

**Meeting of the STARCOMM Executive Board
with Technical Committee**

March 2, 2017

(Regular Jan 11, 2017 Meeting Postponed)

STARCOMM Executive Board Members Present

Rocky De Witt, Supervisor, Woodbury County Board of Supervisors
Dave Drew, Sheriff, Woodbury County
Tom Everett, Fire Chief, Sioux City
Richard Headid, Police Chief, North Sioux City, South Dakota
Dan Limoges, Sheriff, Union County
Ed Mahon, Police Chief, South Sioux City, Nebraska
Scott Pack, Police Chief, Sergeant Bluff

Absent

Chris Kleinberg, Sheriff, Dakota County
Judy Oberg, Director of Communications, Union County Sheriff's Department
Bob Scott, Mayor, Sioux City
Doug Young, Chair/Police Chief, Sioux City

STARCOMM Technical Committee Members Present

Mark Aesoph, Fire Marshal, Sioux City Fire Rescue
Gary Brown, Director, Woodbury County Disaster & Emergency Services
Joe Durham, General Manager, Electronic Engineering
Don Groves, Jail, Woodbury County Sheriff's Department
John Obermeyer, Communications Technician, Sioux City Police Department
Scott Pack, Police Chief, Sergeant Bluff
Glenn Sedivy, Director, Woodbury County Communications Center
Bob Welte, Director of Operations, Siouxland Paramedics

Absent

Doug Bock, Network Manager, WCICC-IT
Tony Carpenter, Calhoun Communications
Paul Hansen, Electronic Engineering
Greg Koinzan, Police Officer, South Sioux City Police Department
Roger Kriesler, Calhoun Communications
Eric Larson, Electronic Engineering
Scott Main, Electronic Engineering
John Malloy, Information Services Director, WCICC-IT
Andrew Pattison, Electronic Engineering
Ray Roggow, Emergency Manager, Union County
Greg Stallman, Deputy, Woodbury County Sheriff's Department

Also Present

Wendi Hess, Ops Supervisor, Woodbury County Communications Center
Sheila Holloway, Electronic Engineering Admin Assistant
Derek McIntosh, North Sioux City Police Department
Melvin Mercado, Motorola Solutions
Mike Mussett, Motorola Solutions
Todd Wieck, Deputy, Woodbury County Sheriff's Department
Brent Rosendahl, Officer, Sergeant Bluff Police Department
Shari Schmitz, Motorola Solutions

Item 1 Call to Order

The March 2, 2017, meeting of the STARComm Executive Board was called to order at 1000 hours by Acting Chairperson Tom Everett. The meeting was held at The Security Institute, Western Iowa Tech campus. (January 11, 2017 meeting had been postponed).

Item 2 Approve Minutes

The first order of business was to approve the minutes of the October 19, 2016 meeting.

Motion Item 2

Richard Headid made a motion to approve the minutes of the October 19, 2016 meeting, seconded by Dave Drew; all voting aye, motion carried.

The October/November/December 2016 STARComm Revenue/Expenditure Report was disseminated.

Item 4 Authorize Chairman to sign Tower Leases with Motorola at the following STARComm Sites: WIT, West, East, Anthon/AT&T

The leases are required to authorize Motorola to place equipment within tower sites. A list of equipment to be upgraded with latest version of operating hardware/software was presented to STARComm. This includes adding steel to three towers, WIT, AT&T and East, in order to accommodate the capacity of microwave dishes; two microwave dishes each. The microwave system will connect STARComm to the new Iowa Statewide Radio System.

Sub-leases will need to be approved; WIT's lease requires a public hearing and approval by the College Board of Directors, both in March. The County approved at a public hearing in February. Sioux City City Council scheduled for March meeting as well as a March public hearing. Motorola will be allowed to proceed after all signatures are obtained.

East, AT&T and Anthon tower sites require a public hearing during County Supervisors March meeting; after, Motorola may proceed with site improvements.

The West tower requires sub-lease approval from the Sioux City School District. Dan Moore, School District Attorney, requested a verbiage change due to the amount of years STARComm has under the initial lease with the School Board. This change is being resolved and involves Sioux City City Attorney and the Woodbury County Attorney.

Glenn made a recommendation the Executive Board authorize Chairperson Young to sign the lease agreements for the WIT, West, East and Anthon/AT&T tower sites.

Motion Item 4

A motion was made by Dave Drew to authorize the chairman to sign the WIT, West, East, Anthon/AT&T tower leases with Motorola, seconded by Rocky DeWitt; all voting aye, motion carried.

Item 5 Acknowledge Consent from the Dakota County LEC Board to Sublease the Homer Tower to Motorola as per Lease Agreement Between STARComm and Dakota County LEC Board Dated April 14, 2009

This required consent from Police Chief Ed Mahon and Sheriff Chris Kleinberg. Chief Mahon brought the signed consent lease agreements Which Co Chairman Scott Love signed March 1, to allow the sublease of the Homer site to Motorola. Only hardware and software installation, no tower modification required.

Glenn made a recommendation that the Executive Board authorize Chairperson Young to sign the lease agreement with Motorola at the Homer site.

Motion Item 5

Dave Drew made a motion to authorize Chairperson Young to sign the Homer Tower lease agreement with Motorola, seconded by Scott Pack; all voting aye, motion carried.

Open Items

Radio Programming and Installation Update

Sioux City Police mobile radios have been installed with existing/current operating programming with the code plug to function on the current STARComm system.

Sioux City Fire mobiles have been installed in all units.

Woodbury County Sheriff's mobiles are nearly all installed.

Currently, new portables are being held for Police, Fire and Sheriff until final fleet map is received, which is about 90% complete with new talk groups. Joel Bates, Glenn, John Obermeyer, Don Groves and Mark Aesoph are to build new code plug for the new portables. The portables will not work until actually connected to the State network, a new system key is required. Joel Bates was provided four hard system keys, similar to a thumb drive, that Motorola has to program to be able to program the radios onto the State network. Once the system keys are programmed and a final fleet map if complete, Glenn will work with Dakota County, South Sioux City and North Sioux City to reprogram their radios with the new system key and new fleet map code plug.

Once the new portables are close to 100% of requested programming, and once Motorola indicates readiness to move over to the new system, the new portables will be distributed to all Fire Officers; at that point they will be operational on the State system.

Every mobile in the STARComm system will then be programmed with the new code plug which contains the new system key and new encryption.

Two radio console positions were installed and are currently connected to the State core in Des Moines as well as connected to existing resources locally as networks are being established.

The fleet map is being built with what is currently used plus many additional resources. County Fire and County EMS will be moved over to 800 Mhz paging at the end of the year and were built in to be able to page them. Traveling talk groups will be built so agencies traveling through Iowa can communicate back and forth. A main ops channel should not be used while traveling across the state as it will tie up the State infrastructure. The same applies to SPI completing patient transfers. Secure talk groups will be created, STARComm Iowa Law Enforcement Secure Talk Group. STARComm Iowa EMS Secure Talk Group, STARComm Iowa Fire Secure Talk Group.

Glenn identified which talk groups will be totally TDMA versus dynamic. Initially, because not all law enforcement will have TDMA capable radios, for example Sergeant Bluff and North Sioux City, the main ops channels initially will be dynamic meaning they can operate on the existing FDMA or TDMA and still function.

Law enforcement secure channels are TDMA.

Initially all Fire Ops and Fire Tac channels will be dynamic. Primary use will be TDMA, but in the event of an emergency incident requiring rural resource response, the radios will still work.

STARComm Technical Committee members representing each agency reviewed and determined the talk groups.

Sergeant Bluff

Department is applying for grant funding to assist in radio purchase.

Comm Center

Wendi will send an email to City Fire requesting feedback as Fire will begin using the new console. Training will be required of Comm center personnel as some differences exist with the new console.

Motorola has acquired the assistance of Electronic Engineering staff to install the consoles and hope to be completed within two weeks. Glenn hopes to have two positions installed and glitches resolved ahead of installing others. The operators will be using old and new infrastructure until completely connected to the State. The old consolettes will function as back up resources.

Item 3 ISICS State of Iowa Radio System Update/Motorola Reps

Melvin Mercado with Motorola presented a slide show with explanation.

Of three cores, the core in the Des Moines area is the active core, powering the Capital area as well as the West Comm area and Dallas County.

The Prime site, AT&T and East are all active. An additional prime site is being added for redundancy. Additional loading will be placed on three towers for microwave as those sites will be the connecting point.

Dispatch will be hard-wired into the ISICS core but will retain the ability to communicate over-the-air; if the system fails, operations continue to exist.

The prime site will no longer be connected to the STARComm core, but rather the ISICS core; the STARComm core then becomes decommissioned.

GEO Prime, which is a back-up to the AT&T tower, will be able to talk to the STARComm simulcast cell as well, creating redundancy.

Channel resources will be added.

Because not all sites have been built, a temporary link to the ISICS core via ICN will connect STARComm to the state core.

So as not to affect operations, Motorola is building a new dispatch site literally side-by-side with the existing site. Some resources the old console system has access to will be shared with the new.

Operations decisions, fine tuning, and corrections will be made and then the physical move/cut-over of operations using the new system will begin. Operator positions will be moved, one at a time.

DC power expansion batteries, rectifier units, etc., will be installed. Each site will have 8 hours of battery backup.

Three base stations will be installed inside the existing expansion rack and work with the current back haul. Reconfiguration will be performed to prepare for the cut-over of the system.

Microwave vendors are on hold until lease agreements are completed.

Roger with Calhoun is working with Joel with Motorola on back haul reconfiguration. New jumbo switches will be utilized to carry the new traffic until the Motorola microwave system is up and operational.

Gary Brown asked about down time when DC power expansion is installed. A time will be scheduled to unplug, rewire and plug back in; this will take several hours and will be done at every site. Sioux City Public Safety will need to move over to Public Works channels during this transition.

Next Motorola will work on replacing/upgrading some of the network equipment, like outdated routers, which will be replaced. Voting computers will be added for additional channel resources; add the redundant prime site, upgrade the software to 7.16 and TDMA software.

Gary and Glenn would like to sweep antennas and lines while the sites are down. Glenn will work through Electronic Engineering to line up a tower crew. Motorola does not have a need to sweep the lines because they are not plugging or unplugging anything but will literally slide base station channels into an ESS rack. Glenn will synchronize crews to sweep lines during the down time. Glenn has documents from the last sweep, spare coax, new tower top amp and antenna.

Structural engineers were consulted and Motorola is having performed a "G" loading analysis which covers 90 mph wind and 50 mph with $\frac{3}{4}$ inch of ice. WIT

and AT&T sites will have additional bracing or steel added/replaced. The East tower site will have the foundation reinforced, and steel modification.

Gary mentioned certificates of insurance for subcontractors working on sites are required; this stipulation is part of the tower lease agreements.

The tower work will be completed after the STARComm/Statewide system is operational.

Microwave is the last piece; full microwave optimization means connecting all sites in ISICS together, then integration of demarcation between the STARComm network and ISICS network, consisting of AT&T and WIT towers. The simulcast cell and dispatch center can then traverse through the microwave network back to the core. Motorola would then cut over from the ICN to the microwave.

The end of April or beginning of May is when the simulcast cell will be connected to the core through the ICN network.

Wendi iterated TDMA must be completed by the end of June, which is the deadline for the \$200,000 Iowa 911 Consolidation grant.

Part of the dispatch is to include South Sioux City's dispatch center, which is connected to the WC Comm Center by fiber and will also connect to the core.

The microwave equipment has been delivered and is ready to install. Frequency coordination had been completed end of September. Batteries are 110 pounds each and were ordered in phases; may be stored for 6 months. Antennas and generators have been delivered to the warehouse.

The Homer site road needs attention before deliveries are made.

Open Issues

Disaster Services – Climbing Hills

Gary Brown mentioned his agency is in the final steps of remodeling the backup 911 Center in Climbing Hill. New radios are in, new computers ordered, led lighting installed. A donation of eight desks and several chairs was received from CF industries.

School Radio Coverage

A couple of school buildings have coverage issues; have coverage on one side of window and nothing on inside of window. The type of glass appears to be a factor. John Obermeyer is planning to install a passive system at Perry Creek school to attempt to improve coverage inside. If not, Plan B is an amplifier type system.

Glenn will contact Police Captain Lisa Claeys to determine the type of glass going in Police/Fire Headquarters.

Mark Aesoph indicated the Code provides the ability to require, if public safety does not have radio coverage, that the owner provide a system which permits coverage. The issue is, that is not anything an engineer can tell you before a

building is built. Mark brought it to the School Board's attention for construction consideration at another school. Perry Creek has same materials as previous school built, which is Loess Hills. An issue does not exist there; the proximity to the tower is much closer. Other jurisdictions are struggling with this as well.

STARComm Billing

Wendi would like the group to consider annual or biannual billing for next year, rather than monthly billing. Agencies are billed the same each month.

Gary had attempted this without success. Since not every agency is on the same fiscal year, it caused budgeting woes. This will be discussed further at a later date.

State Patrol Radios

Glenn met with Jay Smith, State Patrol, to make him aware their radios would not be operational when connection to the State system occurs. Gary provided the agency with radios 12 or more years ago. Glenn was informed all State Troopers are carrying new APEX 8000 radios which are capable of operating on the Statewide system, but require programming or they will no longer be able to talk on the STARComm system when the connection to the Statewide system occurs.

Glenn sent an email to Tom Lampe informing him that Troopers stationed in Woodbury County serving this area have been provided portables for years and inquired as to what agreements will be necessary to authorize STARComm talk groups to be programmed in the APEX radios. Currently DNR enforcement officers have been programmed with STARComm talk groups. Police Chief Young and Sheriff Drew will reach out to the agency.

Shari, Motorola, indicated Dave Gordon, Customer Service Manager agreed to add 6 months to the 3 year warranty on the mobiles and portables purchased last fall for Sioux City and Woodbury County. Since the warranty typically begins when the product ships, the only way to address this is to provide additional months. Shari will coordinate and provide a list to double check all radios.

Maintenance Agreement

Calhoun Communications will provide Glenn with a maintenance contract, same as every year, to maintain microwave and jumbo switches.

Item 8 Adjourn

Dave Drew made a motion to adjourn, seconded by Scott Pack. All voting aye, motion carried; meeting adjourned at 1103 hours.