

**MINUTES**  
**BOARD OF PUBLIC SAFETY**  
**September 25, 2012**

A **SPECIAL MEETING** of the Board of Public Safety was held in the City Hall Auditorium on Tuesday, September 25, 2012.

Those in attendance included Mayor Ryan J. Bingham, Members of the Board of Public Safety Angelo LaMonica, Richard Zaharek, Douglas Benedetto, Darlene Battle, James Potter and Christopher Cook, Police Chief Michael Maniago, Deputy Police Chief Christopher Smedick, and Acting Fire Chief Gary Brunoli. Also present were Personnel Director Thomas Gritt, Northwest Communications, Inc. technician Brian Mazerolle and Vice President Don Nelson.

Mayor Bingham called the meeting to order at 5:45 p.m.

**PRESENTATION:**

Mr. Mazerolle reviewed a timeline of the radio system upgrade. He said in early 2011 or late 2010, the City had an opportunity to get Federal funds to obtain radio interoperability that would allow interagency communication. The grant was limited at up to \$400,000. Mr. Mazerolle said the Police Department noted that this opportunity existed, and asked what they could do with it. He explained that in order to achieve interoperability, the radio system had to be put in the same band that everybody else uses.

NW Communications looked into it, and the money allowed for almost a direct replacement of what Torrington already had, except in the new frequency band.

Mr. Mazerolle said the Police Department was hoping to get encryption from the upgrade. Due to financial restrictions, the original proposal was for a traditional analog system, he said, and encryption on an analog system sounds terrible. They tried to do a hybrid system with digital audio, and the rest of the backbone being a traditional analog set up. Mr. Mazerolle said the audio wasn't clear enough to do that.

Mr. Mazerolle said discussions included what the coverage would be, how it would change, and reviewed coverage maps comparing the old and new systems. He noted that this system uses one transmitting site that is based on car-radio or mobile coverage. He said the Police Department confirmed that the coverage map was pretty accurate for what they currently had.

Mr. Mazerolle explained that the system is currently on traditional analog. In January 2012, Kenwood announced a new software upgrade with the existing hardware, he said, and the hardware sold to them was digital-capable, meaning that some channels would be digital and encrypted even if the system was not. They were able to get that benefit, he said.

The problem is the transport, Mr. Mazerolle noted, or how the signal gets from one end to the other. He said the quickest way to initiate this was to use AT & T phone circuits, but these are *voice* AT & T circuits, not data circuits. Both have the same reliability problem when bad weather or environmental issues occur. It may not be the fault of the radio system, he said, and the problem appears to be trying to run fancy equipment on a very old, antiquated backbone.

In answer to Commissioner Zaharek's question, Mr. Mazerolle said the voice lines are copper lines. There may be fiber optics in the data lines, but you still run into service interruption from power failures or lightening, he said. Mr. Mazerolle said that since they have been installed, there have been problems with those data lines, even without having anything on them yet, and he noted that a lot of the AT & T infrastructure within the City is antiquated.

Normally when a radio system is built from scratch, all the infrastructure is communicated together over wireless microwave point-to-point, he explained. The advantages are not paying AT & T lease fees every month and not waiting for AT & T to make repairs when there is a failure. Mr. Mazerolle said building an infrastructure is usually very expensive and needs to be planned for. He said there were no funds for this in Torrington and that's why it never got done.

Mr. Mazerolle said that we still have very capable digital equipment, but the infrastructure is not capable of supporting it.

Commissioner Benedetto asked if a study was done. Mr. Mazerolle replied that it was but the needs were changing as it went along. The original proposal was for basically the same system but on the new frequency band. The interoperability requirements of the grant were satisfied and everybody in the City is on the same band except Campion ambulance. What was being pushed was privacy and encryption for which analog was completely unusable, and if you want to run digital, the AT & T lines can't really support that reliably, he said.

Mr. Mazerolle said if the City wants the same exact set up but digital and encrypted, lower tiered microwave equipment could be used. He said if it were done right, the proper microwave equipment would be obtained with enough capacity for other City agencies to benefit. In this way the Police Department and Fire Department could come off AT & T leased lines, the City could stop paying the fees for that and stop worrying about weather related incidents. This needs to be determined, he said.

Mayor Bingham asked if these would be the same lines we use for Citywide IT infrastructure. Mr. Mazerolle confirmed it is the same type of line and that the installed T1s are dedicated.

Chief Maniago stated that the end game hasn't shifted, which is to have digital encryption, no dropping of calls, penetration into and out of buildings, and a reliable radio system. That's been the end game since day one, he said.

Commissioner Potter said it sounds like everyone knew up front what the limitations of the system were going to be.

Mr. Mazerolle explained the building penetration issue, saying that it can't be done with one transmitting site. This is normally done with multiple transmitting sites, which has to be engineered. Torrington has the basis of that, but would need more sites to make that happen. This was not intended in the original proposal, he said. The way to do it is to have the backbone and the support system in place first and then add the upgrade in phases. He noted that it would have to be engineered for an accurate number of sites and to make sure that all the sites link together properly.

Regarding the issue with T1s, Mr. Mazerolle said the problem is the environment surrounding them. They are next to 180' lightening rods and do not work well with static in the air. He said he has been calling in service calls on those T1s since they were installed and no data is even on them.

Mr. Mazerolle encouraged the Board to determine their end goal and put it in writing so they can decide on the best route to take from this point on.

Chief Maniago said that Kenwood is in the process of doing a system evaluation, but they are not bringing in an engineer at this point in time. He noted that they have to go back on the digital system for a while to collect some more data.

Mr. Mazerolle said that before Kenwood invests a lot of resources into doing a study for Torrington, they are going to need something in writing that says "This is what we're looking for". They won't take a verbal over the phone, he said.

He explained that the grant money was essentially the first step to a system upgrade, but there was not enough money to go above and beyond.

Commissioner Benedetto said he talks to Police Officers on the street who claim to lose half a dozen to a dozen calls per night. Mr. Mazerolle said this was news to him. He said faulty hardware was found, but by January all that was squared away. There was an issue with a fire truck severely interrupting communications, but that was rectified. We haven't gotten any reports on dropped calls, he said.

Chief Maniago said the Police Department is back on the analog system, which is functioning better than the digital system at this time, but it still drops calls. He said he was unaware of any reports about six or seven dropped calls per night.

Mr. Mazerolle noted that a Police Lieutenant had forwarded those complaints to him in the past. He explained that there is a difference between the term dropped call and somebody in a dead spot who's just not picking up the call. A dropped call means the system stopped transmitting something it let out.

Commissioner Benedetto said when the Police Officers talk to Dispatch, they have to repeat themselves two or three times because they can't transmit. Mr. Mazerolle said the Dispatchers haven't indicated anything about that since January when the bulk of those issues were solved.

Commissioner Cook said he doesn't remember hearing this was just a base plan and that if we wanted to go further it could cost a lot more money, into the millions. He said he did remember talking about the encryption that the Police Department wanted and it seemed like everything was a go at that point in time.

Mayor Bingham explained that when Torrington applied for the grant, it was specific to interoperability, and it didn't say anything about encryption. Mr. Mazerolle said they were trying to stretch that dollar as far as they could for the Police Department to the point where the originally-'spec'd' analog-only radios were changed to digital-capable to get the Police encryption, and Northwest Communications ate the difference because there wouldn't have been enough money.

Chief Maniago said that digital is not the only problem because they are having problems on both, but more on the digital than on the analog. The encryption on the digital gives a warbling sound where it muffles what's being said. Mr. Mazerolle said he had not received anymore complaints and the system was switched back to analog to figure out if the digital will move forward or not.

Mayor Bingham said he agrees with Chief Maniago in that the primary focus should be reducing dropped calls. He said that since the start of this project we have attained increased coverage, interoperability, and we've met the goal of the initial grant application and the grant expense.

Chief Maniago said he doesn't think the dropped calls are as frequent as there were on digital although some still occur periodically. He said he will double-check on the frequency and noted that it is not solely the encryption that is causing all the problems. In conversations with Kenwood and the engineer assigned to the Torrington case, Chief Maniago said he reviewed what he wanted – digital encryption, no dropped calls, and a reliable radio system. He said that Kenwood's engineer assured the Chief that the upgrade was a possibility depending on how much the City wants to spend, and that upgrading the backbone of the system would be a requirement.

Mayor Bingham asked if the current analog system requires the AT & T digital data lines. Mr. Mazerolle said they do not, but the voice lines are required.

Commissioner Cook clarified that a lot of those dropped calls are not based on equipment but are based on infrastructure. Mr. Mazerolle said there had been some faulty hardware on the analog system which was taken care of. For the dropped calls on digital, they were still trying to determine the cause. The T1 lines are suspect, he said, and added that third-party leased lines are not the way to go.

Mayor Bingham asked if the Police Department had dropped calls prior to the upgrade to interoperability and the switch to different frequencies. Chief Maniago replied that we were on 800 MHz prior to this system, coverage was only about 75% in the City and now the targeted number is about 95%.

In answer to Commissioner Benedetto's question, Mr. Mazerolle suggested leaving the system on analog because that seems to be the most stable, reliable platform with the infrastructure that we have.

Mayor Bingham noted that the other immediate issue is to collect the information that is needed for Northwest Communications to take care of some of the dropped calls. Chief Maniago said they do collect information but he's not sure what reporting needs to be done.

Commissioner Benedetto noted that the Police Officers are getting so used to repeating themselves, they just live with it and may not report it to their Lieutenants. Chief Maniago said he hopes that is not the case because everybody knows how important it is to get this radio system fixed.

Commissioner Cook requested a report of that information for the next meeting.

Commissioner Potter summarized, saying that from the beginning, everybody knew what we were getting with the money we had, we tried to upgrade it a little beyond the capabilities of the system for the Police Department, that didn't work, and the only way to fix it is to get an engineer to tell us what we really need. Mr. Mazerolle said that summary is pretty accurate.

Chief Maniago stated that the encryption is not causing this, because the problems exist on the analog system as well.

In answer to Commissioner Benedetto's question, Acting Chief Brunoli explained the initial grant was \$850,000 and part of that was set aside to take care of Dispatch issues by the tower. He said approximately \$443,000 was spent for the Police Department, Fire Department, Public Works and Engineering. Acting Chief Brunoli said that these departments were asked to get everything they need to replace their equipment, including accessories. He said he planned to take whatever is left and make it work for everybody else. In those discussions, increased mobile coverage was considered, he said.

Although he was a third party to what was happening, Acting Chief Brunoli said he doesn't think there was any discussion about having portable coverage in every place in the City. The discussions were about making sure the police had all new radios, that they had the sound quality they wanted, that all parts were included, and that they had encryption.

Acting Chief Brunoli explained that the Fire Department uses its radios differently than the Police Department. Policemen call the dispatch back and forth, he said, but Firemen talk between themselves at an incident scene and don't notice missing transmissions. He said we still have dead spots because of the contour of the town.

Acting Chief Brunoli stated that we have identified the fact that we have an issue and we need to correct it. He said if we're going to fix it, let's fix it for the entire City and have a reasonable discussion on what that is, and what the costs are.

Commissioner Benedetto asked why a switch was made from Motorola brand to Kenwood brand radios. Mr. Mazerolle said they are more upgradeable and the issues are not related to the brand.

Chief Maniago noted that Northwest Communications has responded to every call but it behooves us to continue to try to find out what is causing the dropped calls.

Mr. Mazerolle explained the option of vehicular repeaters for better coverage and offered to research the cost. He further explained his digital data collection plan involving the reconfiguration of every police car radio which will take about three days.

Commissioner Benedetto asked if this will be covered under warrantee. Mr. Mazerolle said he doesn't know of any fees, and they have already donated quite a bit of time to these repairs.

When asked by Commissioner Cook to come up with some ideas for the Board, Mr. Mazerolle replied that the logical way to progress is to start on the backbone.

Commissioner Battle asked if the analog system will be tested as well. Mr. Mazerolle said no, it is a tried and true legacy in technology.

Chief Maniago said he expects this could take another three to four months. He added that the vendors are aware that this is an officer safety issue. In reply to Mayor Bingham's question, Mr. Mazerolle said we are getting better coverage now, especially in the car radios. Chief Maniago said that reliability is as important to officer safety as coverage is.

Mr. Mazerolle added that Torrington's terrain is very rough for a radio signal. Thomaston, by comparison, had to install four sites to give them the radio signal they are looking for, he said.

#### **EXECUTIVE SESSION**

On a motion by Commissioner Potter, seconded by Commissioner Benedetto, the Board voted unanimously to enter Executive Session under Fire Chief Personnel, at 6:46 p.m., inviting Mr. Gritt.

#### **OPEN SESSION**

On a motion by Commissioner Benedetto, seconded by Commissioner LaMonica, the Board voted unanimously to enter Open Session at 8:01p.m.

#### **ADJOURNMENT**

On a motion by Commissioner Zaharek, seconded by Commissioner Potter, the Board voted unanimously to adjourn at 8:01 p.m.

ATTEST: JOSEPH L. QUARTIERO, CMC

CITY CLERK

Respectfully Submitted,

Carol L. Anderson, CCTC

Assistant City Clerk