



MPSCS Newsletter

April 2011

Next Generation Software

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Quick Stats

Total Radios: 55,333
Talkgroups: 5,105

Did you know? The MPSCS is now on Twitter!
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Beginning in 2009, the Michigan State Police requested that the MPSCS aid in installing an advanced computer system in a select number of Michigan State Police vehicles, called Next Generation patrol vehicles, or Next Gen. Four cars had the computing system installed in 2009, with an additional 25 cars receiving the Next Gen package in 2010. Next Gen patrol cars have cutting edge technology such as advanced computing, monitoring, and lighting, and radar and camera equipment. The 25 cars that were designed in 2010 were based off of the best features from the 4 cars designed in 2009 as decided by the troopers who evaluated them.

After the police cars are built (everything except the computers are installed in them), Mike Waltz of the MPSCS begins initializing the computers for customization. Waltz replaces the OEM Microsoft operating system with a State of Michigan XP Professional operating system. Upon upgrading that, he installs additional State of Michigan productivity software along with specialized software to interface with the Next Generation Patrol Vehicle custom features such as the speech recognition hardware. The speech recognition program works in conjunction with LEIN through a client, also installed by Waltz, to run license plates, persons, and other files through LEIN and NCIC. The result is a fully functional computer with specialized car software.

Next Gen software has increased the ease of patrolling for State Trooper Charles Bartley. In older patrol cars, everything was done by hand including traffic crash reports, tickets, etc. Troopers can use voice activated software to call out a license plate number



to their computer, which in turn can place information pulled up about the licensed driver and speech generation software repeats the information back to the Trooper, allowing him to keep his eyes on the subject. The software can also insert the data into a ticket or crash report with the click of a mouse if necessary.

Previous to using Next Gen software, Trp. Bartley describes that when running a plate he would call in to the dispatch center, possibly wait in line, and then have information relayed back to him. With the voice activation software, Bartley can read a license plate out loud and information about the driver (including plate expiration and license status) will be read out loud to him. Troopers with Next Gen installed in their cars have the option to swipe a license on their computer and receive information electronically. They also have the ability to record daily activities on their computer and transfer them via USB to any other computer workstation.

Next Gen software has increased the ease of job duties for troopers while simultaneously enhancing safety.



2010 MPSCS Metrics

Two new 800 MHz Simulcast sub-systems were integrated into the MPSCS system; one was Washtenaw County with an additional seven towers, and the other was Saginaw County with an additional four towers.

A total of 14 new towers were integrated into the system to support not only Washtenaw, Saginaw, but also the counties of St Clair, and Berrien.

\$23.18 million dollars were spent by local government on these integrations of infrastructure into the MPSCS.

MPSCS System Upgrade

Significant benefits to this upgrade include: a hardening of network connectivity through improvements in routers, switches, etc., and an increase in the capability of supporting up to 128,000 system radio ids.

47 Tower Co-Locations are in progress 14 were completed in 2010 and \$239,053.90 was collected in 2010 from co-locations

62 New Agencies Joined the MPSCS in 2010

- Fire 31
- Health 6
- Law 7
- Public Safety 5
- Misc 8
- Federal 2
- Transit Auth 2
- School 1
- 16 new 911 consoles integrated into the system.
- 7 dispatch system upgrades in progress
- 3,514 new radios were added.
- 202 new talkgroups created.
- Integration of 5 additional transmitters installed due to system growth.
- 387 new mobile radio installations (MSP Vehicles)
- 35 DNR mobile radio installations
- 40 additional vehicle installations
- 171 new MSP Mobile Data Computers were added to the MSP fleet

Rebanding Update

The end of the beginning has arrived! Sprint has agreed to fund the MPSCS plan for the implementation of the Back-to-Back (B2B) Mutual Aid reconfiguration of the antenna towers. A signed Frequency Reconfiguration Agreement (FRA) to carry out Phase #1 of the Rebanding process has been received.

Rebanding of MPSCS will be carried out in three phases:

1. Installation of a B2B repeater capability on the radio transmission antenna system. This will install the new Rebanding Mutual Aid (MA) frequencies along-side the existing MA channels.
2. Rebanding each individual subscriber radio by:
 - removing the existing MA frequencies,
 - installing the new MA frequencies
 - reprogram all other necessary frequencies to prepare for Phase #3
3. Rebanding the entire system's antenna towers to the new control frequencies

Migration of the system in a coordinated fashion on to the new frequencies will then take place.

Phase #1 (B2B installation) will provide the continuous capability for subscribers to use the Mutual Aid channels at all times throughout the Rebanding process. Regardless if a radio has been Rebanded (Phase #2) or not, the system will transmit and receive transmissions on both the old and new MA channels. There will be NO interruption of service or the availability of the MA channels at any time in the Rebanding process!

The project is now mobilizing equipment and staff to install the B2B equipment and modify the antenna capabilities to provide the dual MA frequency throughout the system. The on-site modifications are planned to begin as soon as May and be completed by November of this year. This will have prepared the system for communications on either the old or new Rebanded MA channels.

It is anticipated that Phase #2, subscriber radio Rebanding, will begin upon completion of the B2B installation.

Progress on the rebanding will be continually updated in future newsletters.



Retirements at the MPSCS

The MPSCS has had several retirements; Marsha Cosgrove retired last fall, Russ Hoag followed soon after in December, and Rich Rybicki will be retiring this spring.

Rich Rybicki

Rich was one of the four original technicians hired into the NCC at its conception in the fall of 1996 and went through training and development procedures until initial operations began in January 1997. Rich has been a devoted state employee and is now on his way to retiring in May after 15 years of service with the MPSCS.

After 20 years of working with the Detroit Police Department, Rich decided to make the transition to a job working as an MPSCS technician in the NCC because he thought it would offer him a new challenge.

Throughout his years at the MPSCS, the system has continuously gone through upgrades as part of the equipment lifecycle. Since the beginning of his career, five upgrades have been completed including the most recent 7.9 system upgrade. Although the system is constantly adjusting, Rich enjoys this

part of his job that always keeps him on his toes.

Rich's interest in radio communication also expands beyond the NCC. He has been a member of Association of Public Safety Officials APCO since 1985 and became Chair of the Historical Committee in 2008; he still attends chapter meetings and national conferences where he gives presentations. He has also been involved with the Motorola Trunked Users Group (MTUG) was national treasurer for 15 years. He plans to remain an active member of APCO after his retirement.

Plans after his departure from the MPSCS include maintaining his very active lifestyle. Rich is looking forward to spending more of his time on an array of hobbies he enjoys including traveling, bowling, skiing, playing tennis, cooking, and gardening on his two acres.

Marsha Cosgrove

Marsha retired with over forty-five years of work experience; fifteen of which were served with the State of Michigan. She began working as a personal correspondence coordinator for former governor John Engler. In 1999 Marsha began working with the DMB Information Technology Services Division which was eventually converted to the Department of Information Technology. After a few more reorganization within the State, Marsha began working with the MPSCS in July of 2004, and retired as a

departmental analyst. Marsha said that she enjoyed the people she worked with and learned many aspects about public safety communications.

Marsha's retirement plans include a summer trip to Italy. She is also busy being a grandmother to her daughter's newly adopted child from China, and is expecting another grandchild in September. "As every newly retired person will tell you, I don't know how I had time to work," Marsha says.

Leo Goodyear

Leo Goodyear had 27 years of service with the State of Michigan. He worked as a radio technician for MDOT and then when the services combined, he started work for the MPSCS. He had a classification as a TECH 11 and serviced the MPSCS infrastructure and performed upgrades as his duties. Leo is very knowledgeable and was the lead on many projects for the MPSCS and the DNR.

Russ Hoag

Russ Hoag has served the State of Michigan with dedicated service for nearly forty years. His first eighteen years were spent at the DMB office division warehouse, followed by three and a half years with the Department of Commerce, and ending with thirteen years at the MPSCS. Russ says that the people at the state have made his employment enjoyable.

What's next for Russ? He plans on working on his house, spending time with grandkids, and crafting the best lawn in the neighborhood.

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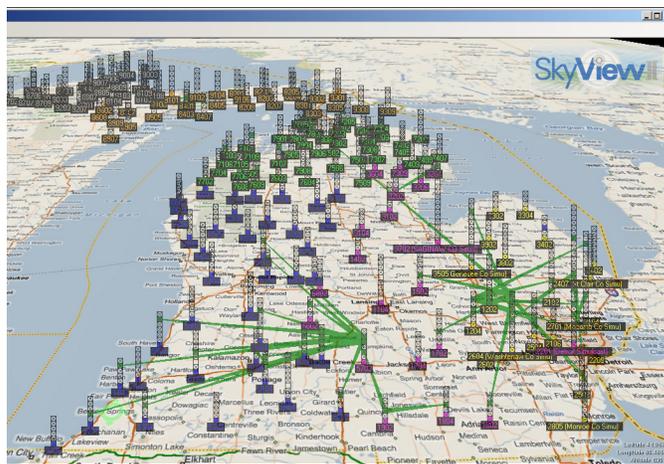
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System Upgrade Highlights

A majority of the work for the system upgrade from 6.9 to 7.9 was executed on Thursday March 24th. Highlights for this upgrade have included:

- Replacing the primary and secondary Zone Controllers
- Replacing the Zone WAN and LAN switches
- Replacing multiple zone level system servers
- Increasing the system IDs from 64,000 to 128,000
- Improve the ability to use 700 MHz channels at remote sites
- Increasing security on network ports and services
- Improving system diagnostics and reporting
- Updating virus detection and intrusion services
- All existing portable and mobile radios will continue to function on the 7.9 platform without an upgrade.
- For more information about the upgrade please visit our website to view updated bulletins found under the About MPSCS tab to the left of the page.



A screen capture of Genesis software which was included in the upgrade. This image shows live calls being made by users.

Usage Statistics

2010	Total Calls	PTTs	PTT Change From 2009/10
Dec	4,515,803	8,071,586	+103,203
Jan	4,662,220	8,311,075	+ 397,005

[michigan.gov/mpscs]