set and the "LEVEL" button is being pushed.

STORE LIGHT: This light indicates that the system is in STORE mode.

LEVELING LIGHTS: The four yellow indicating lights are level sensing indicators. When a yellow light is on, it indicates that its side, end, or corner of the vehicle is low. No more than two lights should be on at the same time.

JACK DOWN LIGHTS: The four red lights surrounding the yellow level indicators are jacks down WARNING lights. They are functional only when the ignition is in the "ON" or "ACC" position, the system is on, and the jacks are extended 1/4 to 1/2 inch.

MASTER "JACKS DOWN" WARNING LIGHT: This is a light mounted in the dash separate from the touch panel. It will be on when any one or more jacks are extended and the ignition is "ON".

BUZZER: This is a jacks down warning. It will sound if the master "JACKS DOWN" warning light is on.

The 325 leveling system is a manually controlled, BI-AXIS push-button system. This system will always extend two [2] jacks at the same time, both front jacks, the left front and the left rear jacks, the right front and right rear jacks or both rear jacks. The jacks are controlled by the UP and DOWN arrow buttons on the right hand side of the touch panel. The UP arrows extend jack pairs and the DOWN arrows retract jack pairs.

There are two parts to leveling a vehicle. First the vehicle is leveled. The jacks are used to turn all the yellow level indicators off. The second part of leveling is to stabilize the vehicle. This is accomplished by extending any jacks not used for leveling to the ground and lifting the vehicle about % to 1 inch.

The ignition must be in the "ON" or "ACC." position and the park brake must be set to turn the system on. The "NOT IN PARK/BRAKE" indicator light will come on while the "ON" button is being pushed if the park brake signal is not present. The system will not turn on.

Pushing the "ON" (I) button will turn the system on. The POWER ON light should be lit. With the POWER ON light on, the UP and DOWN arrows will function. The "DUMP" button will function at this time.

If the vehicle is equipped with an air suspension, the air must be exhausted from the suspension before leveling the vehicle. If the air is not exhausted, the suspension height control valves will interfere with the leveling procedure. There are two types of air dump systems that HWH controls. One system uses air solenoid valves supplied by HWH. The second system is supplied by the chassis manufacturer. This is a pilot air dump system. The HWH touch panel has a "DUMP" button. The "DUMP" button will only work if the POWER ON light is on. If the vehicle uses the HWH air dump pilot air dump system is used, the engine may be on or off. The "DUMP" button can be pushed and released. The pilot air dump system will return to the travel position if the ignition is on and the "STORE" button is pushed or the park brake is released.

NOTE: Releasing the park brake to return the suspension to travel mode (vehicle to ride height) is not recommended for normal operation. This is a fail safe if the "STORE" button is not used to retract the jacks.

Manual Leveling Operation:

On the right hand side of the touch panel there are four (4) red and four (4) yellow indicator lights. The four red indicator lights are JACK DOWN warning lights. There is one light for each jack. These warning lights come on when their respective straight-acting jacks are extended about ¼ to ½ inch or a kick-down jack is in the vertical position. The four yellow indicator lights are level indicators, front, left side, right side and rear. A lit yellow level light indicates that a side, end or corner is low. When all four yellow level lights are out, the vehicle is level within the tolerance of the level sensing unit.

Use the UP and DOWN arrow buttons to extend jack pairs as needed to level and stabilize the vehicle. Side level lights should be turned off before turning off front or rear level lights.

The "OFF" button will turn the system off at any time.

Store Mode:

The touch panel has a "STORE" button and light. The "STORE" button will work with the POWER ON light on or off. The ignition must be in the "ON" or "ACC." position. The STORE light will come on when the "STORE" button is pushed. The STORE light will go out two (2) minutes after the last of the four individual red WARNING lights go out. If the POWER ON light is on while the STORE light is on, the POWER ON light will go out at this time also. If the vehicle is equipped with a pilot air dump system, the suspension should start to return to ride height when the "STORE" button is pushed.

The "STORE" button should always be used to retract the jacks. This allows the system to store any jack that extends due to thermal expansion of the hydraulic fluid while traveling. When traveling, if a jack extends enough to allow a jack warning switch to turn on, the processor will turn the appropriate solenoid valve on so the jack can retract. The master warning light and buzzer will NOT come on at this time. If thirty (30) seconds after the solenoid valve is turned on, the warning switch is still on, the processor will turn the master warning light, the buzzer and the appropriate red WARNING light on the touch panel on.

IMPORTANT: When testing a leveling system, all four sets of UP and DOWN arrow buttons should be used to make sure the complete system operates correctly, including the red WARNING lights and the yellow LEVEL lights.

On Scene

Advise that the Command Vehicle is "10-97."

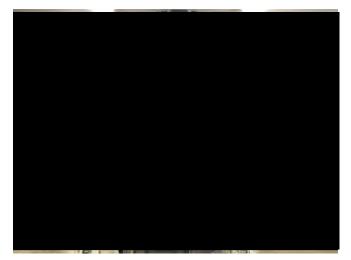
- 1. <u>Apply chocks to the rear wheel. The next step will use most of the air pressure to</u> <u>level the Command Vehicle. This reduction in air pressure will render the braking</u> <u>system on-functional, including the EMERGENCY BRAKE! The rear wheel</u> <u>chocks MUST be in place before proceeding.</u>
- 2. Deploy the leveling jacks. Turn on the HWH Leveling system.
 - a. Press "hold/level" button.
 - b. Press and hold/level button for 2-3 seconds.
 - i. If done correctly flashing red lights will signal on every jack attempting to level the Command Vehicle. Once they glow solid leveling is complete. *See page 15 for further detail if needed.*
- 3. Bring both steps out by pressing the "out step" key located on the driver's center console.
- 4. Turn on what devices you need.

TV System

- 1. Toggle the "TV/VCR" switch to on.
- 2. Locate the satellite box under the 12 Volt DC System panel.
- 3. Press power.
- 4. Press green search button.
 - a. You will hear the satellite begin to move. This process takes approximately 5 minutes for the satellite to fix on a signal.
- 5. Turn on the TV's that you wish to view.

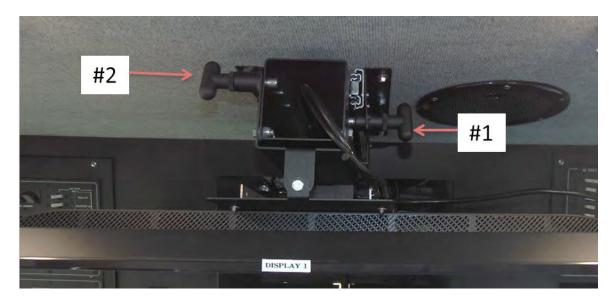
Front TV Fold Down

The front large TV, in-between the driver and passenger seat, should be locked in place.



To deploy this TV do the following:

- 1. Pull handle #1: this will allow the TV mount to pull forward.
- 2. Pull handle #2: this will drop the TV down for viewing.





To store the TV, it is important to make sure that both handles (1 & 2 shown above) are completely locked into place. The mount will not move if done correctly.

Exterior Viewing TV

To activate the exterior TV for briefing purposes, follow the below listed steps:

- 1. Turn on the exterior TV
- 2. Go to the "Radio Closet" and locate the HDMI Matrix Switch.



- 3. Change the output number to number 02
- 4. All TV's should display what is on the Touchscreen at this time.
- 5. <u>KEEP IN MIND WHATEVER IS DONE ON THE TOUCHSCREEN WILL BE</u> <u>DISPLAYED EXTERNALLY.</u>
- 6. To disconnect external viewing turn the HDMI Matrix Switch to any other input

Lighting Systems

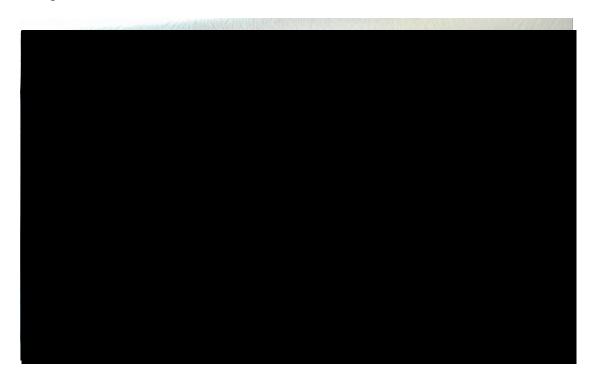
- The D.S. Scene Lights and the P.S. Scene lights control the fixed side mounted lights
- The Exterior Pole Lights D.S and P.S. control the pole mounted lights at the rear of the Command Vehicle.



• Under Cabinet Lights have both White light and tactical Red light functions. To activate either of the "Under Cabinet Lights," flip the switch "on" for Under Cabinet Lights. Then walk around to each individual light unit and flip the switch to change from white to red light.

Emergency Lighting

• All "Code 3" lighting is controlled by the switches and light bar control panel, similar to a patrol car.





When driving, consider the size and weight of the Command Vehicle in regards to turning response, stopping distance, and maneuverability. The Command Vehicle is equipped with Code 3 lighting to assist with "Code 2" clearing intersections, conducting large turns in major intersections, or backing. The Command Vehicle <u>IS NOT EXPECTED TO</u> <u>RESPOND IN A TRADITIONAL CODE 3 MANNER!</u>

Blackout/Privacy Curtains

- The Command Vehicle has the option to block the front windows from public view. The curtains are located in the driver's side, top Cabinet located behind the driver's seat.
- Attach the curtains to the fixed button points located along the front windshield and side windows.

Command Vehicle Briefing Mode

On scene commanders may wish to conduct large scale briefing(s) outside the Command Vehicle. The generator usage at this time is too loud to conduct such a briefing. In order to put the Command Vehicle into a briefing mode, you will need to configure the vehicle to run on battery. To do run on battery power follow the steps below:

- 1. Turn off the Heater and AC units. Make sure that prior to shutting down the Converter systems, that all work being done on laptops or the Touchscreen are saved.
- 2. <u>Turn off Converter Switch #1 and #2. IT IS CRITICAL THAT THOSE ARE</u> **BOTH OFF DURING BRIEFING MODE.**
- 3. Turn off the Generator.
- 4. Go to the exterior of the Command Vehicle and access the Shore Power system in the first compartment closest to the front stairs.
- 5. Grab the orange power cord. The power cord is zip-tied and has a large outlet plug on one end and a traditional plug at the other.



6. Plug the yellow end into the external shore power outlet.



7. Plug the Orange and Black side into the wall socket mounted in the compartment



8. Turn the "Inverter Power Switch" on. This is located in the front passenger side stairwell.



The Command Vehicle is now running on battery mode and will be silent for the duration of the briefing. After the briefing is done reverse the above steps and turn the generator back on.

Briefing mode is meant to only be used for short periods of time. Typically the Generator is what is used to power the Command Vehicle.

Plumbing System

- 1. To activate the plumbing system, first turn on the Plumbing system toggle located on the 12 Volt DC System Panel.
- 2. Walk to the galley sink and turn on the red toggle switch. This turns the pump system on.



Waste Tank Dump Procedure

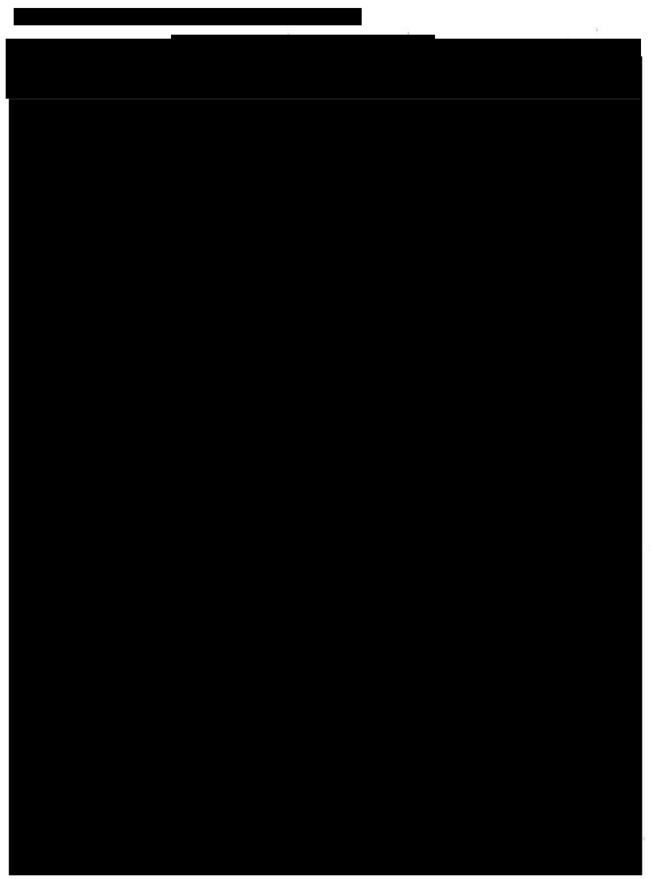
The waste tanks must be dumped after **every** use. The vehicle sits for long periods of time and if waste is left in the tank, the vehicle could be unusable for an emergency callout. The only exception to this is for a callout and late return; the driver may elect to return the next day and take the vehicle out to dump the waste tanks. **DO NOT** wait longer than one day to complete this task!

To dump the waste tanks:

The Alviso Water Treatment Plant (700 Los Esteros Rd, San Jose, CA, 95134) has a 24 hour dump facility at no charge. The area to dump at this facility must be approached carefully, but is easy to depart from and has a hose available to rinse the dump hose.

- Open thewaste storage container door (use the latch to hold the door up) and put on rubber gloves stored inside the Command Van driver's side rear top storage above display #7.
- Attach the dump hose (black attachment piece) to the dump drain at the bottom of these tanks.

- The end of this hose must be in the dump receptacle (it cannot be nearby, but must be in the receptacle to prevent spillage).
- Identify the grey water (from sink-washing hands) valve release and the black water (toilet waste) valve release which will be used in the next step.
- 5) Once the dump hose is securely in place, release the black water dump by pulling the large lever out. <u>ALWAYS EMPTY BLACK WATER BEFORE GREY WATER.</u>
- 6) By dumping the Black water first and the Grey water second, the Grey water will flush out the pump house with Dirty/Soap water.
- 7) Wait until both tanks are empty (draining noise has ceased).
- 8) Close both release valves.
- 9) If a hose is available, attach the hose to the flush receptacle (yellow female hose end on the side of the tank) and with moderate pressure, fill the tank about halfway to rinse it.
- 10) Re-open the black water release valve and allow to drain completely.
- 11) Close black water release valve.
- 12) With the hose still attached to the flush receptacle, fill the tank approx. 1/8 to 1/4 with fresh water.
- 13) Remove the hose from the flush receptacle
- 14) Remove the dump hose and use (or find if possible) a water hose to rinse this.
- 15) Replace the dump hose within storage area
- 16) Close and secure storage area.
- 17) Replace the hose used for rinsing.
- 18) From inside the vehicle, add tank deodorant to the toilet by flushing one container down the toilet (tank deodorant is a small bottle stored in the rear storage area above Display #7 and in the storage compartment labeled "Cleaning Supplies").





Command Vehicle Printer

The Command Vehicle is equipped with a printer. The printer is located in the large closet at the rear of the Command Vehicle.

To activate the printer turn on the "Printer and Rear Closet" switch located on the 240 Volt AC Panel.

Command Vehicle Supplies

The Command Vehicle is equipped with various supplies which should be checked prior to leaving PAB to include:

- Electronic flares located in a yellow bag in the locked Office Supplies Box
 - Patrol style road flares should never be stored inside Command Vehicle.
- Additional paper and printing supplies
- Water Bottles
- Orange Crime Scene tape





• Ensure that the Command Vehicle is clean and all trash is emptied. Replace any supplies used and make ready for the next deployment. It is important to restock, clean, and inventory all supplies and resources inside the Command Vehicle as the next deployment could be at any time.

- 10. Shut down the generator and turn on shore power. Re-plug in both exterior plugs.
- 11. Re-chock tires.

History of the Command Vehicle

The current command vehicle was purchased with 350 thousand dollars in grant money.

The base price of the vehicle was 250 thousand dollars and the radios and other equipment was the additional 100 thousand dollars.

The design of the vehicle came about through a BFO committee made up of BFO Admin personnel, Communications personnel, Fleet Management, and Research and Development. As the plans were decided they were presented at Captain's staff meetings for input and approval.

It was designed as a mobile command post. Secondarily, it was designed with the use in mind of a mobile communications center.

A major factor in the purchase and design was that it can be driven by anyone possessing a standard driver's license. There is no need for a special driving endorsement. This became an issue when the license was obtained for the vehicle. It was initially thought that the weight rating put the vehicle over the limit. Captain Kenneller fought hard to ensure that the vehicle was rated at the level requiring only a standard driver's license.

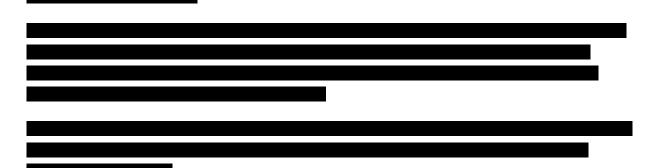
Current drivers for the Command Vehicle have gone through an approximate 5 hour training course which included the operation of all the equipment on board as well as how to drive it.

While everyone is licensed to drive it, we ask that only those trained in its operation take it out since there are many things unique to the driving and operation of this vehicle.

We currently have approximately 25 people trained to drive the Command Vehicle.

The Command Vehicle can, and should be, called out for any type of incident where a mobile office or command post setting would be beneficial. This can be anything from a homicide scene, to a lost child or even to any sort of involved investigation.

Recent examples of callouts include a barricade situation and a lost child where the investigation took several hours.



Note: when calling the vehicle out, it would benefit supervisors on scene to ensure any Command Vehicle qualified officer (Command Vehicle on watch list) can be kept available or at an easily replaceable position in the event they are needed for the vehicle callout.

If and when the vehicle is down for a maintenance issue, please keep in mind that it may still be available for emergency callout. If the vehicle is at a commercial vendor and it is after hours, it will not be available. If it is at a city service center, we can always get to it. To see if it is available, call or page the Command Vehicle coordinator.



