

**Meeting of the STARCOMM Executive Board
with Technical Committee
January 10, 2018**

STARCOMM Executive Board Members Present

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

Absent

Sara Beatty, Communications Center Director, Union County
Chris Kleinberg, Sheriff, Dakota County
Rex Mueller, Police Chief, Sioux City
Scott Pack, Police Chief, Sergeant Bluff

STARCOMM Technical Committee Members Present

Gary Brown, Director, Woodbury County Disaster & Emergency Services
Tony Carpenter, Calhoun Communications
Stacy Geesaman, Electronic Engineering
Roger Kriesler, Calhoun Communications
Terry McElvoy, Electronic Engineering
John Obermeyer, Communications Technician, Sioux City Police Department
Glenn Sedivy, Director, Woodbury County Communications Center

Absent

Mark Aesoph, Fire Marshal, Sioux City Fire Rescue
Doug Bock, Network Manager, WCICC-IT
Don Groves, Jail, Woodbury County Sheriff's Department
Paul Hansen, Electronic Engineering
Greg Koinzan, Police Officer, South Sioux City Police Department
Eric Larson, Electronic Engineering
Scott Main, Electronic Engineering
John Malloy, Information Services Director, WCICC-IT
Scott Pack, Police Chief, Sergeant Bluff
Andrew Pattison, Electronic Engineering
Ray Roggow, Emergency Manager, Union County
Greg Stallman, Deputy, Woodbury County Sheriff's Department

Item 1 Meeting Called to Order

The January 10, 2018 STARComm Executive Board Meeting was called to order by Chairperson Tom Everett at 1003 hours.

Item 2 Approve Minutes of November 7, 2017 Meeting

Ed Mahon made a motion to approve the minutes of the November 7, 2017 meeting, seconded by Dan Limoges. All voting aye, motion carried.

Item 3 Update on STARComm Radio Coverage Issues and Connection to the State of Iowa ISICS System

Since connecting to the State core, coverage issues have been reported, mainly Woodbury and Dakota County. Dakota County uses APEX 8500 radios.

During troubleshooting, Motorola discovered Homer tower top amp equipment had not been adjusted properly when installed; this has been corrected and resolved some of the issues. Fringe areas are still a problem; the radio emits an acknowledgement tone, which lets the transmitter know they've got the system but the traffic is not going anywhere. The transmitter is not aware they are not being copied.

This was not an issue until STARComm converted to TDMA and connected to the State system; at the same time all new radios were put in service system wide. The question remains, is it end user radios or tower sites?

The same issues occurred with old handhelds, which may indicate an infrastructure issue. Encryption does not pose a problem; disconnecting from the State Core ruled that out. Buildings that had coverage prior to the State connection no longer do.

Users will continue to email Glenn their coverage issues.

Motorola is meeting with engineers and program managers in Des Moines to review all issues with the entire system. Glenn is waiting to hear from Motorola rep Joel Bates with an update.

Item 4 Update on Proposed First Amendment to the Public Service Radio System Governance Agreement

The first amendment was distributed to each entity to take to their governing bodies for input and changes. Glenn reminded members to get requested changes to him. Sioux City Attorney and County Attorney are waiting on requests from outside agencies, **one way or the other, approve or disapprove.**

Item 5 Update on Radio Programming Issues

Had Tech meeting; are looking to reprogram all Sioux City Police, Fire and Woodbury County Sheriff, Dakota County, South Sioux City radios that are in-service under the old STARComm talk group ID plan with the State. Motorola left out a couple counties and had to redevelop a new talk group ID scheme. The programming is delayed until Motorola determines if coverage issues are due to end user radios so those changes can be made at the same time. Every radio currently operating on the system will need to be reprogrammed; this is a huge task.

Mobiles are operating okay, issues appear to affect portables. Mobiles in SCPD invest cars have issues due to inside mount antenna; power/wattage is turned down.

Item 6 Discussion of Capital Improvement Projects

The Tech Committee put together a list of projects. Carry over funds exist from previous operating budgets which require a budget amendment or return to the user agencies. Glenn obtained estimates for eleven projects. Priority Items are 1, 2, 4 and 5.

- 1) Six radios for STARComm Bus to replace XTL2500 mobile radios which will no longer be able to communicate. Price for replacing them with a lower end radio APEX 6500 single band 800 radio is \$23,892; with installation \$25,227. Priority.
- 2) Tower top amp equipment at 5 tower sites, which includes equipment inside building, \$56,700; with installation \$72,143. A tower top amp issue requires a tower crew. The equipment is as old as the radio system and has been phased out by manufacturer. The Homer site sustained a lightning strike and equipment was updated by Motorola for the State project. Priority.
- 3) TRAK timing system to replace existing equipment \$191,841, with installation \$193,979. The equipment is old but spare parts do exist.
- 4) Replace damaged coax due to tornado damage, \$20,442 with material. AT&T Tower coax damaged roughly 4 years ago. Spare spools of coax exist, would like to keep in inventory. Priority.
- 5) Microwave Wave Guide AT&T site \$37,000. Replace 4 runs of coax for microwave due to tornado. No spare material on hand. Priority.
- 6) Replace existing microwave system dehydrators at five sites. \$21,000. Draws moisture from microwave coax with a wave guide to prevent moisture from causing interference. Dehydrators as old as radio system. East tower had one fail a few years ago. No spares on hand.
- 7) Microwave radio replacement AT&T to East, \$73,400. The electronics which break out circuits within the microwave system have been replaced. The actual radio equipment itself which transmits the signal from tower to tower needs replaced; it is as old as the radio system. A length from AT&T Tower to East Tower is a hot standby radio link. When a radio fails, another takes over.
- 8) Microwave radio replacement from AT&T to Homer with diversity, \$95,000. Two antennas and two sets of radios. Diversity due to distance.
- 9) Microwave radio replacement from AT&T to WIT Tower, \$73,400.
- 10) Microwave radio replacement WIT to West Tower, \$73,400.

11) Microwave radio replacement West to Homer \$75,000. Estimate higher than other links as antennas need to be lowered; originally installed too high. Moisture on Nebraska river bottoms causes reflective power and consequently, radio issues.

Glenn will attend the 911 Board meeting January 10, this evening. He has included some of these projects in the proposed 911 Budget. 911 funds, if approved, may be used to offset shares for members of STARComm in Woodbury County. Some of the priority microwave links, such as AT&T to East Tower, from WIT to AT&T, and from AT&T to Homer, may be phased in. This would then free up equipment to be utilized for spares until funding becomes available for remaining links. Because of fiber optics, some links aren't as critical; fiber now exists to Homer Tower. If 911 funds replace the critical sites for Woodbury County, other STARComm members, Dakota, Union and North Sioux City may begin budgeting a year or two out for other links.

Woodbury County users (Woodbury, Sioux City, Sergeant Bluff) user fees amount to 79% of the STARComm budget, just under \$300,000. Removing Woodbury County, leaves roughly \$80,000 remaining to be funded between Dakota 14%, Union 4%, and North Sioux City 2%. Dakota, Union and North Sioux City could fund the link between West and Homer at roughly \$75,000, by percentages. Glenn indicated this project could be pushed out to 2020 if necessary; he had concerns about technology changes and remaining consistent.

Glenn suggested he, Wendi, and Dennis Butler review the STARComm budget. Funds are available under the current budget due to the change in the Motorola contract.

STARComm Insurance

The STARComm Insurance deductible is about \$800,000. The policy covers towers, mobiles, and equipment inside buildings. Tower deductibles are \$50,000 per incident. The AT&T roof was funded from operating budget as repair was less than deductible.

Item 7 AT&T Tower Lease Amendment on the STARComm West Tower

Glenn was contacted by AT&T regarding amending the current lease agreement with STARComm. AT&T currently has hardware in the building and an antenna and would like to add three additional antennas. They currently pay \$2,275 a month. The proposed amendment will not affect STARComm users. Glenn recommended moving forward with amending the agreement to add additional hardware, complete any additional modifications to accommodate antennas, and to increase the payment by \$475 a month, bringing the total monthly payment to \$2,750 per month. STARComm Chair Tom Everett will sign the amended lease after City and County attorneys have approved. The amended lease will require approval of City Council and County Board of Supervisors, and the Sioux City School Board as it is on school property. Glenn will determine if a public hearing is required for an amendment.

Motion Item 7

Bob Scott made a motion, seconded by Rich Headid, to authorize Chairperson Tom Everett to sign the Amended AT&T STARComm West Tower Lease with proposed \$475 monthly increase, once approved by City and County Attorneys. All voting aye; motion carried.

Open Items

Emergency Button Activation Test

Sioux City Fire conducts an emergency button activation test every week. Previous instructions to clear the alarm are no longer correct. Rather than turn the radio off and back on to clear, Joel Bates, Motorola, indicated that since STARComm is wire-line controlled to the core, the proper way to clear emergency button activations is to **push and hold the red emergency button until it “bonks”** at which time the radio is telling the core this radio cleared the alarm. Please pass this along to Fire personnel.

West and Homer Tower Generator Fails

West and Homer Tower generators failed New Year's Day. Glenn spent most of day making them operational. Every Monday generators start and run for an hour, that day they failed and Glenn received alarms. Glenn had an electrical contractor install a thermostat and heater inside the generator room at the West Site. A 12-volt battery charger failed at the AT&T site. A temporary charger was used and an electrician will install a new one.

Sioux City Fire Station Alerting System

Hoping for approval of new Sioux City Fire Station Alerting System through the 911 Service Board which will include a microwave link to Fire Station 6 from WIT Tower. Sioux City Fire is moving forward with this project with previously budgeted funding from the 911 Board. The new system will eliminate the antiquated alerting system (VHF radio system off West Tower) and will utilize the City fiber network to each fire station. The system will be linked to the dispatch computer system; upon generating a call, the computer network in the Station Alerting converts that call to a SIRI voice and the SIRI voice will broadcast the call out of each station allowing the 911 operator to gather more information from the caller. Lincoln, Nebraska has been using this system for years and it has drastically improved response times.

New County Fire Pagers

Pagers were purchased with 911 funds, \$374,000 for 510 pagers. Glenn is in the process of moving Woodbury County Fire paging over to the 800 system and has programmed 410 pagers thus far with three departments left to complete. Glenn demonstrated this pretty amazing pager, which is 800 and Vhf so the current Vhf equipment is still an asset. If the STARComm system is down, County Fire can still receive Vhf paging. Will page off Homer and eliminate Climbing Hill and Pierson sites.

Electronic Engineering assisted in the purchasing. Chargers were not purchased with the pagers, but because of the quantity ordered between September and December, EE was eligible to receive a charger for each unit, which are valued at \$89 each; 510 pagers were purchased.

An amplified charging unit, which amplifies the audio, was purchased for every fire station county wide, which includes Sioux City Fire, 185th ANG, and Woodbury County Disaster and Emergency Services. The amplifier can be tied into a PA system and may serve as a backup if the station alerting system fails, which amplifies audio.

Volunteer Text to Phone vs. Pager

Glenn was asked if any volunteer department members are receiving texts to their cell phones for emergency response call dispatch. The Comm Center sends texts to their phones coming out of the CAD system, tied into a program called Haleon, interface to CAD sends out an email to all fire departments.

At times when the City network is down or connection to cell carrier is down, volunteer responders believe they are receiving calls, two hours later a text is received after the call is over. Gary Brown indicated there is no method to reach them to let them know the system is down. Volunteers do not seem to want to carry both a pager and a phone. **The pager is provided and should be carried.**

Woodbury County terrain is high or low and transmitter sites cannot hit every valley; the 800 paging will help.

New Electronic Engineering Branch Manager

Terry McElvoy, new Electronic Engineering branch manager, was introduced.

Item 9 Adjourn

Bob Scott made a motion to adjourn, seconded by Dave Drew. All voting aye, meeting adjourned at 1053.