

4th Quarter 2014



# Nassau County ARES

www.NassauCountyARES.org

# Amateur Radio in 2035

~ Dave Akins, AK<sub>1</sub>NS

## **ARES Web Site**

### **Highlights**

- Educational Resources
- Skywarn & Storm pages
- NBEMS Resources
- Technical Videos
- ARES Literature
- Links
- News
- Current Events Page
- 2015 ARES Schedule
- Member Resources
- And More

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I heard this said recently:

Looking at the past is a good way to predict the future.

Looking at the past is a good way to be wrong about the future.

Both statements are correct, especially when it comes to Amateur Radio (AR) and the technology driving it forward.

Less than 30 years ago, PC's were just coming into more wide spread use. Tube radios were prevalent. Today, most hams can't even fully program or tap their rig's capabilities without computers, much less operate digital modes.

30 years ago, the internet was a collection of university computers and the internet that the public heard about was a nebulous concept. The Web was still years away. You really had to *know* your way around DOS and use special commands to communicate through it.

Of course today, hams communicate far more by internet than by radio and for several years many thousands have been using online AR emulation services that allow worldwide SW listening, CW, nets, rag chewing, digital modes, contesting, logging, awards and integration to Echo Link without a radio or an antenna.

That's exactly how I found *real* ham radio in 2011. But you really don't need a rig to use the ham "Hinternet". You just need to be in the matrix.



In only 20 years, it's said there will be 1.7 million licensed hams in the U.S. AR will certainly have a place, a new face, and a new mix of technical, EMCOMM and social hams in it.

And they will all be on SDR steroids.

Ham radio will be fully integrated with the new generation of the internet; one using artificial intelligence and even human mind interfacing. Cisco already says we will pass the zetabyte threshold by the end of 2015. Zeta comes after Exabyte and Petabyte in case you're still using one of those old terabyte hard drives.

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#### **Nassau County ARES**

Thanksgiving is upon us and we have a great deal for which to be thankful in each of our own lives, and within our Nassau County ARES team as well.

During this year, we have continued our positive forward momentum that started in 2013. Joe Gomez, W2BMP, has piloted a new series of online courses to acquire or upgrade an amateur radio license; these courses enjoy a 100% success rate to date.

Our training meetings have been overhauled to bring you more "hands-on" demonstrations. We have made forward strides in NBEMS and MESH Networking, and a new packet node has been installed in Nassau County.

## The DEC Corner by Tim Cregan, N2RDB

There was, of course, the ACS Walk in October, which has been our largest undertaking ever, and has shown us that we can work seamlessly with other ARES groups (NYC, Babylon, Islip), as well as our partner agencies such as CERT/RACES, CAP, LIMARC, ARC-ECS and SHTFLI.

While this is by no means a complete list, the point has been made. What we need to do as a team is to continue in that positive forward momentum in 2015. To help us in this, we are launching an all new ARES RESERVE Training Program. This will commence after HRU, and will utilize the same WebEx format as our licensing courses.

Great job, folks! Enjoy your holidays, but don't enjoy them too much -- we still have much to do in 2015!

## A DAY IN THE LIFE OF AN ARES MEMBER

by Ceil Gomez W2CTG

It was a cold and windy night in the early Spring of 2014....

I was innocently sitting at a LIMARC meeting when Dave AK1NS asked if he could discuss something with me in the lobby of Levittown Hall.

What could Dave, one of the leaders of Nassau County ARES, possibly want to talk to me about? "Step into my office" he said, as we entered the lobby.

I was a ham for less than 2 years. I was still learning everything as far as radio operation went and afraid to talk on the radio at all because I might make a mistake. I was attending meetings and listening and trying to absorb as much information as I could.

Curious but nervous, I went into the lobby and Dave explained that ARES was looking to take an active role in a large American Cancer Walk that would take place at Jones Beach in the fall, and wanted to know if I would take the initiative and make first contact with the Cancer Society. Nassau County had not asked ARES for assistance with the Long Island Marathon, due to the attack at the Boston Marathon, and both Tim Cregan (DEC) and Dave felt that this would be a good opportunity to put ARES out in front of the public eye at a major event.

I responded to Dave, "Great idea. But why stop there? Why not try for the Oyster Bay Festival and the Blue Angels Air Show?" Dave lit up, "Now we're talking!" Thousands of more



people would be able to see how important ARES is in helping provide a safe environment for our family and friends living on Long Island.

I started making phone calls. I was a supervisor for the phone company for over 20 years, so you learn a thing or two about getting contact information. When you hit a brick wall of resistance, use all the experience you have and climb that wall. After numerous tries, I got in touch with the right person at the ACS in Suffolk County.

As I explained the service ARES could provide at the walk, the folks who were responsible for the events at locations throughout New York State, became more enthusiastic about continuing the discussion in person. Our conversation concluded with me telling her that Dave would be calling to further explain all that ARES could do to help make the walkathon a safe and secure event for all attending.

Within weeks, Dave, Richie K2KNB and I had our first meeting with the American Cancer Society and the rest is now history!

All it took was a few calls, some time and some ingenuity to arrange for this meeting to take place.

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The ARES reserve program, along with a basic Red Cross background check and a short Shelter Ops course, will credential hams to be assigned to a shelter as needed. ARES Reserves will be fully trained and vetted to handle their role in communications at a shelter.

The second important feature is that during any emergency, hams would become familiar with procedures and activities that would be invaluable in providing communications support to our communities. Hams might be called on to assist local government in providing back-up or primary communications. Credentials and training will allow ARES Reserves to easily assume this role as well.

In addition, there are many public events in which ARES participates, and depending upon the size of the event, a well trained Reserve allows ARES to ask for additional help knowing that the Reserve is trained, ready, and willing to assist wherever possible.

The first ARES Reserves course will be taught online this January by Joe Gomez W2BMP and written by Dave Akins, AK1NS, both of whom are ARRL certified licensing instructors.

# The ARES Reserves Program

After Sandy swept Long Island, Richie Cetron, K2KNB, our ARES PIO, spoke about his observations on radio nets both on and outside of ARES. He then presented a concept to bring more <u>trained</u> radio operators into use during future communications emergencies. His vision has now become a reality: **The ARES Reserves.** 

During any emergency, the vast majority of amateur radio operators understand the role that they can play in providing a communications network. Now, the ARES Reserve program, as organized and administered by Nassau County ARES, is offering basic training which will also provide two important additional features for hams interested in furthering their capabilities in the program.

In this changing world, it is necessary to be background checked *before* being able to participate in certain activities. This has become essential for ARES members providing communications support at Red Cross Shelters.

## 7 Goals of Nassau County ARES

- 1. To establish close cooperative relationships with relevant communications organizations and our partner agencies in Nassau and adjourning counties.
- 2. To be recognized as the primary coordinating agency for amateur radio operators in Nassau County in the event of a communications emergency.
- 3. To provide competent radio communications support for the American Red Cross and County EOC's during activations.
- 4. To be recognized by emergency services agencies and the community as a model of competence and professionalism in network operations.
- 5. To foster training and the development of skills and capabilities that will keep ARES members abreast of new technologies to help support the communication needs of our partner agencies.
- 6. To use the resources of ARES to foster awareness of the need for preparedness in the community at large.
- 7. To be the recognized "go-to" agency for community organizations needing communications support for events and activities of general benefit to the community.

# **Nassau County ARES Members in the Spot Light**

A DAY IN THE LIFE OF AN ARES MEMBER by Ceil Gomez W2CTG ...continued

The preparation of the event itself involved a lot of man power and many hours of coordination, but it was so worth it. In the end, ARES was able to demonstrate what a professional team of people can do when a common goal is the objective. Working the subsequent meetings with Dave and Rich Cetron at the Cancer Society Headquarters, was a rewarding experience in and of itself. When two professionals are talking about a subject they know inside and out, it is great to just sit back, take notes and learn.

I was proud of what I had accomplished for ARES by setting up the initial meeting and accomplishing the task Dave had given me. I got the pleasure of meeting some incredibly wonderful people at the ACS, along with many ARES members with whom I had not previously been acquainted.

After the event, I realized that I was now part of a group of individuals who could take on a challenge and at the end, own it. That made me even prouder.

Although I have much more to accomplish as I continue in my journey as an ARES member, I have learned that with persistence, anything is possible.

Before us lies the challenge of the Jones Beach Air Show and Oyster Bay Festival, both, requiring a myriad of "impossible" hoops to jump through. I can hardly wait to start the process!





Although I have much more to accomplish as I continue in my journey as an ARES member, I have learned that with persistence, anything is possible.

Who knows? Maybe next year the 65,000 people from the Taking Strides for Cancer Walk will attend the Air Show and be among the 2,000,000+ people we serve and help protect at that event!!

You never know what you can do until you try. I want to thank ARES and in particular Tim and Dave for taking a chance on a new "ham" and making me want to try and do more in 2015!!!!

Thank You Ceil for All that <u>You</u> do!

Congratulations to John Wilson, KD2AKX, for his Cover Photo on the 2015 CQ Magazine calendar! John's awesome shack not only *looks* great, it all *works* perfectly because he painstakingly restores Heath Kit equipment to perfect operating condition.

Having also developed a solid understanding of mesh video and full duplex telephone for ARES, John is also our MESH MAN, and will be providing training on this important mode to us all in 2015.

John is one of our most dedicated ARES members, our ADEC for the Town of Oyster Bay, and a very active LIMARC Board Member.

# **ARES 2014** A Year in Pictures



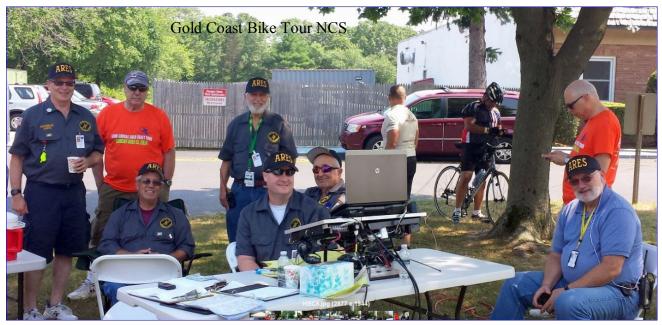






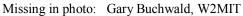


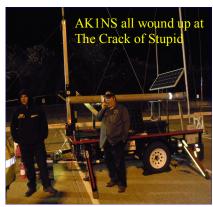












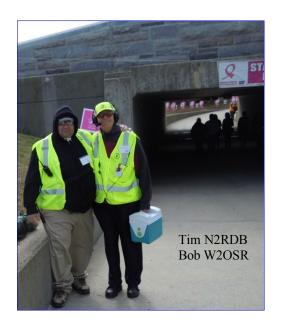


# **ARES 2014 A Year in Pictures**

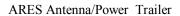
















# SUCCESS

## LIMARC-ARES Online Training Score Card for 2014 for Joe Gomez

Here is the final count for all classes given in 2014.

Technician Class = 385 students General class = 38 students Extra Class = 29 students

Total = 431 students completed courses

Of those taking at least one exam for classes given, the Pass Rate remains at 100%.

And <u>THIS</u> is who will teach the ARES Reserves course! Congratulations Joe W2BMP!!



#### Amateur Radio in 2035 - AKINS

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The Future-Net will be cloud based. It will be wire-less and every human and every thing will be dongled to it, including your toaster and your tire pressure. That means the radio spectrum allocation as we know it will be re-configured. Hams will possibly use some form of dynamic spectrum switching with extreme speed to communicate, and you may not even realize what "band" you are on at any given moment while transmitting.

## May 2035 QST Advertisement?



The new N-com Wrist-Rig SUIT (Symbiotic User Interface Technology) features augmented reality, 3D holograms and wearable technologies to integrate the user and transceiver via a Spinal Lock Antenna System. SWR is corrected by simply adjusting your posture. The optional Mind Lens displays graphic contact details to the ham brain, while stimulating nerves to intensify the rag chewing experience.

Logging new DX contacts will be done without searching the bands or calling CQ. That will be done by appointment. DX skimmers and SDR is already supplanting that, as well as dials and knobs. Our rigs will not look at all like they do today. Our existing rigs and repeaters, currently referred to as *Legacy Analog Systems*, will go the way of incandescent light bulbs and inner tubes. No one will be permitted to tie up valued pairs frequencies for such inefficiencies.

To many in Amateur Radio, this will be an intangible loss to the hobby's charm. But nostalgic analog hams (*aka* "Tubers") will still abound and mingle to practice their dark art in basements and clandestine airwaves.

These statements about coming technology are not prophesy. They are already occurring. Ham radio *will* change, and it will still be alive in 2035 because of its strong technical component, and even stronger public service foundation. The EMCOMM and public service aspect will continue to be absolutely critical in the fight to justify and maintain spectrum use, no matter what direction technology, governments and industry want to drive it.

**Make no mistake about it,** what you are doing in ARES and RACES **now** is vital to amateur radio's continued existence, and you are defending it against scores of special interests that covet radio spectrum for other uses. Every time an ARES-RACES activation occurs *anywhere*, Amateur Radio's <u>value</u> is underscored once again, especially as fragile technology and infrastructure collapses and communications emergencies occur.

**Thank you** for participating in ARES, and for maintaining our rebounded relevance in the **Present**, where All Else does indeed Still Fail. And from the looks of things, I got a hunch they're gonna need us for a <u>long</u> time to come!

**Practice the Art of ARES** 

73, Dave A.

