

## **WORKING IN AN INCIDENT COMMAND VEHICLE**

By Earl Pack – AE5PA

Working in an Incident Command Vehicle (ICV) is a challenging and fun experience. Since none of the vehicles are alike and one does not always find what they would expect, some training about an ICV is recommended in the event you have an assignment to work in one. There are several things you should be aware of and be prepared for. The following is a description of a very nice, 1.5 million dollar ICV. It has:

- 7 work stations with dual screen computers at each station in the front work area.
- 2 work stations in the back work area.
- Telephones at each work station.
- Tables in both work areas for maps, equipment, eating area, etc.
- Wireless internet access.
- Telex computer interface access to a bank of 8 onboard radios for the front 7 work stations. The Telex system allows any work station to access and monitor any one or multiples of this bank of 8 radios via the computer and headset.
- 9 additional radios, one at each work station.
- 50+ foot telescoping mast with cameras.
- Capability to access a live feed from all city cameras
- Digital TV feed.
- Multiple large screen touch displays for APRS/GPS tracking, video feed, etc.
- Mini refrigerator.
- Microwave oven.
- Comfortable chairs for all occupants.

However, as is typically the case there were no radios in this vehicle specifically programmed or setup for amateur radio use. In addition, no provisions had been made in the vehicle design for passing any cables to the outside any other way than through the roof escape hatch. It had not been considered that amateur radio operators would work in the vehicle. The vehicle pop out sections were sealed so tightly no cables could be passed around them. So putting your own equipment in the vehicle would be more difficult. Only 3 of the 17 radios were VHF capable. There was no HF capability. None of the radios could be programmed without a technician. Due to cost constraints no technicians were available to program the radios on the weekend. The radios in this particular ICV had to be programmed by a contract company.

For large special events or disasters it is common to have communication personnel from the local fire department, police department, EMS, event officials, and amateur radio operators in the ICV. All these agencies needed to quickly pass communications between each other and dispatch assignments out to their respective teams.

Prior to an event when the vehicle described was inspected, it was determined that amateur radio operators would have a problem using the onboard radios. Arrangements were made to program two radios: one for VHF repeaters and one for UHF repeaters. These programs would be useful for the

current and future events. The program design was done by a licensed amateur radio operator, but the technician doing the actual work was not licensed, so was not able to test the programming. Hours prior to the start of the event, it was determined that the radios programmed for amateur radio use were not working properly and could not be reprogrammed on the spot. Amateur radio Hand held Transceivers (HT's) could not reach the repeaters through the metal walls of the vehicle. Thus some amateur radio operator ingenuity had to be employed at the last minute to make the communication plan work as required.

Other ICV's have a very similar design and functionality to the one just discussed. One had multiple capped off pass through ports for routing cables outside the vehicle. These pass through ports make it easy to set up your own amateur radio equipment. In one case the driver of the ICV was a licensed amateur operator and technician who was permitted, capable, and available to program the radios as needed on the spot. Most ICVs do not have radios for HF work.

If you have the assignment to work in an ICV, plan to put fate into your own hands by being prepared with the following:

- Your own dual band 2m/70cm and/or HF radio(s) that you can change on the spot for any developing needs or frequency changes.
- 110Vac power supply and/or cigarette lighter adapter for power.
- Coax cable(s).
- Protection for your coax in case you have to pass it through a doorway or hatch that has to be propped open.
- 5" Magnetic mount.
- Cookie sheet or pizza pan for mounting your magnetic mount since the vehicle roof will likely be aluminum plate preventing the magnetic mount from making the correct attachment.
- Dual band, gain 2m/70cm antenna(s).
- Antenna mast equipment with a ground plane base for the 2m/70cm antenna just in case a roof mount is not possible.
- HF antenna(s) as needed.
- Full ear cover head phones.
- The ability to work in a crowded-noisy environment with a lot going on. Messages must be passed quickly to the necessary organization for action.

If you have the opportunity to influence the design of ICVs, stress the need to be flexible and have the ability to accommodate amateur radio operation along with all other agencies, in addition stress the need to have a qualified technician present during the event to make changes as situations change. This will allow the efficient use of the onboard equipment and not require you to bring and set up additional equipment. The owner of the first vehicle described was very appreciative and open to suggestion for future modifications to make that ICV usable for all agencies including amateur radio.

As amateur radio operators trained in emergency communications and public service, be prepared for and have the tools and equipment you need to adapt to anything.