

AUXCOMM 2016

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This audience consists of a individuals representing a varied mix of disciplines. We have some emergency managers, some non-government organization folks, and, hams of all stripes, new/old, veterans and newbies to emergency communications. With that in mind, I tried to put together a presentation for you today that covers all the bases from the 30,000' level. We have an hour and 15 minutes together, and I promise that I do not intend to talk that long. I will devote the last 30 minutes to a question/answer forum, or, an open discussion.

This session was intended to attract not just amateur radio operators involved in emergency communications, the 'church choir,' if you will, but, also to introduce some members of Illinois' emergency management community to what they have in their own jurisdictions, right now, today, which can, for a small investment, when compared to the cost of LMR and statewide networking costs, provide them with self-healing, reliable, effective emergency communications and a cadre of capable, highly motivated volunteers.

So, let me begin by explaining this breakout session's titles... Both of them!

SHHTF? There's a tag to some of the popular TV shows you may recall where, while one of the production company logos is displayed, a young boy says, 'What's that mean?'

You, of course, are free to define the term as you see fit... My definition is 'Stuff Has Hit The Fan.' After the SHHTF' was written as what, when I was in broadcasting, called a 'teaser,' something to make the readers think a bit, to be curious about what the term meant, and, to encourage them to read the second line – the part about '*. . .low cost options for resilient emergency communications in an era of shrinking budgets*' and, of course, to be motivated to show up here this afternoon.

Shrinking budgets? In Illinois? Surely, NOT! Well, levity aside, in many states, emergency management budgets across the nation have been shrinking as the horror and shock of 9/11 and Katrina have become distant memories. Those two events were pivotal in pointing out our failures, as planners, to fully understand how vital communications is to disaster and emergency response. Firemen couldn't talk to policemen who couldn't talk to the ambulance crews who couldn't talk to the heavy equipment teams who couldn't talk to the rescue crews who couldn't talk to the national guard . . . As AAR's were written by committees and agencies, the point that communications between agencies, between responders, regardless of their sponsoring agency, gov't or otherwise, was mandatory. We had to make pathways

for agencies and groups to share communications resources and not just communicate with each other. The popular buzzword for lack of interoperability, these days, is that we're all working in 'silos.' And, the Federal grant funds began to pour forth. The battle call was to develop, at all levels, communications 'Interoperability.' Almost a trillion dollars has been spent by our federal government since 9/11 on 'homeland security.'

I do not have figures to be able to tell you how much – or, little – is being shelled out today by FEMA to state governments for emergency management. I can tell you that, for the past 7 years, I have been told each year by the Chairman of the Illinois Terrorism Task Force that “. . . grant funds are declining.”

In any event, I would like to suggest to you that where we, collectively, in Illinois, find ourselves with regard to resilient emergency communications systems and networks is the result of a perfect storm. Let me explain...

Illinois chose to spend a lot of those Federal grant funds on the StarCom21 system, a Motorola system that consists of a network of wired or wirelessly linked 'cell sites' – repeaters, actually – located around Illinois which allow users, equipped with suitable, Motorola digital radios, to communicate with each other. The network is set up such that there are lots of channels available to users and the radios can be programmed to use only those channels for which they are authorized. The 'interoperability' demands were met by defining a group of channels that are programmed into all of the SC21 radios so that, let's say, the Sheriff of Pope County can dial up a common channel to communicate with a rescue team coming in from Lake County. Of course, the assumption is that both users a) have StarCom21 radios and, b) that they are subscribers to Motorola's StarCom21 service, and, most importantly, that the infrastructure that supports the StarCom21 system – towers, antennas, radios and computer networks – are all intact and operating properly AND that the StarCom21 network is not overloaded with users all battling to get on the air, or, just listen in, at the same time.

The leading edge of this 'perfect storm' is that, in the real world, those assumptions are, in many cases, false. Not every law enforcement, fire service, EMS, or rescue group in Illinois chose to be included in the StarCom21 system. That's especially true of rural and lightly populated counties. These local governments saw that, at some point, the grant funds that were, initially, paying for the subscription fees and maintenance of the 'free' radios, would run dry. Their budgets did not then, and, do not, certainly, now, include the funds necessary to maintain the subscription or the radios.

Now, to be fair to IEMA and ITTF, additional funds were spent on a variety of programs, one of which was to purchase strategic technology reserve systems – ITECS units, which are equipped with portable caches of various types of radios, repeaters and programming gear that can be deployed to a disaster site, and UCP's, which are mobile command posts, also equipped with communication suites.

Then, the second part of this 'perfect storm' hit. That was the FCC's decision to outlaw the use of the venerable Land Mobile Radio systems that had served agencies around the US for half a century. The FCC wanted to make more channels available to users, so, it mandated that only 'narrowband' FM transmitters would be allowed on the air on LMR channels beginning Jan 1, 2013. In short, every agency, everywhere, that did not have modern radios capable of being reprogrammed to these new

standards, had to purchase entirely new radio systems. Did they buy as many radios as they retired? Not in most cases. In most cases, the agencies bought the minimum amount of radios necessary to do the job.

The third, and final part of this 'perfect storm' was the marriage of cellular telephones and the internet which led to the development of the SMART phones we all take for granted. Yes, they are a modern marvel, and, in many cases, the LMR circuits that went away on Jan 1, 2013, were replaced with cell phones, tablets, and, the like.

The problem with all of this 'post 9/11-Katrina' technology is that it's all wholly reliant upon fragile infrastructure. By that, I mean that everything I've talked about for the past few minutes – StarCom21, Land Mobile Radio, cell phones and the Internet, all rely entirely on wires, towers, cables, and electrical energy from the power grid.

I won't go into the whys and hows of the various threats to our infrastructure, but, I would like to say that, at any given point in time, we are 8 minutes away from losing the power grid from a solar storm CME. Hackers have learned how to disable substation and power generating facility IoT controls to damage or destroy the equipment. The North Koreans are now launching missiles from submarines. A couple of nukes, detonated at 150 miles altitude would render all technology in the US that isn't hardened or EMP shielded useless.

And, then, there's Mother Nature. Has anyone else noticed that there seems to have been a distinct uptick in the number of earthquakes occurring around the globe this year? Oklahoma just had a series of temblors this weekend, the strongest of which was M5.6. Ice storms, anyone? 2009 saw the Commonwealth of Kentucky completely paralyzed by a massive ice storm. All but 2 counties were affected. In the western part of the state, every elevated wire, tower, or antenna, was destroyed. The majority of Kentucky's population were without electricity or communications for days, in the dead winter – late January and early February. Derechos, floods . . . the hits just keep on coming!

How do we, as emergency managers and communicators prepare for something of this magnitude, because, if we are prepared for the worst case, smaller incidents will be handled in stride.

Let's get started with the basic premise of emergencies, a truism that was presented in your ICS100 class, towit: All emergencies are local. While your town or county may not be the only one experiencing the stressor (flood, fire, earthquake, tornado), your attention is going to be devoted to what's going on in YOUR jurisdiction. To you, it's a local event. In order to be able to manage your department's, and we're talking about emergency management, here, assets, you need situational awareness. You need to know how fast the water is rising, or, what roads have been closed, or where the next storm is, or, where the fire department is and how long it will be before help arrives from outside your jurisdiction.

How are you going to communicate with all of those agencies, departments, and, individuals? Assuming that all the infrastructure is in place and everything is working, it's business as usual. But, what if? What if the great, 'Oh, my God!' has just happened in your town, your county? Is your communications plan up to that challenge?

It is if you're including amateur radio in that plan. Now, amateur radio doesn't mean that we're 'amateurs' at what we do in the sense that we're not as professional as those who get paid for their time. It means that we do what we do because we LOVE it. We just don't get paid for our expertise or our time. Having said that, amateur radio emergency communications groups come in a variety of flavors. There are RACES, ARES, MARS, CAP, CERT, REACT, SATERN, HWN, MMSN, and countless other groups that all exist to, in one manner or another, train and organize their members to provide resilient emergency communications.

Why do I use the term 'resilient?' Because, as the Adjutant General of the Kentucky National Guard said, after their 2009 ice storm, ". . . amateur radio is the only self-healing radio service. If these guy's antennas fall down because of ice, they go outside and put up another one." He's right. We do. We have that knowledge passed along from our fathers and grandfathers before us. If the power goes off, you would probably be surprised to know that, in a recent survey of Illinois' ARES and RACES members, I learned that 86% of the respondents to the survey question have gasoline, diesel, propane or natural gas-fired generators or alternators. Even if those weren't available, a whopping 89% of the respondents indicated that they have enough battery backup capabilities in their home stations to operate at least for 12 hours, continuously, without recharging. 97% of the respondents have mobile VHF or UHF stations available to them. 46% of the respondents have mobile HF radio installations.

In short, we are not in short supply of emergency communications-capable amateur radio operators in Illinois. How many, you ask? Well, the FCC says Illinois has 20,278 licensed amateur radio operators. There are licensed amateur radio operators in **EVERY ILLINOIS COUNTY**. Some counties have more than others, but everybody has hams, somewhere, in their county.

So, the follow up question is, what is ARES? What is RACES? And, what in the dickens is AUXCOMM?

ARES stands for Amateur Radio Emergency Service and that's a program of the American Radio Relay League, amateur radio's national organization. ARES sponsors county or municipality-based ARES groups. Hams who are interested in providing emergency communications are invited to join the local ARES groups who are led by an appointed 'Emergency Coordinator.' ARES groups do not exist as legal entities – they can't incorporate, charge dues, own or sell property, for instance, and, they cannot accept any monetary reward for their services. That's true of every amateur radio operator. We cannot accept payment by communicating over amateur radio for a third party. Period. ARES groups are loosely controlled – there is no training mandate, and little accountability beyond what's performed in the local group. We encourage ARES groups to establish working relationships with local government and non-governmental agencies, like EMA's and American Red Cross, to help them during times of need.

RACES stands for the Radio Amateur Civil Emergency Service and is a relic of the first Cold War, back in President Eisenhower's term in office. RACES officers are duly licensed amateur radio operators appointed by emergency management officials in local, county or state jurisdictions. These officers **MUST** be members of the EMA that appoints them. The RO's, then, are able to recruit RACES members who also must be sworn members of that same EMA. The difference between ARES and RACES is that ARES members are purely volunteer, and while they may be verbally committed to a local ARES group,

they are not bound by any other special rules or regulations on how, when or where they may communicate.

RACES units are obliged to follow FEMA and FCC regulations about how many hours per week/month they may exercise, to whom they can communicate if an emergency is declared, and with whom and on what frequencies they may communicate should the President of the US declare a national communications emergency. The upside to the RACES program is that it gives emergency managers a sense of control over their amateur radio volunteers, something that is not the case when affiliating with or establishing a relationship with an ARES group. The emergency manager can mandate, for instance, that it's RACES folks have to complete ICS 100, 200, 300, and 400 classes. Or, take CPR classes. In short, RACES volunteers are a part of that emergency management agency.

AUXCOMM is a term coined by John Peterson. John is an employee of DHS's Office of Emergency Communications. AUXCOMM is, essentially, a course that is taught by DHS OEC contractors, to amateur radio emergency communicators. The course teaches hams how they are to interact with and what's expected of them when they do interact with emergency managers in an ICS environment. The first principle of the AUXCOMM paradigm is that all badges come off at the door of the EOC. It doesn't matter if you are a MARS, ARES or RACES volunteer outside the EOC. Once you come through the EOC door, you are a part of THAT EMA and you need to follow their instructions, guidelines, and directives. There are AUXCOMM classes taught in every state at least once per year. Some states have more classes than others – it's a matter of funding, of course. We've had 4 classes in Illinois, and, as of today, there are 112 AUXCOMM-trained amateur radio operators in Illinois. That's a number I hope to see grow markedly over the course of the next few years. We'll talk about that later this afternoon.

Now, to bring all of these loose threads – RACES, ARES, and AUXCOMM into a single, strong rope... Back in 2009, IEMA finally allowed amateur radio to enter through their doors. This ended a 17 year hiatus that saw no volunteer emergency communications in the Agency. IEMA, given the choice of available options I presented to them, chose to use the RACES model. That's the first choice of most government agencies when they wish to deal with amateur radio volunteers, since RACES members are absorbed into the parent EMA. AUXCOMM came along a few years later and, while we – IEMA – still have a very viable and legal RACES program, for the most part, we operate under the AUXCOMM banner.

In point of fact, a lot of states now embrace AUXCOMM as the program which best meets their needs for viable, resilient, emergency communications. Remember, AUXCOMM doesn't leave anybody out. It's inclusive, as long as the AUXCOMM volunteers undergo the necessary training, minimally, ICS 100, 200, 700 and 800 courses, and are able to work in an ICS environment. Completion of the actual AUXCOMM course is a great plus, but, as I mentioned earlier, if your state only offers one, 30 student, class per year, it's going to take a very long time to train a few thousand volunteers.

Everything I've said up to this point has been preface for this: How can you, as an emergency manager, best use your amateur radio resources to improve the resilience of your emergency communications programs and plans? Glad you asked!

At the risk of being redundant, we have 20,270 licensed amateur radio operators and over 22,000 amateur radio stations located within our borders. The disparity in the numbers is accounted for by club stations, emergency groups with separate call signs, adding to the number of stations, but, not licensees. Of the total number of licensees, about 15,000 live north of an E/W line drawn thru Peoria. Roughly 13,000 of those people are stuffed into the northeast corner of the state. The remainder are scattered about Illinois more or less in direct proportion to the general populations of those counties.

I have been licensed since 1963, and, one thing I know about hams: We, typically, like to do two things: Build stuff – radios, antennas, accessories - and, talk on the radio. One of the projects that most ham clubs take on is to build a club ‘repeater’ and put it on the air from a high point in their area. A repeater, in case you don’t know about those, is a dedicated transmitter and receiver with an antenna system located as high as can be achieved. That system can be on VHF or UHF frequencies – or, both. It’s purpose is to extend the range of users’ (club members’) mobile, base and handheld VHF or UHF radios so that these users can talk further than they could by just communicating from ham-to-ham (peer-to-peer, in network jargon). Amateur radio repeaters can be found on top of high buildings, corn and coal silos, tall towers, the hills in southern Illinois that pass for our state’s only ‘mountains,’ and myriad other locations. Repeaters are so popular that there are now 502 active repeater systems in Illinois! You would be very hard pressed to find a single acre of ground in our state that isn’t within radio communicating distance of an amateur radio repeater. Whether you’re in the hills of the Shawnee National Forest in Gallatin, Johnson or Pope Counties, on the Rock River at Dixon, or on the Magnificent Mile in downtown Chicago, there are ham repeaters available on one or more frequencies. And, they are available to users at no charge. Free. Some repeater system owners and operators collaborate and electronically ‘link’ their repeaters together so that the area of coverage is exponentially expanded. One such linked system provides users with the capability to connect to both the Lincoln and St. Louis National Weather Service offices, both of which have ham radio stations, incidentally, and to communicate from Peoria, in the north, to Mt. Vernon, in the south; Champaign on the eastern side of our state to St. Louis on our western border. Let me say this again: This is available at no charge to the users. There is no subscription fee. Are you hearing this, Motorola?

Think about this for a moment: 22,270 radio stations, each of which has one or more experienced operators, with one, and, likely, many more than one, radio system. Many of them also have mobile and portable radios. Many of them are equipped for operations when the power grid is unavailable. Some have antenna installations that approach the complexity and performance of military communications installations. Some have satellite capabilities. They are equipped to communicate using LEO satellites – also built by amateurs – or they use communicate via the orbiting ISS, which also has ham gear on board, to communicate with other amateurs.

We are the solution for last-mile, resilient emergency communications. We are also the solution to your need for enhanced situational awareness. If you need to know what’s going on in another part of your jurisdiction, odds are that a ham either lives nearby or can grab up his handheld radio or jump in his radio-equipped car and go find out and report back to you. Want to know how high the water is along the levees protecting your town from the nearby river? Cadres of radio-equipped hams can – and will – do that for you. All you have to do is establish a working relationship with them.

I said low cost in the sub-title of this session, and, I'd like to talk about that issue for a moment or two. I meant what I said. Amateur radio communications is extremely inexpensive compared to the cost of LMR or StarCom21 (or, other DMR/P25 communications gear). Let's talk about P25 and StarCom21 radios for a moment. It's a running joke that the model number of a Motorola radio pretty well reflects unit's price. So, the typical StarCom21 mobile radio, an Astro XTL5000 costs about \$5,000. And XTL7000 radio – a handheld unit – costs about...\$7,000. Those prices just buy the radios. Those figures don't cover the user fees for your agency to use StarCom21, should you choose to do so. Yes, using grant funds for their purchase, ITTF did hand out SC21 radios to local agencies for several years. Now, however, when grant funds are no longer available to pay the monthly subscription fees for their use, local agencies are dumping the radios – not literally, they are being returned to the state through a fiduciary organization.

So, let's take the cost of one StarCom21 radio – that mobile radio, for example, at \$5,000 and compare that to the cost of a fully furnished AUXCOMM station in a typical local EOC. A typical emergency communications installation would consist of a VHF/UHF transceiver. This can be separate units, one for each band, or it can be one radio with dual band capability. Cost? About \$350. One power supply is necessary, which would add another \$85 to the total. Let's assume that the EOC already has a radio antenna mast or tower, so, we're going to buy an antenna (\$90) and some feedline (\$75). That is the basic EMCOMM setup for many EOC's. If you bought it all new, the cost is about \$500. That's 10% of the cost of ONE StarCom21 mobile radio. And, there are no subscription fees for the amateur gear. Incidentally, a heads-up ham may be able to locate or build you an antenna for nothing or nearly so and he may be able to find a used radio you could purchase, or, in some cases, find one that can be donated to your EOC. This simple installation can open a new world of situational awareness to your agency and give you communications within the borders of your jurisdiction that no other communications service can provide at any cost. If your county or municipality has, for instance, 250 hams, I'd be willing to bet that 230 of them have 2 meter (144 MHz) FM amateur radio gear. They have it in their home stations, in their vehicles, and, they have at least one, and, maybe more, handheld radios. That's 230 sets of eyes and ears scattered throughout your county or municipality that you previously didn't have access to.

One of the projects we, i.e., the State RACES/AUXCOMM Team, have been working on is the Illinois Digital Emergency Network (IDEN). This network is designed to provide statewide email-over-radio service on amateur radio frequencies using repurposed LMR equipment. I mentioned that 2013 FCC mandate for narrowband equipment. The old radios were, for the most part, sent to the recyclers. We, however, managed to obtain the retired Illinois State Police Motorola radios. We were given these old radios with the understanding that we wouldn't sell them. We are, instead, repurposing them by converting them to operate on a single, VHF channel in the 2 meter amateur radio band. These radios are paired with packet radio modems (called Terminal Node Controllers) so that they can operate as part of a statewide, distributed network of similarly equipped stations. The software is free. The radios are being donated to local agencies by my group. The agencies only need to provide the modem, a power supply, an antenna system, and a PC to connect to the modem. This system allows users to send and receive messages whether the Internet is available or not. In other words, it's an infrastructure

independent ad-hoc network. If the Internet is available, and, if a Gateway station is within range of your installation, you can send and receive email messages to/from any valid email address anywhere in the world using your donated radio and inexpensive TNC. If the Internet is not available, you can send messages to other recipients within the IDEN network – which includes IEMA. The total cost to an agency for a modem, antenna, and power supply should be less than \$300. When we can find good, used modems, we donate those to local agencies, as well, and used power supplies are available from eBay vendors for as little as \$15.

Equipment for portable operations which an EMA might choose to buy for its AUXCOMM volunteers can cost as little as \$40 per handheld radio. Yes, I said \$40 and that's for a dual-band, V/UHF 5 watt transceiver. You can buy a case of those for under \$500. If one gets lost or falls into floodwaters, it hurts a lot less than when one of those \$7,000 Motorola radios goes missing!

By the way, volunteer communicators can help in your EOC's by operating other radios and communications systems, should you choose to train them. Likewise, they can be of value in the field, as part of damage assessment teams, rescue teams, shadowing onsite incident commanders, or manning shelter communications installations. Many of our volunteer AUXCOMM personnel are SME's with skills your agency might find to be useful. We have personnel with advanced skills in IT networking, telephone interconnections, data management, electricians, electronic technicians, physicians, nurses, paramedics, accountants, law enforcement officers (retired and active), firefighters, teachers, mechanics, and lawyers.

That's the 20,000' view of Illinois AUXCOMM. We're here to help, but, we're not going to break your doors down trying to get into your agency or organization. You have to invite us in and, then, tell us what you need us to do for you.

For those of you who are hams and are already involved in EMCOMM, thanks for your patience. I do have a few things to discuss with you – and, you other folks might want to sit in on this, too. Everything said here today is about preparing to provide better and more robust, resilient emergency communications to our Illinois neighbors and communities.

First, thanks to all of you who made the trip here for this session. To my knowledge, this is the first, ever, amateur radio breakout session to be held during one of IEMA's annual conferences. By being here today, you have become part of history! Please sign the roster before you leave so we get an idea of who was here!

AUXCOMM – you've heard me describe it in general terms during the first half of the presentation. AUXCOMM classes are now, in Illinois, being taught by Illinois instructors. Our first three classes were taught by DHS OEC contractors. That arrangement, however, did cost the state some of its grant funds to pay for the transportation and lodging of both students and instructors. Instead, ITTF decided to spend its money elsewhere. Three individuals have been accredited to teach the class in Illinois and we

have one more 'on the burner,' awaiting his opportunity to 'student-teach' before he, too, becomes accredited.

The last couple of AUXCOMM classes have not been as well attended as were the first couple of them. I think that's because there wasn't enough notice made to the amateur radio community of the scheduling of the classes. I've been assured that won't happen again and that I will get enough advance notice of upcoming AUXCOMM classes to be able to get the word out to all concerned.

A couple of months ago, I 'pulled the pin' on an idea I'd had about AUXCOMM in Illinois. I, along with Dr. Terry Donat, W9EYZ, and Jim Pitchford, N9LQF, filed paperwork with the Illinois Secretary of State to incorporate a not-for-profit, charitable, Illinois corporation. I called this new corporation 'Illinois AUXCOMM, Inc.' and we have received our paperwork back from the SoS. Now, I am awaiting word from the Illinois Atty General's office that we are properly registered as a charitable organization. Once I have that in hand, bylaws and a constitution for the organization will be drawn up. Those documents will be needed for me to file with the IRS for 501-c-3 tax exempt/charitable status. We should have no problems in navigating all these hurdles. It all just takes time.

Illinois AUXCOMM, Inc., was created to help support the efforts of our amateur radio volunteers in Illinois. ARES groups cannot accept a donation. RACES groups can't, either, as they are part of government agencies. So, unless amateur radio clubs sponsor ARES groups and are legally entitled to conduct business (have a bank account, pay taxes, etc.), their efforts cannot be supported in any way other than the members fishing dollars out of their own pockets.

Illinois AUXCOMM, Inc., as a charitable corporation can seek grants and donations, accept gifts from businesses and individuals, own and sell property, just as can any other corporation. The difference is that no Director of the corporation can profit from his or her position on the board. We can donate funds, property or equipment, build repeaters, Winlink stations, or whatever we choose to do in support of AUXCOMM efforts. We can hold training sessions, statewide conferences, drills, exercises – really, the sky is the limit for this new corporation, and, I'm not afraid to tell you that I'm excited about the possibilities.

Another of the projects that I intend to pursue through ILAUXCOMM is to create a type of credentialing system that, with IEMA's input, will, hopefully meet the standards necessary to be recognized by state and local authorities. I envision this as being a multi-tiered approach to credentialing, where members and their training/certifications/qualifications determine what level of credential they are provided. Whether or not we are able – financially – to get to FIPS compliance (Federal Identification Process Standard – Personal Identity Verification) remains to be seen.

Another vision I have involves an annual AUXCOMM training summit, similar to the one we're attending here, today. For many years, there were two emergency communications conferences held in the US – EMCOMM East and EMCOMM West. One was held in New York, the other in Seattle. At these conferences, training sessions were held, subject matter experts gave talks and demonstrations to attendees, and, the venues provided the opportunity for like-minded hams to mingle and network with his or her peers. I tried for the first few years of my tenure as Illinois ARES SEC to get an 'EMCOMM

Central' event put together but failed in every attempt as I could never find an incorporated, not-for-profit ham club that would agree to act as our 'banker.' Remember... ARES groups, even at the Section level can't write or cash checks!

Illinois AUXCOMM, Inc., will provide a statewide database for AUXCOMM volunteers in which members can enter their names, addresses, class of amateur license held, training, and experience, along with an indication of their willingness to be deployed as emergency communicators, should the need arise. The database will also have fields where the registrant can indicate how far he or she is willing to travel and how long they are willing to be gone from home in the event of a deployment. Finally, the database will provide a portal where the registrant will be required to upload digital copies – scans – of the certificates of training the entrant has claimed in the data fields. These digital images of certificates will be 'attached' to the registrant's database entry such that a COML or AUXCOMM Leader looking to put together a response team for a given incident can view the certificates, if necessary, to ensure that the registrant has, in fact, accomplished the training he or she has claimed. As I currently envision this database, read access will be granted to the database administrators, Illinois AUXCOMM Leaders, the SWIC, IEMA, and Illinois' COML's. We're not inventing the wheel, here. North and South Carolina and the State of Colorado already are using this database system and it's use has been offered to Illinois AUXCOMM, Inc., free of charge.

Strategic Technical Reserve - The STR consists of UCP's and ITECS units scattered around Illinois. Some, perhaps most, of the ITECS units have at least one ham as part of the team that operates them. Not so much, however, with the UCP's. I am unaware, in fact, of any ham that's involved in a UCP team. Some of that may change. There is a proposal being kicked around Illinois right now suggesting that Region RACES Officers be automatically named as part of each ITECS team. I think that's a stellar idea. Our RO's could provide the missing link between ITECS and amateur radio/AUXCOMM, while, simultaneously meeting our RACES mission goal of supporting IEMA's Region Coordinators. There won't be many (if any) disasters that require an RO's support of an RC that doesn't involve the deployment of an ITECS. Stay tuned for more info on this. As I said, right now, it's a concept.

Technical Support Teams – TST's are another new idea being kicked around. A TST would consist of a small group of SME's – Subject Matter Experts – who would provide technical support to ITECS and UCP units. TST's might, for instance, include someone who is skilled in wiring telephone interconnects, Motorola RSS (radio programming), data management, RF technician, and an AUXCOMM representative. That last part is the most interesting to me, as our AUXCOMM rep can open a lot of doors for as a TST member. Will COMT qualification be required? Maybe... but, the COMT curriculum is LMR-specific. Stay tuned for more on this, too.

For the first time in many years, IEMA has agreed to embrace it's RACES department and I believe that we are on the right road, finally. Being on that road means that, likely, more will be expected of us than has been in the past. For instance, it would not be unreasonable to expect to see RACES Officers (RO's or Deputy RO's) establish a regular schedule with their respective IEMA Region Coordinators to do quarterly testing of the IEMA HF radios that the RC's (are supposed to) have. If the RC's don't have the radios and/or are not aware of them, then, we have some educating to do, after a 'push' comes down

through IEMA's chain of command to make sure we are properly introduced to the RC's and their staff members.

I think that we will be more involved in IEMA exercises than has been the case in the past. Without dragging any skeletons out of the closet, let me just say that all parties involved in Illinois emergency management and emergency communications, and, our folks – ARES/RACES/MARS/AUXCOMM – need to learn how to work together; what each agency or group brings to the table; and, how to best utilize the resources that we collectively have available to us for the benefit of all Illinois citizens.

AUXCOMM –

Definition

DHS OEC course offered thru the ICTAP catalog

Trains volunteer, i.e., amateur radio, communicators to perform in an ICS environment

Embraces all aspects of amateur radio EMCOMM – RACES, ARES, MARS, REACT, CERT

Training offered by DHS and by State of Illinois

Training thru ITTF/ILEAS

One class per year, maximum of 30 students

Currently have 100 trained AUXCOMM volunteers in Illinois