



Fort Worth Radio Services Newsletter

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IT Solutions Radio Services

By Alan Girton

In our last newsletter, we indicated that we expected the fall of 2010 to mark the beginning of one of the busiest periods we've seen in a long time. That's turned out to be the case. You'll find a number of articles in this issue describing significant progress in the many projects underway.

One of the major developments during the last three months has been the implementation of the P25 Overlay System backed by the North Central Texas Council of Governments. The Tarrant County component was installed at the City of Fort Worth's Burnett Plaza radio site in November. Our thanks go to C.J. Holt for contributing a project update for this issue.

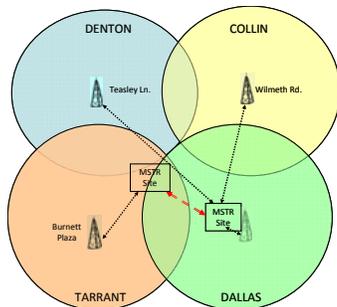
We have enjoyed working with and for all of you during this last year. We wish you a wonderful holiday season!

Regional Overlay System Installed

By C.J. Holt, North Central Texas Council of Governments

In 2007, the North Central Texas Council of Governments (NCTCOG) applied for a grant through the Public Safety Interoperable Communications (PSIC) Grant program and was awarded \$2.9 million to help build a Project 25, 700 MHz, trunking overlay system for agencies in the North Central Texas region. With assistance from NCTCOG's Regional Public Safety Communications Governance Committee and RCC Consultants Inc, the Regional Overlay Communications System has been installed, and it will be available during the Super Bowl.

The Overlay System provides wide area mobile radio communications coverage to Tarrant, Denton, Collin, and Dallas counties. Each county has a single four channel, Project 25 trunked radio site located at a point in the county to provide the maximum amount of coverage for user agencies. The system is controlled by two Master Sites, or switches, from two communications companies-Harris Corporation and Motorola Corporation.



Please see *Regional Overlay System* on page 4

Rolling Hills Tower Construction Nears Completion

By Kevin McNamara

The Rolling Hills Tower project is moving along nicely. At this writing the tower has reached its maximum height of 480 feet, cable ladders completed, climbing ladder and 13 rest platforms completed, transmission line Ice Bridge to radio building completed, Tower strobe lighting controllers mounted and temporary lights are operational.

Currently the crews are mounting the massive steel rings that will support the artistic lighting element that will be near the top of the tower, mounted between the 460 foot and 370 foot levels. The lighting element consists of 5 separate rings. The top ring is approximately 50 feet in diameter. The diameter of each of the lower 4 rings decrease uniformly. Although the actual lighting materials only weigh about 150 pounds, it was necessary to construct the rings to meet the structural requirements as well as permit a worker to climb safely onto the rings for maintenance or repair in the future.

The final steps to completing the tower will include completing the ring installation, mounting the platform atop the tower and finishing the permanent lighting (FAA). This is expected to be completed before mid-December. Once completed, as part of the City's acceptance process, we will perform a third party inspection to identify any issues with the construction and make corrections as necessary.

Please see *Rolling Hills Tower* on page 5



The new Rolling Hills tower, left, is 80 feet taller than the existing tower.



Radio Master Plan Progresses

911 District Seen As Possible Participant

By Alan Girton

Progress on the development of radio master plans for the City of Fort Worth and Tarrant County continued on schedule during the last quarter. Consultants from Buford, Goff & Associates (BGA) spearheaded discussions with stakeholders and with Motorola Inc. regarding the replacement of the City's 19-year-old public safety radio system. In addition, the City and its partners from other area jurisdictions began talks with the Tarrant County 911 District to determine feasibility of having the District take a major role in the funding, management and operation of a district-wide system.

Motorola submitted its first proposal to the City in mid-September. Since that time, BGA, Motorola and the City have worked through revisions to service descriptions, statements of work, and coverage and system acceptance test plans. Although pricing has been included with each revision, additional discussions are scheduled in December and January.

Please see *Master Plan* on page 5

800 MHz Rebanding – Super Bowl Freeze Coming Up

By John Eikerts

The federally mandated 800MHz Rebanding process is ongoing. This is an enormous undertaking and includes approximately 10,000+ radios units and the infrastructure for five Public Safety Radio sites, one Local Government Radio site, five Mobile Data System sites, and the Bolt Street Public Safety Communications Center. Even though we are trying to make the process as painless as possible, rebanding still impacts every City of Fort Worth department and its surrounding agencies that utilize the City's 800MHz radio systems.

The rebanding process consists of the following 4 milestones:

First Touch: Timeframe June 2009 to December 2010. During the First Touch, all mobile and portable radios are retuned with new Public Safety channels. First touch has been completed for all radios on the City's 800MHz radio system with the exception of the Water Department and the Media Outlets. We are on track to complete first touch rebanding by mid December 2010.

Super Bowl Freeze: Timeframe December 2010 to mid February 2011. During the Super Bowl Freeze, the retuning of all mobile and portable radios will cease so as not to interfere with Super Bowl Public Safety communications. This timeframe will be devoted to planning the second touch retune and infrastructure reconfiguration.

Infrastructure Reconfiguration and System Cut Over: Timeframe mid February 2011 to late April 2011. This activity involves retuning the infrastructure and cutting the system over to the new Public Safety channels.

Second Touch: Timeframe late April 2011 to January 2012. Removal of old Public Safety channels from all mobile and portable radios and fleet map clean up.

For more information regarding the CFW rebanding project, please contact John Eikerts at 817-392-2628

P25 Implementation Project Begins

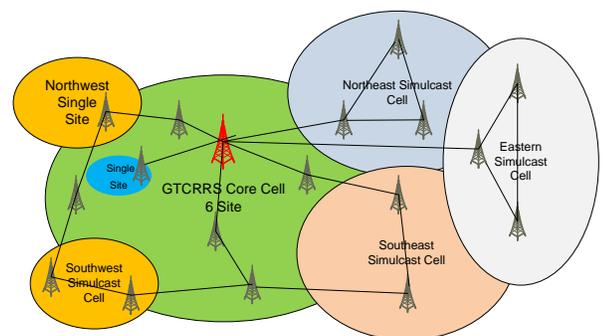
By Kevin McNamara

The core of the City of Fort Worth's P25 radio system will soon be in place.

The first phase of the P25 implementation project is officially underway. The initial phase of the project will consist of a new master switch located at the Eagle Mountain radio facility and the first P25 digital radio site at Burnett Plaza in downtown Fort Worth.

At this time the contract has been executed. We have had a pre-design/kickoff meeting with Motorola. The initial site walks have been performed and the preliminary engineering drawings have been produced. Materials are on order and we expect to start the installation as early as February 2011 with a projected completion of August 2011.

More project details will be provided in the next quarterly newsletter.



Regional Overlay System from page 1

Because of the Project 25 architecture, the two Master Sites are able to communicate with one another and pass radio traffic between them. This feature allows an agency in Tarrant County to communicate with an agency in Collin County over a set of Regional Talk groups when needed. This configuration between the two Master Sites, called an Inter-SubSystem Interface (ISSI), is the first in the country between two different communications equipment manufacturers. This system will also provide a much needed capability to inter-communicate throughout the four counties.

The Regional Overlay Communication System is one additional tool in the toolbox of first responders during emergencies, or large scale events.

For more information, contact CJ Holt, Public Safety Radio Communications Coordinator for the North Central Texas Council of Governments, at 817-695-9142 or jholt@nctcog.org.

Accessing the Regional Overlay System

To access the Regional Overlay System, radios must be able to communicate via the Project 25 (P25) standard. Most current radios, such as the Motorola XTL-5000 and the APX-6500, are capable of communicating via P25, but still must be reprogrammed with the appropriate P25 software. Also, templates must include the Overlay talkgroups. Costs for the software and reprogramming can exceed \$1,000 per radio.

In Fort Worth, almost 350 radios have been programmed with the P25 software. More are planned for early 2011.

MTS-2000 Radios Declared Out Of Support

By Alan Girton



The MTS-2000 handheld radio, used by several City departments, is no longer supported, according to Motorola. As a result, Motorola is no longer accepting orders for the repair of this model.

Radios turned in to ITS Radio Services will be repaired on a best-effort basis. To supplement those efforts, the City will utilize a third-party vendor, DFW Communications, for repair services.

In cases where repairs cannot be made, customers will need to consider replacing the radio with a current model. Costs for an equivalent handheld radio will usually range from \$2,800 to \$3,200 depending on the configuration.

ITS Radio Services is currently developing test plans for Motorola's newest handheld model, the APX-6000. This radio is comparable in both function and price to the XTS-5000, but should be expected to remain under support for several years longer than the XTS-5000.

Rolling Hills Tower from page 2

Upon acceptance we will commence with the next phase of the project that includes the addition of new antennas and transmission line. Ultimately we will cut over the radio system to the new antennas and perform system tests. As part of this phase of the project, the same vendor will also install the electrical and data risers as well as the necessary equipment to support the artistic lighting element. We expect this phase to be completed in mid-January.

The third phase of the project will be to power-up and test the artistic lighting system. This will be a collaborative process between our vendors, technical personnel and representatives, including artists, from the Fort Worth Public Arts Council. Our goal is to have this completed by the end of January.

The final phase of the project will be to remove the old Rolling Hills tower which will follow closely after the completion of all phases of the new tower.

Overall we are projecting completion of the total project in time for the Super Bowl.



Tower construction began in early October.

Master Plan from page 2

Two key considerations for pricing have included:

- The City's existing customers and all jurisdictions that opt to connect into the City's master switch must be able to utilize the City's contract to obtain discounts off the standard HGAC pricing. This would include both infrastructure and subscriber units. This provision would be effective from the contract execution date until system acceptance (estimated to be late 2014).
- Pricing must be comparable to the pricing that would be available through competitive bidding.

In addition to working through Motorola's proposal for the City, considerable attention has been devoted to collaboration with other jurisdictions. These efforts are crucial to achieving the common objectives of the City's partner agencies as they relate to public safety communications. A new potentially significant partnership was identified during the last few months.

Steve Streiffert, Fort Worth's assistant director for IT Solutions, presented details of current activity to the Tarrant County 911 District Board at its November meeting. Board members were briefed on the activities underway in the County as well as the challenges in funding, governance and scope development being faced by all County stakeholders. Following the presentation, members expressed interest in pursuing an active involvement by the 911 district. They cited a close alignment between the public safety radio projects and the district's strategic direction. Streiffert was invited to provide an update to the board in January or February once the master plan is completed.

Additional information regarding any of this activity can be obtained by contacting Steve Streiffert at (817) 392-2221 or Alan Girton at (817) 392-8484.



Did You Know?

That the two Fort Worth 800MHz trunked voice radio systems process more than 25,000,000 calls annually?

CFW Radio Services Manager

For details and to apply, go to the on-line job board at https://www.fortworthgov.org/hrappl/Job_Detail.asp?RecID=3093.



Radio Services Contact Information

To Report Problems and Incidents:

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(817) 392-7871

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This newsletter is a quarterly publication. If you have any comments or wish to be added or removed from the Radio Services Newsletter Recipient List, please contact Alan Girton.

We are interested in your suggestions and your feedback. So please - let us know what you think!!