



Chester County - Radio Committee Meeting

Date: 06/14/2022

Attended Meeting: Barkley Ramsey, Doug McMurray, Jeromy Vinson, Bill Baxter, Britt Lineberger (via phone)

Not Available: Ben Grant, T. Melton

Meeting started at 14:00

- Welcomed Jeromy Vinson to the committee as representation for the Municipal Police Chief's. He will need to be added to the Teams Group and Outlook email group.
- Vinson had a concern about the number of radios assigned to Great Falls and how the numbers were arrived at
 - These were discussed and resolved with no changes to the counts
- Waiting on template merge from Ben Grant
 - Need this to get it to the state for additional work
- Work at the tower site was scheduled to start the week of June 6th
 - No work has started as of the meeting
 - Construction crews are working on a new tower at the Moss Justice Center in York
- The mid-August timeline is looking very narrow for the system being ready
- Received information from the engineers on the Vehicle Repeaters (VRs):
 - Working with the manufacture
 - a jurisdiction in Florida was identified to have a system close to our system
 - They use the VRs to assist with building penetration in place of requiring hundreds of BDA's
 - All their first out trucks have a VR
 - When they arrive, they park strategically to the structure and turn on the VR
- VR Usage
 - The VRs are programmed to work with their Ops channels
 - If Ops 1 is assigned, they use VR1
 - If Ops 2 is assigned they use VR2.
 - This make knowing what channel to use very easy and uniform in the field.
- Parking Strategically with VR's
 - They have found there is no building in their jurisdiction they cannot work the entire area of the building if they position the VR Truck strategically
 - There is one elevator shaft in a hospital that is not covered, and they did install a BDA at that location
 - Parking in the center of a building's length not on the end
 - They cover three story apartment complexes and a 10-cinema movie-plex with their VRs, no problem
 - A mobile lift, like a boom truck, was setup as a portable VR truck, the install became very complicated and expensive with the cable spools, routing, and reliability
 - They decided not to use VRs on ladders and lifts

- FCC Application
 - Doug has instructed the engineers to proceed with the FCC application for tree frequencies for VR's
 - This will take about 6 to 8 weeks, if all goes well
 - They will then start an intermod study for frequency interference before accepting the assigned frequencies
 - This will take about a week
- When our system is up and running, the engineers have an agreement with the Manufacture to bring a unit here, programmed on our system and test its use in our exact application
 - Florida is a densely populated city; we are looking for building coverage as well as overcoming terrain obstacles.
- The engineers also found that the antenna spread on vehicle MUST be 12 feet or more
 - Florida had no issues on a 'Class A Pumper', but command vehicles and SUV did not work
 - Why: one antenna is receive the other is transmit, when they are too close, when the transmitter keys, the radiation pattern from the transmit antenna envelopes the receive antenna and it can no longer receive the incoming signal when the transmitter keys, the radiation pattern from the transmit antenna envelopes
 - Antenna spread is key
 - This will cause Group to rethink the vehicles that the VRs are assigned to.

Next meeting was scheduled for June 28, 2022 at 1400 hrs.

The meeting was adjourned approximately 1445 hrs.