The VIPER Newsletter Q1 -2010

As part of our project plan, we want to keep you informed of our progress and issues as we work to construct VIPER across the state. Our goal is to produce and distribute a quarterly newsletter via email and to post a copy on the VIPER website. Once posted, the newsletter can be found by visiting www.nccrimecontrol.org/VIPER. If you would like to contact us, you can email us at VIPER@NCSHP.ORG or call 1-888-92-VIPER.

Quick Facts:

- **240 total sites planned for statewide coverage**
  - **144 sites constructed and on-the-air**
  - **50 sites are fully funded and under construction**
  - **25 sites PARTIALLY FUNDED via 2008 Public Safety Interoperable Communications Grant (PSIC) awaiting $4.7M State matching funds, otherwise return $13.1M to Capitol Hill**
  - **21 sites UNFUNDED**
- **VIPER estimated to cost $189M**
  - **$110M funded to date**
  - **Pending: $13.2M Public Safety Interoperable Communications grant (PSIC) has been awarded pending State match of $4.7M**
  - **Pending: Additional $61.1M is left to be funded (assuming PSIC matched)**
- **VIPER is 60% complete (number of sites) with 144 sites on-the-air**
- **VIPER infrastructure is 59% funded.**
- **41% of VIPER remains to be funded**
- **35,000 Users are currently on the VIPER Network**
- **182 Emergency Responding agencies makeup the VIPER user network**

Activated Sites:

	Site County	Site		Site County	Site
1	Alamance	Altamahaw	74	Lincoln	Anderson Mt
2	Alamance	Cane Mtn	75	Macon	Cowee Bald
3	Anson	Wadesboro	76	Madison	Big Knob
4	Avery	Linville	77	Martin	Williamston
5	Beaufort	Bath	78	McDowell	Grants Mtn
6	Beaufort	Chocowinity	79	Mecklenburg	Pineville
7	Bertie	Windsor	80	Mecklenburg - UASI	Heathway
8	Bladen	Elizabethtown	81	Mecklenburg - UASI	Huntersville
9	Brunswick	Pea Landing	82	Montgomery	Buck Mountain
10	Brunswick	Supply	83	Moore	Carthage
11	Buncombe	High Windy	84	Nash	Rocky Mount
12	Buncombe	Meadows	85	New Hanover	Wilmington
13	Burke	High Peak Mtn	86	New Hanover	Carolina Beach
14	Cabarrus	Concord	87	Northampton	Odom

	Site County	Site		Site County	Site
15	Caldwell	Hi Britten Mtn	88	Onslow	Jacksonville
16	Carteret	Newport	89	Orange	Hillsborough
17	Carteret	Laurel Road	90	Orange	Chapel Hill
18	Carteret	Stacy	91	Orange	Laws
19	Carteret	Kuhns PE	92	Pamlico	Bayboro
20	Caswell	Yanceyville	93	Pasquotank	Elizabeth City
21	Catawba	Baker Mt Twr	94	Pender	Penderlea
22	Chatham	Chatham	95	Pender	Holly Ridge
23	Chatham	Siler City	96	Pender	Burgaw (NC53 East)
24	Cherokee	Wine Springs	97	Perquimans	Winfall
25	Cherokee	Joanna Bald	98	Pitt	Greenville
26	Chowan	Valhalla	99	Randolph	Shepherd
27	Cleveland	Shelby	100	Richmond	Ellerbe
28	Cleveland	Boiling Springs	101	Robeson	St Pauls
29	Cleveland	Bens Knob	102	Rockingham	Reidsville
30	Cleveland	Kings Mtn	103	Rockingham	Wentworth
31	Columbus	Delco	104	Rockingham	Eden
32	Columbus	Whiteville - TWC	105	Rockingham	Mayodan
33	Craven	New Bern PE	106	Rowan	Faith
34	Cumberland	Cedar Creek	107	Sampson	Newton Grove
35	Cumberland	Slocomb	108	Sampson	Salemburg
36	Cumberland	Fayetteville-TWC	109	Sampson	Taylor's Bridge
37	Dare	East Lake	110	Stanly	Albemarle
38	Dare	Bodie Island	111	Stokes	Sauratown
39	Duplin	Kenansville	112	Surry	Turner Mt
40	Duplin	Kornegay PE	113	Surry	Chestnut Ridge
41	Duplin	Wallace PE	114	Surry	Elkin DOT
42	Duplin	Chinquapin	115	Transylvania	Brevard
43	Durham	Camden Ave	116	Tyrell	Columbia
44	Durham	Cole Mill Rd	117	Union	Monroe
45	Edgecombe	Tarboro	118	Union	Wingate
46	Edgecombe	Dodge City	119	Wake	Wake County Simulcast
47	Franklin	Margaret	120	Wake	Wake Forest
48	Franklin	Youngsville	121	Wake	Fuquay
49	Gaston	Cherryville	122	Warren	Manson
50	Granville	Butner	123	Wayne	Lee Plant PE
51	Granville	Oxford BiCom	124	Wilkes	Pores Knob.
52	Granville	Bullock	125	Wilson	Bailey
53	Granville	Oak Hill	126	Wilson	Wilson
54	Granville	Berea	127	Yancey	Clingmans Peak
55	Greene	Farmville	128	Lee	Tramway
56	Greensboro	A&T Univ.	129	Scotland	Laurinburg
57	Halifax	Brinkleyville	130	Wayne	Goldsboro
58	Halifax	Halifax	131	Surry	Fisher's Peak
59	Harnett	Cokesbury	132	Catawba	River Bend
60	Harnett	Erwin PE	133	Davie	Mocksville
61	Harnett	Spout Springs	134	Rowan	Salisbury
62	Hoke	McCain	135	Robeson	Proctorville
63	Hyde	Plymouth	136	Gaston	Belmont
64	Hyde	Ponzor	137	Hertford	Ahoskie

	Site County	Site		Site County	Site
65	Hyde	Rose Bay	138	Dare	Rodanthe
66	Hyde	Engelhard	139	Dare	Kitty Hawk
67	Hyde	Ocracoke	140	Dare	Buxton (US Cellular)
68	Iredell	Mooresville	141	Gates	Gatesville
69	Iredell	Barium Springs	142	Camden	South Mills
70	Johnston	Archers Lodge	143	Granville	Oxford Water Tank
71	Johnston	Smithfield	144	Stokes	Booth Mt
72	Lenoir	Seven Springs	**Activated as of 1/2010**		
73	Lenoir	Kinston			

Up-Coming Site Activations through Q2:

- Barco – Currituck Co.
- Clemmons – Forsyth Co.
- Cole Ridge – Randolph Co.
- Comfort – Jones Co.
- Green Mountain – Alleghany Co.
- Hosley Forrest – Franklin Co.
- Longarm Mountain – Haywood Co.
- Louisburg – Franklin Co.
- Margaretsville – Northampton Co.
- McFarland – Anson Co.
- Mt. Gilead – Montgomery Co.
- Payne Mountain – Cherokee Co.
- Pisgah – Haywood Co.
- Riverdale – Guilford Co.
- Waxhaw – Union Co.

Updates:

Rebanding

Sprint/Nextel has agreed to all the costs in the FRA (Frequency Reconfiguration Agreement). A discussion of the growth (radios) since the PFA (Planning Funding Agreement) was finalized in Oct. 2007 will take place shortly. All in all, with the FRA signed, we, NCSHP/VIPER will begin reprogramming all the radios on the system and then conduct a system retune. This whole process is likely to take 2 years.

VIPER Tactical Refresh

Through the use of PSIC funds, we are going to be replacing legacy VHF and UHF radios in the VIPER Tactical System for counties that have migrated to VIPER. This will improve our ability to bridge communications systems in the event of an emergency. We have also integrated the State Emergency Management MSAT satellite system into VIPER Tactical and now have the ability to bridge that capability over onto a state event talk group on the VIPER trunked system as well.

P25

Consistent with the intent of the original VIPER plan of December 2004, VIPER is moving forward with our migration to full digital, P25 operation. This will provide the ability to serve all of the potential users that we hope to see join the system as well as positioning North Carolina to look at state to state interoperability as well.

Recent Events / Exercises:

During the recent snow/ice event, January 29th – February 2nd, VIPER sent a cache of 22 radios and three chargers to Greensboro for the NCNG and a cache of 6 radios and one charger to Asheville for the district. As a precaution, First Sergeant Cameron Taylor took two caches and three chargers home on Friday, System Manager Mike Hodgson took several with him and Trooper Lane Hobbs had one cache in his vehicle when he left Friday in the event we received more requests for VIPER assets. The State EOC went ahead & assigned 12 State Event talk groups to the three EM branches should they be needed.

ARRL FIELD DAY - - PATROL STYLE

NT Bob Lukaszewski, V131, K4HA

The last weekend in June every year, the ARRL (American Radio Relay League), holds its Field Day activity across North America. This is a sort of contest / emergency preparedness exercise to keep the radio amateurs (hams) ready to set up their equipment and antennas in case of an emergency, and to see how many other stations they can contact in a 24 hour period.

NT Bob Lukaszewski & NA Joe Allison, Preparing Antennas

This year the Highway Patrol VIPER Group, as well as SCARS (The Smith Chart Amateur Radio Society), joined forces at the Highway Patrol's driving track and held field day. This served several purposes this year. The patrol had built two new tower trailers that had not been exercised or tested. They house generators, antennas, portables and other Interoperability radio equipment that can be used anywhere in the state, by anyone in the state in case of an emergency or disaster to provide communications as needed.

NA Joe Allison & NT Gary Baird, GOTA Station

We had about 35 people show up to help us set up the towers & antennas and get things ready for the actual contest. The group also set up a GOTA (Get On The Air) station so anyone who wanted to see how the hobby worked could get on and make contacts. This is also served as incentive for the hams that do not get to operate often, to get back on and maybe start to get active again in the hobby.

We would like to thank the North Carolina State Highway Patrol for the use of the driving track and facilities to achieve this goal. Everything worked flawlessly, and when the results came out this past December, we finished 2nd in the section in which we were entered. In addition to testing our emergency equipment, a good time was had by all.

Overview of Field Day

View of Towers from the Driving Track

NCSHP's Mobile Command and Communications Unit

Great Job VIPER Team:

The Highway Patrol has been paying SBA Towers $9,646.32/year lease cost for the low band site at Aulander in Bertie County. On July 21, 2009, VIPER turned on Ahoskie site #137 in Hertford County. By December 29, 2009, a plan was set in motion and executed with the support of the uniform staff at TSU to move the Highway Patrol low band equipment from Aulander to the VIPER site at Ahoskie. This was an effort to consolidate Highway Patrol assets and save the Patrol an annual recurring cost of $9,646.32/year in lease cost. It took the combined efforts of the VIPER East team and Facilities team to move the Highway Patrol assets inside the building, the building itself and the propane tank from the Aulander SBA Towers property to vacate the site. This work performed by the VIPER team was done during a time when access in and out of the site was a hardship due to all the rain in the area to the extent that the gas company refused to come into the site and siphon out the gas in the propane tank. In order to meet our end of year deadline, the VIPER team worked to remove the entire propane tank and move it to a suitable location so the gas company can safely pump the gas out of the tank.

As of January 1, 2010, the Highway Patrol does not have a low band presence at Aulander and will not have to pay the annual recurring lease cost of $9,646.32 due to the efforts of the VIPER team.

Interoperability at Work:

On January 31st Trooper R. Brian Maynard, C631, was working a wreck in the snow and ice on I95 near the I40 exit. As he sat in his car typing up the wreck report, he noticed in his rearview mirror a car approaching at a high speed in his lane. The driver of that vehicle didn't see Trooper Maynard until it was too late. He hit the Patrol car on the rear driver's side. Trooper Maynard immediately contacted Troop C Communications and advised them that he had been hit and to send an ambulance. He heard the call being paged out on his scanner to EMS that a Trooper, who was a pedestrian, had been struck on I95 and to proceed as quickly as possible, or CODE 3. Trooper Maynard knew he was not seriously injured, and he certainly didn't want anyone else to wreck on their way to help him, so he switched his VIPER 800 MHz Mobile radio to the VIPERJCLAW talk group and advised all it was not CODE 3 but CODE 1 (non-emergency response). With that knowledge, all responding units were able to proceed to the scene at a safe pace as not to further risk any injuries.

STR (Strategic Technology Reserve):

Strategic Technology Reserve is a term that has been adopted by the US Department of Homeland Security to describe deployable radio assets. The STR is a mutual aid, interoperability radio asset that can be utilized to facilitate interoperability between local, county, state, and federal entities as well as non-governmental agencies. It is designed to support command and control communications, as well as tactical functions in order provide an effective communications and interoperability solution.

The NC STR assets consist of two primary components:

1. Radio Equipment Trailers
2. Mobile Towers

Radio Equipment Trailers:

The Radio Equipment Trailers and caches were funded using the Public Safety Interoperable Communications (PSIC) Grant. There are eight Radio Equipment Trailers, each with 80 portable radios. The 80 portable radios are allocated as follows:

20	VHF High Band
20	UHF
20	700-800 MHz
20	Family Radio Service (FRS)

The radio caches are stored in self-contained, field-deployable storage containers which include the necessary ancillary support equipment. Each radio cache has disposable and rechargeable batteries for each radio in the cache, plus equipment to recharge all batteries.

The radios on each frequency band are programmed to operate on the applicable EMS, Fire-Rescue, and Law Enforcement public safety radio systems throughout North Carolina. The Radio Equipment Trailers are also equipped with the capability to program or reprogram cache radios when necessary to meet unanticipated communication requirements.

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In addition to caches of portable radios, each Radio Equipment Trailer contains tactical audio switches (ACU-T gateways) that permit interconnection of incompatible radio users and/or systems to support public safety operations.

Mobile Towers:

There are five Mobile Towers, three of which contain five channel trunked radio systems. All five Mobile Towers are equipped with one conventional 800 MHz NPSPAC field programmable repeater. Each Mobile Tower contains rack mounted gateway technology (ACU-1000) and mobile radios on multiple frequency bands which are used to interconnect incompatible radio users and/or systems to establish interoperability.

Mobile Towers include 106’ radio towers which may be utilized with antennas supporting conventional repeaters, control stations, or the trunked radio systems.

Deployment:

The radio cache is available to support public safety communications needs within North Carolina for emergency incidents or scheduled events. Within two hours of receiving an emergency deployment

request, the radio cache plus support staff can be in route to the requesting agency, to include a qualified Communications Unit Leader (COML), Technical Specialists (THSP), or Incident Communications Technician (COMT). Emergency requests for deployment of the NC STR to an emergency incident must be forwarded by the requesting agency to the State Emergency Management Area Coordinator or the NCDEM Emergency Operations Center (EOC).

The VIPER Group is currently developing required documents for the final step in the implementation of the states STR assets. Memorandums or agreement, policies and deployment procedures are just a few items that must be completed prior to the full implementation of this project. Host agencies will begin training on the STR equipment in first quarter of 2010.

For more information, please contact Trooper T.Lane Hobbs at 919-622-4440 or email at tlhobbs@ncshp.org.

Pictures:

View into Tennessee from future PSIC site Camp Creek Bald

NT Marty Randall surveys US Cellular's cabinets with US Cellular Rep Joey Chandler. This is the future PSIC Hot Springs site in Madison County.

If you look at the top left vehicle, you can see Captain Melvin's SUV with the hood up. Because of engine problems, he & his VIPER staff who rode with him had to leave it on the mountain and catch a ride back to Raleigh with Don Smith from UNC TV.

View from Locust Knob Fire Tower, Mitchell County

VIPER Project Manager, Tanya Luter, climbing the Locust Knob fire tower. The word is she did not go very high before chickening out and coming back down!

Captain Alan Melvin receiving the “President’s Award” from Henderson County’s Emergency Manager & NCEMA President, Rocky Hyder, for his work on the advancement of interoperable communications with the VIPER system at the local & state levels

Annual VIPER Staff Meeting

On a recent lunch outing in Garner, several members of the VIPER staff happened upon a vehicle displaying the personalized tag featured at left. We thought he was a big fan of VIPER, but it turns out he just really likes snakes…

View from Fisher's Peak facing Pilot Mountain

UPDATE FROM LAST NEWSLETTER:
NA Joe Allison is no longer stuck in the sand!

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News Articles:

Terrorism Exercise Reveals 5 State Universities Without Vital Communications System

RALEIGH (WPTF) - Governor Beverly Perdue says a simulated terrorist attack revealed a troubling communication problem for several colleges in North Carolina.

Perdue says five state universities lacked the VIPER warning system. VIPER, which stands for Voice Interoperability Plan for Emergency Responders, allows state agencies to directly communicate with one another on a single radio. Perdue insists communication is critical during emergency situations.

"We couldn't talk to people during Hurricane Floyd," Perdue says. "That's what devastated part of the coast - nobody knew what was happening. We've got to find a way to build out the VIPER system. I mean, we've got to do that."

The training exercise involved elected officials as well as federal, state and local law enforcement. Perdue didn't identify which campuses are currently without the VIPER system. However, the North Carolina Department of Crime Control and Public Safety website lists the universities with the VIPER system in place. Those not mentioned include Appalachian State University, the University of North Carolina at Greensboro, the University of North Carolina at Pembroke, the University of North Carolina at Wilmington and Western Carolina University.
Feb 4, 4:40:36 AM EST

VIPER System Missing On Some UNC System Campuses

Written by Josh Ellis/David Horn http://www.ncnn.com/content/view/5454/26/

(RALEIGH) -- Gov. Beverly Perdue said a terrorism training drill this week pointed out a troubling communication problem on several college campuses. She said five state universities lack the VIPER warning system, which allows state agencies to have radio communication with one another.

Perdue said the state must find a way to build out the VIPER system. "I know we have the skill set and I know we have the professionals and we're good at it, because we work together and plan, but if we don't have the essential equipment, then none of us can do our jobs, so I'm troubled," said Perdue.

Voice Interoperability Plan for Emergency Responders

End-user VIPER gear purchase OK'd; county already has communications towers all agencies can use

By Al Wheless
www.hendersondispatch.com

Vance Commissioners agreed Tuesday night to spend 55,337 county dollars to get 284,940 federal dollars to buy portable and mobile radios some local emergency personnel need to use the VIPER communications system.

The acronym for the state-wide program stands for Voice Interoperability Plan for Emergency Responders.

The total amount — which is made possible by the Federal Assistance to Fire Fighters Grant Program — for VIPER end-user equipment is $316,600.

The City of Henderson will be asked to pay half of the $29,021 match.

Volunteer fire departments that will get some of the equipment include: Cokesbury, Drewry, Epsom, Hicksboro,

Kittrell, Kerr Lake, Townsville, and Watkins.

Other departments are Vance County Fire, City of Henderson Fire and Vance County Rescue Squad.

Due to severe interference on the existing VHF fire-paging frequency, Brian Short, director of Emergency Management for vance, said, “We have applied for and have been awarded an alternate frequency for paging and VHF communications through the FCC (Federal Communications Commission).”

To take advantage of that, he explained, will require $9,400 or less to reprogram the pagers for all volunteer departments.

The grant also includes six additional control stations. They will make possible tactical communications channels that can be used by all local agencies that have access to the VIPER system.

The tactical channels are considered critical to “local interagency interoperability,” according to Short.

Short said the overall change will eliminate a number of “life safety issues” that exist with the communications system now used by the county.

Emergency response people are currently not able to adequately talk with each other or with the E-911 Communications Center in certain areas of the county and the City of Henderson, he explained.

Short told the commissioners that the grant doesn’t cover the cost of buying and installing an additional eight-channel antenna combiner and a network adapter card.

They are needed to integrate the control stations “into our existing infrastructure,” the Emergency Management director added.

He said it has long been his department’s intent to connect the county’s public safety communications system to the “800 MHz spectrum” using the VIPER network.

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Vance already has seven communications towers which offer overlapping, county-wide coverage at a cost of $6.5 million.

According to Short, local responders can use the system at no cost and only need to supply themselves with the necessary “end-user” equipment to access the network.

It results in a seamless digital two-way system that will enable them to communicate anywhere in the county and beyond, he explained.

On July 26, Phase I of the VIPER access project was launched at the Vance County E-911 Center using Homeland Security and other grant money, Short said.

The application for the radios was submitted on behalf of all city and county fire and rescue agencies to the Federal Assistance to Fire Fighters Grant Program through the Hicksboro Volunteer Fire Department, but was regional in nature, he said.

Spring Lake police seek equipment upgrade

SPRING LAKE, N.C. — The interim chief of Spring Lake's beleaguered police force will ask town aldermen Monday for nearly $300,000 to upgrade communications equipment.

Gregg Jarvies, who once ran Chapel Hill police, is tasked with strengthening the Spring Lake Police Department, which was stripped of its powers in early May after the arrests of two senior officers.

While the department is under investigation by the State Bureau of Investigation and Chief District Judge Elizabeth Keever, Cumberland County sheriff's deputies are patrolling the town.

When officers return to the streets, Jarvies wrote in a memo, it is essential that the department switch to a statewide communications system and get new information-sharing software.

"We must be prepared to move into the 21st century with a modern, multi-faceted network that allows us to be a full partner with public safety agencies across the state," he wrote.

Spring Lake uses an 800 MHz radio system that new technology will soon render obsolete. Already, the old radio system is creating dead zones where officers can't get a signal – "a significant safety hazard for officers and the public," the interim police chief wrote.

Jarvies proposes arranging to use Cumberland County's connection to the VIPER System, which gives law enforcement statewide "the ultimate in voice transmission capability."

The VIPER network let Spring Lake officers training in New Bern talk to police back home, he said. "With the current radio system, we are often not able to transmit across several blocks," he wrote.

Jarvies also wants to switch to information software called OSSI. The software enables law enforcement to share data across jurisdictions and is already used by Fayetteville police and the Cumberland County Sheriff's Office.

Sitting in his car, an officer could use the OSSI software to look up outstanding warrants, suspects' pictures and the location of other officers, as well as file reports.

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"Most of all, it increases officer safety by providing officers with fast, reliable data from law enforcement partners in over 130 North Carolina jurisdictions," Jarvies wrote.

Together, the new equipment and software would cost $292,000, Jarvies estimated. That's a "significant financial commitment," but by doing it, town aldermen would send the right message, he urged.

"An investment in state-of-the-art voice and data communications systems is a statement from the Board that it is committed to supporting a professional, well-funded and fully capable police force," Jarvies wrote.

A $39,000 grant could help the purchase, and Rep. Bob Etheridge and the Base Realignment and Closure commission are helping look for other funding.

Leaders discuss emergency preparedness

by Amanda Dodson
www.thestokesnews.com

Amanda Dodson/The Stokes News
Government leaders from Stokes County gathered in Danbury on September 16 to learn about emergency preparedness in the case of an H1N1 outbreak or other catastrophes.
On September 16, a Stokes County Public Officials Conference was held at the Ronald Reagan Building in Danbury. Leaders in the community came together to discuss how Stokes County can be best prepared in the case of an emergency.

Monty Stevens, Emergency Services Director, conducted the conference. Two sessions were offered, one in the morning and one if the afternoon. The speakers were Joe Wright, Central Branch Manager of NC Division of Emergency Management; Trooper Lane McNeill of the NC Highway Patrol VIPER Acquisition Team; Josh Swift, Health Director of Stokes County and Del Hall, Director of Communications.

Stevens, who has been with Emergency Services for over 28 years, said, “The purpose of the conference was to give key elected officials an idea as to what their role is in the case of an emergency.”

Wright encouraged Stokes County public officials to be ready and equipped in areas such as “preparedness, response and mitigation.”

“We often hold these types of meetings after an emergency has already happened. It’s a pleasure to discuss it before it occurs,” Wright said.

Wright continued to say, “Two things are common in all disasters; no one thought it could happen or would ever happen, and those who were ready were repaid in savings of life and property.”

“Stokes County has an emergency plan in place. A good thing about being in a small community is that a lot of us know each other and work well together,” Stevens said.

Mayor of King, Jack Warren, said that he “absolutely benefited from the conference; Monty did a great job getting us the information we needed.”

Warren feels confident that Stokes County will be prepared in the case of an emergency but did have some concerns about the VIPER system on which Trooper McNeill provided information. [Mr. Warren’s concern was why Stokes County was not progressing toward using the system.] VIPER is a statewide initiative program that was conceived in 2002. It enables all emergency personnel to speak to one another on the same radio system. According to McNeill, an average of 80 counties in NC already have access to this technology. Warren feels this would be an excellent tool for Stokes County.

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Voice Interoperability Plan for Emergency Responders
A CJIN Module

John Hodgkin, mayor of Walnut Cove, was also very satisfied with the informative conference.

Hodgkin said, “With all the best plans in place, you don’t know until you’re in that situation. We’re discussing doing a drill the first of the year to assure that everything is working the way it needs to.”

Chief Deputy Sheriff, Durward Bennett, feels Stokes County is equipped in the wake of a weather-related emergency,

“Logistically, we’re prepared to be able to distribute medication and food. We would also maintain security and traffic control.”

“The conference gave us a good understanding of how emergencies are handled on the local and state level and what procedures to follow,” Bennett said.

“It’s never a bad idea to have water, extra canned food and a battery-operated radio available,” he advised.

Stevens says, “The best thing for Stokes County citizens to know is that there is an Emergency Plan in place. We believe that whether it’s on a large or small scale, we’ll run it smoothly. ”

New radios connect emergency agencies across Pender County

By K.J. Williams
Citydesk@StarNewsOnline.Com
Published: Monday, September 28, 2009
Communication among fire departments in Pender County and other first responders will get a boost with the addition of more VIPER radios for fire departments countywide.

Sheriff Carson Smith said the county started acquiring VIPER radios in 2005. The system enables agencies to use a common channel in a crisis. “VIPER allows us, every emergency management agency in the county, to be able to communicate with each other, and it allows us to communicate with state agencies,” he said.

Voice Interoperability Plan for Emergency Responders
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VIPER stands for Voice Interoperability Plan for Emergency Responders. The sheriff’s office has been on the system, but fire departments have had only some portable VIPER radios unless they obtained their own grant money to buy more equipment.

This month, the Pender County Commissioners approved using state-allocated 911 funds to buy 57 mobile radios and 25 portable radios for $159,445, completing installation of the VIPER system for its fire departments. Some of those radios will be used by the sheriff’s office, Emergency Management Services and the 911 center.

To handle the expected increase in radio traffic from the fire department, commissioners also approved spending $71,428 to buy repeaters for the new Burgaw tower and the Holly Ridge tower.

The fire departments have been communicating with other agencies via portable VIPER radios, but they’ve been on a separate radio system.

Charles Newman, the county’s interim director of emergency management, said he expects the mobile radios for fire trucks to be delivered by the end of the year.

“We’re waiting for all fire departments to be ready before we switch to VIPER,” he said.

Smith said having VIPER used by all county agencies will improve communication. “The emergency services in this county have never been able to talk to each other completely.”

In an emergency, a specific channel can be assigned to that event and accessed by any state agency on the VIPER system.

“It’s a multimillion-dollar system that we put in place with very little Pender tax money having to be spent,” Smith said. Federal grant money totaling about $1.1 million paid for portable radios for all agencies and two towers.

N.C. State Highway Patrol spokesman Capt. Everett Clendenin said VIPER is being used throughout the state. “We do encourage local partners to partner up with the VIPER system.”

In North Carolina, 67 counties and municipalities are using VIPER at various levels, including Brunswick and New Hanover counties, with 10 of them using it as their primary source of communication, including Pender, Bladen, Duplin and Sampson counties, according to the N.C. Carolina Department of Crime Control and Public Safety Web site.

More than 30 state agencies use VIPER, including the Highway Patrol and State Bureau of Investigation.

Grant would enhance county's new emergency communication system

August 18, 2009 5:43 PM
Robert Boyer
Burlington Times-News

Alamance County has a good chance to get a $500,000 federal grant that would add major enhancements to a new countywide mobile emergency communications system that is scheduled to kick off on Oct. 1.

In December 2007, the county commissioners approved installing the N.C. Highway Patrol’s statewide 800 MHz VIPER system, which, for the first time, will allow all emergency service agencies in Alamance County to communicate seamlessly. VIPER will replace the county’s VHF system. Local agencies have had difficulty communicating with each other and those in nearby counties under the current system.

In October 2008, the commissioners approved an eight-year, $4.65-million loan to pay for VIPER.

In April, Reps. Howard Coble and Brad Miller notified county officials about the U.S. Department of Justice grant, which would pay for equipment and other enhancements beyond those that are part of the initial roll-out, said Dave Leonard, the county’s fire marshal and emergency management coordinator.

Leonard reported to the commissioners on Monday that the $500,000 would provide a 50-foot antenna at the County’s Emergency Operation Center for a back-up system “in the event the 911 Communication Center is unable to operate.”

The money also will pay for:

- A mobile communications/command center.

- Four additional talk channels to allow for future increases in radio traffic.
- Portable “gang” chargers that can charge up to six batteries at a time.
- Seventy five batteries for the gang chargers, Emergency Operations Center and the Mobile Communications/Command Center.
- Five portable repeaters to boost radio coverage.
- Lapel microphones for 25 portable radios and a mini console for “better field use.”

A desktop communication console with three channels that will allow the Burlington City Communications to communicate with other agencies through the County Emergency Operations Center.

Once the VIPER system is up and running, “We will have the opportunity to reach out to other agencies statewide,” Leonard said. The eight enhancements “will make our system much stronger at an earlier time.”

Leonard submitted an application on Aug. 11 under the direction of Assistant County Manager Tim Burgess after the Justice Department notified the fire marshal’s office about the process. Leonard is optimistic the county will win the grant, given that Justice Officials have already contacted his office twice about it. “We have a real good feeling from the Department of Justice,” Leonard said.

The county should hear back from Justice Officials on Sept. 30, the day before VIPER is scheduled to “go live,” he said.

Burlington’s emergency management office and the county’s Central Communications, sheriff’s and EMS offices were instrumental in helping his office complete the detailed application, Leonard added.

Burgess said the system has a good chance to be in place on Oct. 1. If not, the system will be up and running by the end of the year.

A tower in Altamahaw has been installed, and new consoles for the 800 MHz system have been installed at C-Comm.

The county will get 606 of 741 mobile radios in the initial package, Burgess said. The remainder will go to other municipal departments across the county. The other non-county agencies can opt to buy additional radios.

Motorola has begun installing dispatch equipment, hardware and infrastructure in C-Comm. The installation of mobile radios and base stations, as well as getting portables radios out to the users will begin soon, Burgess said.

Second-phase work includes remodeling C-Comm’s office and former telecommunication area.

Emergency communications options explored

By Linda Beaulieu
The Montgomery Herald

A good communication system is the core of emergency response services, allowing various agencies to quickly respond to incidents and communicate with each other on scene. Changes in federal regulations, brought about by communication problems during the terrorist attacks at New York's Twin Towers on 9-11 and Gulf Coast hurricanes, mean that Montgomery County emergency agencies will have to either upgrade their current communication systems or switch to another system.

New federal regulations, commonly referred to as "narrow banding" and meant to increase the number of UHF and VHF channels, go into effect in 2013 and would require substantial cost to upgrade current equipment.

Montgomery County agencies currently use two different systems, with law enforcement using UHF (ultra high frequency) systems while fire, EMS and rescue use VHF (very high frequency). While this system has worked fairly well for many years, it does have problems, most serious being dead spots across the county where responders can't get radio signals.

Shortly after coming to work in 2007, Alan Griffin, the county's emergency management director, raised the issues of the new federal regulations and signal problems. In January, a seven-person committee led by Griffin with representation from different county emergency agencies began a communication study, which Griffin expects to present to county commissioners this month.

According to Griffin, the study compared two options. One is upgrading the current UHF/VHF dual system and additions that will allow interoperability among agencies. Griffin estimates a cost of $2.8 million for this option.

"It will be tough to get large scale grant funding for this," Griffin explained, since this option will not support the system the state is using to meet federal interoperability standards. The state system, called VIPER (Voice Interoperability Plan for Emergency Responders) is a digital 800 MHz system, and the state is bearing the cost of installing VIPER towers, including some in Montgomery County.

Voice Interoperability Plan for Emergency Responders

Estimated cost for full VIPER compliant equipment for the county is close to $1.5 million, with numerous grant opportunities available for local equipment, according to Griffin. Grants have already been received or approved for part of this cost, with funding in place for the first phase of VIPER, which makes the 911 communication center VIPER compatible. FirstHealth EMS has also been approved for a grant for VIPER capability and the Sheriff's Office has been approved for partial grant funding covering 14 VIPER-capable hand held radios.

The biggest costs will be for the county's 10 fire departments, since they have the largest number of radios, and Griffin has applied for two grants, one which will require an $80,000 county match and another, a BRAC grant that would cover the full remaining cost.

There are conflicting opinions among some members of the study group about which option is best. Troy Fire Chief Joe Huntley has said from what he's learned so far, the VIPER system doesn't allow for signal penetration into structures as well as the VHF system; the county would have to keep part of the current system in place since VIPER doesn't work for firefighters' paging systems. "I realize digital is more modern but I still feel like the fire departments will be better off with the old system," Huntley said, adding that he hadn't yet taken advantage of the opportunity some other local agencies have had to try out the VIPER radios the county already has.

Tracy Parsons, outgoing captain of the Montgomery County Rescue Squad, however, is a VIPER fan. Parsons said rescue personnel have used the VIPER radios several times, including the recent search operation for the Raleigh youth group on the Uwharrie River.

“We cover the whole county and have lots of areas where we can’t get a communication signal,” Parsons said. “We’ve used VIPER on the Uwharrie Trail and other places and I’m tickled to death with it; it’s got great service anywhere I’ve been and I really like it.”

Star Police Chief Dempsey Owens, who was also on the study committee, said he believes the county will go to VIPER sooner or later. “We’ve got the interstate, and the Highway Patrol is pushing it,” he said. Although Griffin is applying for grants that could eventually phase in local law enforcement, “There’s a lot of what ifs,” Owens said. Just in case the countywide grants don’t come through, Owens is applying for a grant that will get the Star P.D. enough VIPER compliant equipment to use as a secondary communication system.

Other counties’ experience

Currently, 67 N.C. counties or municipalities are part of the state’s VIPER partnership. According to Capt. Everett Clendenin, with N.C. Crime Control and Public Safety, VIPER is not mandatory and agencies moving to VIPER must find their own funding.

“It’s up to counties to decide but it is the way North Carolina is moving,” he said. “The towers are going up and it’s advantageous for local responders. It gets emergency responders all on the same channel and they can talk instantly among different agencies.”

From the list of 67 VIPER partners, the Herald picked four at random and spoke with emergency management directors about how they’re using the system.

Stanly County used Homeland Security grants to purchase VIPER equipment being used as a secondary system, giving one radio each to different agencies, including outlying fire departments, police departments, sheriff’s department, the hospital and public health department, that allow them to communicate with each other and outside agencies in disasters or mutual aid situations.

“It’s there for back up and it works well,” said Brian Simpson, Emergency Management director. “We can talk from all over, even in poor signal areas.” Stanly has no current plans to expand its VIPER capability, citing the expense to completely transition their current UHF/VHF system.

Hoke County is moving to full VIPER according to EM Director Freddy Johnson. “It will be our primary system for fire, rescue and EMS and we’re in the process of implementing it now,” he said. Law enforcement will be phased in as funding becomes available. Based on testing and current use, he said the system works very well and they’ve found no problems of communication among individuals on scene and have found only a handful of large structures where signal penetration is an issue. Hoke County is installing a $12,000 repeater that will handle that problem.

Johnson is also president of the Cumberland County Fire Chief’s Association and said Cumberland’s VIPER system is up and running and everyone is pleased with it. “It’s a good thing; it’s the future,” he added.

In Bladen County, rescue, fire, ambulance and sheriff’s departments are fully VIPER compatible. Fire departments have VIPER radios in their trucks and handhelds for line officers. “We’re still working out the

Voice Interoperability Plan for Emergency Responders
A CJIN Module

bugs in paging and using both systems at the same time right now," said EM Director Mitchell Byrd, who noted they've had to install more repeaters and that the system is expensive. Byrd's FEMA grant applications were not successful and the county commissioners opted to finance the cost, estimated at $1.8 million. Noting that Bladen is in "hurricane alley," Byrd said he feels the ability to easily communicate among different local and outside agencies will be helpful, "so the right hand knows what the left hand's doing."

Steve Hale, EM director in Rockingham County, said VIPER will be their primary communication system and the county's base site is operational.

In 2004, Rockingham County officials did a communication study that showed poor interoperability among agencies using different UHF/VHF bands. "Narrow banding was an issue we knew was coming," he said, and the county included communications upgrades in its five-year capital improvement plan for county-funded agencies, including sheriff, EMS and emergency management.

He's working with the 21 volunteer fire departments on grant applications to help with their costs.

"There was a lot of skepticism at first and people had concerns, but we handed out the cache of state VIPER radios to fire chiefs and police departments and other agencies to try them," Hale said. "They were concerned about the cost and said they couldn't afford to have these radios, but now they want more. Communication is the most important part of the situation and the only thing that hasn't moved forward in firefighting is communication technology."

Griffin, responding to questions about signal penetration in buildings, said he's tested the VIPER equipment with a few of the committee members in several local structures, including a Troy industrial building, the hospital and the Wadeville Fire Department. "The coverage was fine and we could talk mobile to mobile and back to the 911 center," Griffin said. "There may be some spots with signal issues, but less than what we have now."

He also noted that if full grant funding doesn't come through, the VIPER system, which is his recommended option, can be phased in gradually as funds become available.

Voice Interoperability Plan for Emergency Responders

VIPER System Vital to Public Safety and Emergency Response

By Ron Fitzwater www.**mountaintimes**.com

As previously reported in AMT Trooper Lane McNeill, pictured at right, of the North Carolina State Highway Patrol appeared before the Ashe County Planning Board for a public hearing to request a variance to the county communications tower ordinance of 30 feet, allowing for the construction of a Federal Aviation Authority approved, 180 foot communications tower on Phoenix Mountain that would be used by multiple non-profit entities including Ashe County first-responders.

The tower will replace the old Blue Ridge Electric (BRE) owned tower currently in place. The 2002 North Carolina State Legislature mandated the creation of a statewide 800 Megahertz (MHz) radio system for all state

emergency responders. The program was named Voice Interoperable Plan for Emergency responders, or VIPER.

The mission of the VIPER system is to ensure that emergency responders from across different jurisdictions and agency levels will be able to communicate during times of natural or man–made disaster, and to improve the ability for state law enforcement officials to communicate across greater distances and from locations here-to-fore too secluded to permit clear communication.

To make the VIPER system a reality, the legislature tasked the Highway Patrol with the creation of the infrastructure that supports the system.

The construction cost for the new tower and supporting structure will be paid for entirely with Department of Homeland Security (DHS) funds allocated to the NCSHP from the federal agency. BRE will continue to pay the lease on the property and honor existing lease agreements with non-profit organizations using the tower moving forward.

“The funding comes through the North Carolina Department of Emergency Management (NCDEM) and are diverted out into different directions. VIPER is just one of the off-shoots of the program,” McNeil said.

McNeill explained that the VIPER Site Acquisition team has been working to get the 238-site tower system up and running in the state that would effectively create a blanket of coverage over 95 percent of the state. In Ashe County NCSHP is already working with Mount Jefferson State Park to place a VIPER site on the state owned land and the Phoenix Mountain tower is extremely important to the communications network.

“It’s all about inner-operability. If a deputy sheriff gets into a chase, the Ashe County dispatcher has to call the highway patrol dispatcher on the phone and the highway patrol dispatcher has to relay through the phone line all the details of the chase. ‘We’re turning here; we’re turning there; Trooper is putting stop sticks out on 163’ coordinating like that can sometimes be frustrating.”

The VIPER system will according to McNeill eliminate the majority of those situations because with the VIPER system in place and 800 MHz radios in all patrol cars “we can monitor each other’s traffic and respond more quickly to emergency situations.”

According to McNeill two events in recent national history proved the need for inner-operable communications; the attacks of 9/11 and Hurricane Katrina. Those events pushed the public knowledge of the flaws in communicating between departments and varied entities.

Locally, the VIPER system proved extremely useful in late 2008, when Caldwell County sheriff’s deputy Adam William Klutz was shot and killed by Skip Brinkley.

“When the deputy was shot all the all the Sheriffs’ Emergency Response Teams (SERT) from surrounding counties showed up with their county radios and the FBI, the SBI, the highway patrol and some Caldwell County Officers showed up with 800 MHz radios. Well we were able to hand out radios to the SERT units and we could all talk to each other and communicate with the highway patrol helicopter that was assisting in the hunt for the assailant.”

Incidents such as the Klutz shooting and the need to be prepared to respond to natural disasters from Ice Storms to Hurricane spawned flooding makes the VIPER system a vital new tool in emergency response state-wide and locally.

Ashe County Emergency Management Coordinator Patty McMeans has stated that all emergency and first-responder entities in the county are fully behind the project because of the improvement in the coverage area. Chief County Dispatcher Kevin Hardy and area Ham radio operators, who are a vital part of the county’s emergency response system, have also added their support to the program.

Current Coverage Map: