

The VIPER Semi-Annual Newsletter

(Jun. 2019 - Dec. 2019)

As part of our communications effort to keep everyone informed of our progress, we will be distributing a semi-annual newsletter via email and posting a copy of it on the VIPER website at <http://www.ncdps.gov/Our-Organization/Law-Enforcement/VIPER>. If you would like to contact us, you can email us at VIPER@NCSHP.ORG or call 1-888-92-VIPER.

What is the VIPER staff doing?

- Please help us welcome the newest member of the VIPER team, Zebulon Scott. Zeb has joined the team as a Maintenance/Construction Technician III.
- Working with the Spectrum Deconfliction Committee for the RNC.

Critical Upcoming VIPER Upgrades

- **GTR Upgrade:** Sixty-one (61) tower sites have been identified for upgrade from Quantars to GTR base stations in state fiscal year 2019-2020 should we get a budget. The number of sites upgraded is directly dependent upon the funding provided by the Legislature. Notification for the outages/upgrades will come from the Network Operations Center (NOC) via email **prior** to the upgrade and any assistance during the upgrade should be directed to the NOC at 1 (888) 927-4737.

Quick Facts

- 241 total sites planned for statewide coverage; 227 sites constructed and on-the-air.
- 4 sites are under construction.
- \$2,837,764 funded for FY2019-2020 for Construction; normally \$7,000,000.
- \$7.5M O&M needed at completion of build-out; Current funding = \$7.0M recurring.
- Challenges
 1. No budget passed thus far in SFY19-20 significantly reduces the number of tower sites planned for completion by fiscal year end.
 2. In moving forward with construction of new tower sites, the challenge will be to get fully executed leases prior to site construction.
 3. Lack of an exemption for State owned property has now become a significant challenge since local governments are now able to veto the state's use of its own land.

Tower Construction Updates

- Benson (Johnston Ct): NEPA is complete awaiting construction drawings.
- Anson 911 (Anson Ct): NEPA is complete awaiting construction drawings.
- Ford Rd (Watauga Ct): Waiting for county to negotiate a land lease with property owner.
- Charlotte (Mecklenburg Ct): Working on lease for site.

Radio reprogramming

- Please ensure that you make every effort to update your current radio code plug to include the latest control channel list so that your equipment performs at the optimum level. When updating the control channel list, you must ensure that the Full Spectrum Scan option is also activated in your radio code plug. As of January 2020, we are still seeing radio code plugs where the number of control channels in the list is set to ONE! If you have any questions about the control channel update, please send an email to VIPER-activate@ncshp.org.

- We are currently working on revising all of the VIPER Statewide talk groups and anticipate that a new Mandatory VIPER Basic Statewide Template will be forthcoming in mid 2020. These changes will include quite a few new talk groups as well as the renaming and realignment of existing talk groups. We are also finalizing a statewide plan for encryption and the assignment of KID's and SLN's to both counties and agencies to ensure that all users follow a coordinated plan. We hope to have that in place prior to 30 June, 2020.

VIPER ID status

- VIPER POCs should maintain their inventory and are required to submit an annual "true-up" document to VIPER in January of each year. The "true-up" document for 2019 is due Friday, January 31st and should be sent to VIPER-activate@ncshp.org.

VIPER approved radios

- For 2020 we continue to approve multiple radio vendors and products for use on the VIPER system. Currently Motorola, EF Johnson, Kenwood, Harris, Tait and BK Relm all have approved products for use on the VIPER system. **New radios from vendors for consideration are due no later than 30 September of each year** so that testing and evaluations can be completed prior to the start of the new calendar year.
- **Please read the following notice carefully regarding radio additions to the VIPER System effective 1 January, 2020 and beyond.**
- **Effective 1 January, 2020, VIPER will no longer allow current or new VIPER end user agencies to activate non TDMA capable radios on the system. This would include all models from the below list of manufacturer radios;**
 1. **Motorola – XTS1500, 2500 and 5000 portable radios**
 2. **Motorola – XTL1500, 2500 and 5000 mobile radios**
 3. **EF Johnson – 51SL/51ES portable radios**
 4. **EF Johnson – 53SL/53ES mobile radios**
- Effective 1 July, 2022 all radios being added to the VIPER system must be ready to receive TDMA programming. It is extremely important that our end users understand exactly what this means. Many manufacturers radios may be capable of TDMA operation but were not ordered with the "feature" enabled from the factory. These radios will need to be modified in the field to add the TDMA feature, so as to be **ready** for a transition to TDMA in the future.
- Effective 1 July, 2025 all radios currently **active** on the VIPER system, along with all future additions to the system shall be ready to receive TDMA programming. VIPER respects that these dates may represent challenges to our end users, especially in the area of funding since replacement radios or upgrades to existing radios will be necessary. However, it is also important to consider that the system continues to grow and in order to maintain VIPER's current level of system availability, that a move to TDMA operation would be the most cost effective manner to address future growth and system health. VIPER would strongly recommend that as soon as feasibly possible, that end user agencies consider purchasing new radios **with the TDMA operation already included** in the radios features, so that it is not necessary to have to revisit radios to add the TDMA feature in advance of the above listed dates. VIPER has created a new email address specifically for TDMA related questions regarding this memorandum and any other VIPER TDMA related items. Please utilize viper-tdma@ncshp.org for any TDMA related inquiries.

System Health

- The System Health is a section that we plan to provide with each newsletter to update our stakeholders, users and partners as to how the VIPER system is doing. These statistics are taken directly from the system.
 1. System count

Users (actual radio IDs, consoles not incl.)	129,658
Trunked channels	1,690
Conventional channels	722
Talk groups	4,161
Comm centers tied directly to VIPER	43

2. Busies: The percent of busies compares the number of busies vs. the number of PTTs on the system. Acceptable industry standard is 3% busies for a system. Below is VIPER's system health as it relates to the percentage of busies that we get on the system.

	PTT average	% Busy
Daily average	297,000	0.02%
Monthly average	8,800,000	0.01%

