



## *Presidents Message*

Let me begin by wishing everyone a very Happy New Year. 2012 was another good year for the Club and I thought I'd list some of the major accomplishments we achieved.

- the Club continued its community involvement with support of the Pitman Bike Races, MS Walks and City to Shore Bike tour, Pitman Crop Walk, support of BSA Troop 9 at both our Field Day and Hamfest, ARES/RACES disaster exercises and support of storm victims in Atlantic, Cumberland and Gloucester County.
- the Club ended the year with a balanced budget.
- we had an enjoyable and fun filled Field Day and profitable Hamfest.
- we had enjoyable and informative monthly Club programs and two fox hunts.
- the Club received donations in the way of a new old 2 meter repeater and Clubhouse.
- Increased general membership.

I'd also like to take this opportunity to thank outgoing board member, Gene, AA2YO and trustee, Mike, N2SRO for their service the past several years and to welcome the following individuals:

- Mark, W2OCY, board member for a three year term
- Jeff, KC2WCS, board member for a three year term
- Bill, N2VIL, trustee for a four year term

2013 is already starting out great in that Jim, N2GXJ has already lined up programs for the first half of the year including speakers that will be of interest to our entire membership. And I believe he's currently looking into the possibility of arranging for an early summer Club picnic which would be a great opportunity to meet each others families. By all accounts we'll also be busy the first quarter setting the new trailer in place and disposing of the old one plus conducting work on the inside.

Finally, on behalf of the officers, board members and Club trustees, I want to thank our general membership for its support during the past year and we look forward to everyone's involvement in 2013.

73, Tom, KE2ES

## Crosstalk Articles

As your newsletter editor, I would like to thank all of you who have contributed articles to Crosstalk during the past year. I hope that in the coming year more of you are moved to contribute articles and ideas for articles. This is the place to share some of your hard earned knowledge with the rest of the Club. I wish you all a very merry Christmas and a happy new year.

Your editor.

# Down Jersey DXing

By Bill Grim, W0MHK

So what was your DX year like in 2012? We're in a new DX year, but how well did you do DX-wise in 2012 compared to 2011? It is time to take out my 10 Band yearly "cheat sheet" that shows any all-time new yearly qsos or all-time new band country qsos by the month and totaled for the year. I keep track of new DXCC entities each month during the year on a separate sheet of paper. Sure, I get shut out some months, but it's fun to see during what months in the past year I have been most successful building on my DXCC totals.

In looking at my 2011 and 2012 running totals, I can see the increased success in working new ones on 12 and 10 Meters compared to the years just previous during our sunspot drought. I can't emphasize enough how these two bands using basic transceiver power and a modest antenna (if it's only a dipole, wire, or vertical antenna, up as high as possible, please!) can really add many new DXCC locales. As an example, in the last few weeks here in Down Jersey, there have been some strong openings on 10 Meters to Southeast Asia, Japan, and China long path between 8 and 9AM in the morning. If you have a directional antenna, you can cash in on this propagation from time to time by aiming your antenna approximately in the opposite direction of the shortest path to the intended DX QTH. "Rock" your directional antenna somewhat on either side of the long path heading, as a pure 180 degree opposite signal path may not be present.

My 30-160 Meter low band individual totals look quite similar to last year's results. Definite progress can be seen even on 160 Meters, but nothing like what I would have hoped for. Although I acquired a K9AY Low Band Receiving Antenna this summer, I never erected the antenna. I'm sure my laziness resulted in missed qsos that I could have made on the lower bands if I had this antenna in place and functioning. Sometimes actual numbers are very telling!

I also noted some new additions to my phone-only DXCC total in the last two years after quite a slump. I'm sure better propagation contributed to that success. Increased signal strengths in times of solar peaking can sure make it easy to nab a new one on less efficient phone compared to cw. Do you need a little more balance between phone, cw, and digital modes to pick up some rare ones?

Even if you don't start an annual by month DXCC "cheat sheet", look back in your log at your DX accomplishments for the year. It's an informative way to help you evaluate your DX strengths and weaknesses.

Make a resolution for 2013 to make some improvements in your equipment, antennas, DX technique, and better use of your DX time to increase your on-the-air success. The solar cycle probably peaking in 2013 should also provide an extra wind at your back for the New Year.

While most of Europe is still on "holiday" from the end of the year festivities, here are some DX possibilities for you during a typically quiet DX January:

CALL	DATES	HIGHLIGHTS	5=MOST RARE	ENTITY
VP9	12/29-1/2	160-10M/CW+DIG	1	BERMUDA
JD1BMH	12/30-1/4	80-10M/CW,SB,DIG	3	OGASAWARA
V5	1/4-1/18	80-10M/RTTY	2	NAMIBIA
6W7SK	1/5-1/18	HF/MAINLY CW	2	SENEGAL
T88	1/5-1/18	80-10M/CW,SSB	3	PALAU
XV4LU	1/12-1/16	40-10M/SSB,RTTY	4	VIETNAM
6W2SC	1/17-3/10	40-10M/CW	2	SENEGAL
ZF	1/12-2/2	2 DIFF STNS/MOSTLY HI BANDS	1	CAYMANS
PJ4/KP2L	1/20-1/25	HIGH BANDS/HOLIDAY-STYLE OP	1	BONAIRE
J5UAP	1/25/3/10	40-10M/CW	2	GUINEABISSAU

CREDITS: NG3K ADXO

# Club Programs for 2013

By Jim Wright, N2GXJ

Looking forward to 2013, the list of programs, guest speakers, and activities is already growing! Here's a "sneak peek" at some of what we have to look forward to in the first half of this year. I'm kind of excited about some of the events (e.g. picnic), and guest speakers lined up so far. Come on out and show support for our Club. Members and guests are always welcome at our Club meetings. Save the dates, and help spread the word. Hope to see you there!

Club Meeting Jan 2<sup>nd</sup> : "Why RTTY?" Just in time for the ARRL's massive RTTY contest the weekend of Jan 5<sup>th</sup>, this evening's program will give us insights into this popular digital two-tone HF radio mode, and more.

Club Meeting Feb 6<sup>th</sup>: "Fun and Easy". By invitation, QRP legends George Heron (N2APB) and Joe Everhart (N2CX) will be visiting GCARC as our guest speakers for the evening. Self-described as long-time home-brewing enthusiasts, and hosts of the current popular Internet radio program "Chat With The Designers", George and Joe intend to have plenty of sample projects on hand to show and pass around that illustrate the kind of fun they've had over the past decade helping hams, high school kids, and Boy Scouts with electronics, improving their DIY skills, and ending up with working projects for the bench.

Planned Event Feb 10<sup>th</sup>: GCARC afternoon outing; February mobile Foxhunt Club Meeting.

March 6<sup>th</sup>: "Lightning Protection". By invitation, lightning protection specialist Ron Block (NR2B) will be visiting GCARC as our guest speaker for the evening. Ron has over twenty years experience in the lightning protection industry as a lightning protection consultant, newsletter editor, and PolyPhaser Corporation product distributor. He has been the moderator of the *Lightning Protection Forum* at Dayton on numerous occasions. This program will discuss the characteristics of lightning and how it affects us as amateurs, review your chances of being struck depending upon location and tower height, and examine how lightning impulse current can be controlled to eliminate damage to equipment, how lightning strike magnetic fields from a nearby tower can destroy electronic equipment, proper exterior grounding for protection and RF grounding, and a useful approach toward establishing a single point ground system in the radio room. A software simulator will be used to demonstrate the effects of tower placement in relation to the radio equipment, coax/tower take-off height options, and single point ground connection options.

Club Meeting April 3<sup>rd</sup>: "A DX Primer". Author of our Crosstalk magazine's "Down Jersey DXing" column, and accomplished 5-band DXCC radio operator, Bill Grim (W0MHK) will be our host and guest speaker for this informative evening.

Planned Event April 21<sup>st</sup>: GCARC afternoon outing; guest operators on board the Battleship NJ.

Club Meeting May 1<sup>st</sup> : "GPS and Geocaching". Prior to our Club picnic activity, Adan Maskery (KC2YJX) introduces us to the fun of GPS-enabled Geocaching.

Planned Event June 2<sup>nd</sup>: Afternoon at the clubhouse; 2M tape-measure foxhunt antenna, group build.

Club Meeting June 5<sup>th</sup>: "DXpedition!" Fresh from an end-of-May overseas radio adventure, Darrell Neron (AB2E) is our scheduled guest speaker for the evening. From planning to pile-ups, Darrell will share with us some of his DX-Expedition experiences.

Please see "Programs" on Page 4.

“Programs” from Page 3.

Planned Event June 8<sup>th</sup>: (new!) 2013 Club Family Picnic! (This event will include an on-foot RDF / geo-cache activity too!)

Planned Event June 22<sup>nd</sup>: GCARC Field Day, 4H fairgrounds.

Additional program ideas: pizza night, radio control, antennas and modeling, first rig basics, (how to for soldering coax and connectors), electronic QSLing, antique radio restoration, HF propagation, radio software demonstration (JT65HF, PSKREPORTER), Morse code night (code contest, training). What program ideas would you like to see? What program ideas would you like to present? Feel free to email me at [n2gxj@arrl.net](mailto:n2gxj@arrl.net) with your suggestions. Thanks.

## Past Club Programs, 2012

By Jim Wright, N2GXJ

It was great to see so many members showing support for our Club and for each other by attendance at our Club meetings and activities this year. It's great to have a Club like ours where we can meet, even if it is just once a month, to see some familiar faces and socialize a bit with others who have a common interest based in our radio hobby. As a general interest Club, we have a wide range of interests and knowledge that can be shared with each other to broaden the horizons of our ham radio experiences. As your programs chairperson for this past year, I want to send out a special “thank you” to our Club members who volunteered to “give back” a bit by being guest speakers this year. It was appreciated!

So, looking back on 2012, what were some of your favorite programs and activities of the year? Cory started us off with a show-and-tell program on “Do-it-yourself and home-brewing” in January. I'm sure I wasn't the only one impressed with what he was able to fit in a tuna can! This was followed by a memorable presentation from Doug on “The art of QSLing” in February. In March, our featured guest speaker was Greg Jurens from FlexRadio Systems, who flew in all the way from Texas to give us an overview of Software Defined Radio, and how it is changing the game for us amateur radio operators. In April we learned from Harry about the ongoing radio room restoration efforts on board the museum ship Battleship New Jersey, and then had the chance to visit as guest operators onboard one weekend! In May, Ken helped me introduce the fun of “Digital HF”, attempting a few rounds of “decode that signal” on our own laptops during the meeting's presentation. June featured a popular “pizza night”, where we socialized, and finalized plans to provide radio support to the “Tour de Pitman” bicycle race, and for our Club's participation in the single most popular on-air event held annually in the USA and Canada, Field Day. With the Boy Scouts joining in and camping out with us at the site this year, it was great fun! In August we continued with a program on radio direction finding, and then had the chance to follow that up in the field with a fun GCARC radio “fox hunt”. In September, Al introduced us to the mysterious world of “VHF and up”, which set the stage for some Earth-moon-Earth “moonbounce” radio attempts made from the Clubhouse later in the year. Later in September was our Club's sponsored Hamfest, which we hold annually out at the 4H campgrounds. In October, Gary and John teamed up together to present a program centered on emergency amateur radio communications, and the steps to take now to be able to provide useful assistance if called upon to do so in the future. Impressive “go packs” guys! Who knew Hurricane Sandy was going to visit so soon after? Following the Club officer elections in December, we finished the year with an evening of testimonials from Tom and Ray on “what I like about ham radio”.

I'd like to hear from you. Let me know what you liked most from this past year. Have an idea for a topic or program you might be able to present sometime? If so, just drop me an email at [n2gxj@arrl.net](mailto:n2gxj@arrl.net) Thanks!

## What will you do with ham radio in 2013?

By Jim Wright, N2GXJ

Congratulations! Through your efforts, you have now qualified to be identified as being in a growing group of patriotic Americans who are licensed amateur radio operators! Now, what are you going to do with that license in 2013?

Perhaps 2013 will be about re-discovering that you have chosen a hobby that is only limited by one's imagination. Perhaps we will use this year to better prepare ourselves to be able to assist when normal communications are disrupted? Perhaps this year we will strive to advance our understanding of the radio art through field trials and experimentation? Perhaps this year, through our DX contacts, we'll be helping to promote international goodwill?

What interests you? Perhaps this year you would like to learn more about alternative energy operation, amateur television, antenna design and building, antique radio collecting and repair, amateur radio on the international space station, radio astronomy, automatic position reporting system, awards and certificates chasing, backpacking operations, high altitude ballooning, civil air patrol, classic amateur radio equipment, amateur radio clubs, card collecting, our Clubhouse, coast guard auxiliary, community service, contesting, county hunting, digital modes, direction finding and tracking, distant stations, DXpeditions, education, emergency communications, search for extraterrestrial signals, famous hams, field day, fox-hunt, hamfest, homebrewing and kits, hurricane tracking, eliminating interference, internet linking, islands on the air, lighthouses on the air, modulated light DX, low power operating, maritime mobile, meteor scatter, microwave communications, military affiliate radio, missionary support, mobile operations, moonbounce, Morse code, museum ship radio clubs, narrow bandwidth modes, official observer, rag chewing, propagation prediction, public service, radio teletype, radio location, recreational vehicle operations, remote control, repeaters, reverse beacon networks, satellite communications, scouting, search and rescue, shortwave listening, slow scan television, solar activity, space communications, special events, sporadic E communications, spread spectrum, volunteer examiner, traffic handling, very low frequency, weak signal digital, volunteer weather spotting, or more? Or perhaps you are already expert in some areas, and would like to share that knowledge with others? Either way, we'd like to hear from you!

Each year offers new opportunities for learning, discovery, and friendship. This year, let us, your fellow members of the Gloucester County Amateur Radio Club be there to share in your journey, as you are there to share in ours.

Happy New Year!

## Capabilities vs Self Control

By Cory Sickles, WA3UVV

In recent weeks, 2 FCC enforcement actions have caught my attention. One involved a ham who decided to set up his own unlicensed FM station in Kansas. He was also causing interference to licensed broadcasters, as well. I guess he wasn't satisfied with the privileges he had as an Extra Class licensee.

Another guy, in North Jersey, put together a station to talk to friends in Brazil, via some Navy satellites. (I wrote about this activity in a past [Crosstalk](#)) Here again, was someone with more technology, money and know-how (another Extra) than he had self control and good citizenship. Please see "Self Control" on Page 5.

“Self Control” from Page 5.

From public reports, they both seem to feel that because they knew how to do a particular thing, they should do it.

Trust me, I fully understand the desire to collect certain things when they’re part of your hobby. I know several people that collect old AM broadcast transmitters. It’s OK if you fill your garage with 50 kilowatt Collins transmitters. It’s not OK if you’re crazy enough to illegally put it on 160 or 75 Meters....

In recent years, there’s been tremendous growth in the handheld computer market. The iPad, iPod Touch and various Android-based systems have put the power of what once took up a desktop and placed it in the palm of your hand. Applications, commonly referred to as “apps”, have been created for all sorts of things. From navigation aids to assistance in learning foreign languages, it’s a fair statement that “there’s an app for that”.

As hams, we can find apps for testing, digital modes, CW readers, logbooks and digital magazines. Scanner feeds and international broadcasters can be found, as well. Apps such as “5-0 Radio”, “Police Radio” and others allow you to listen in to public service and amateur radio activity in towns throughout the country. Many times I’ve listened to Skywarn or ARES traffic as a storm (like Sandy) have come up the coast. Or, I might just check in to see how things are going in my hometown.

Eleven days before Christmas, I was listening to the “regular” radio when a news story was reported about a mass murder of teachers and students in a small town, some 20 miles from the ARRL. Turns out, the killer possessed an assault rifle, hand guns, extended clips and enough ammunition to stage a small coup in a banana republic.

After a few minutes of listening with disbelief, the thought of being able to hear the public service traffic in Newtown occurred to me. As I reached for one of my iPod Touches, I hesitated. Hearing what was being reported on the radio was bad enough and had my imagination already in overdrive. I put it down, turned off the radio and paused in silence for a while. As true with most parents, I thought of those children and then of my own.

Just because the technology is available and you *could* do something, absolutely doesn’t mean you *should* do it...

## Straight Key Night!

By Cory Sickles, WA3UVV

I still own the key I purchased and used as a Novice. While I have other straight keys and paddles (never really got the rhythm of a bug) that I use on a regular basis, there’s at least 1 time each year when I take it off the shelf and have fun with it. That’s Straight Key Night or SKN. (<http://www.arrl.org/straight-key-night> )

SKN is not a contest, rather, it’s an event. It’s a chance to start the year with some back-to-basics hamming. Perhaps it’s also a trip through Mr. Peabody’s Wayback Machine. For many, using a straight key by itself is not enough. Tubes are the favored way to get on the air. Whether you fire up an old single-tube transmitter or a vintage Drake, Johnson, Eico or Heathkit rig, the glow seems to make it all that much nicer.

Please see “Straight Key” on Page 7

“Straight Key” from Page 6.

Some years, I’ve built a small transmitter that uses some of my FT-243 crystals on 40M. A variety of 6AQ5A, 6J6 or 6L6 variant rigs have been thrown together for the night. I’ve also used kits, like the NS-40 from the Four States QRP club ( [www.4sqrp.org](http://www.4sqrp.org) ) or just a nice commercial rig from the 70’s. This year, I’m going to fire up a 3 watt 6J6 transmitter that’s powered with a stacked set of fifteen 9 volt batteries on 80 & 40 meters (hopefully not both at the same time) and see what I can scare up in the way of new contacts and memories. When I get tired of that, it will be my Swan/Cubic Astro 150A, set at 20 watts. It’s solid state and synthesized, but just fits in with the 70’s.

What will you do on SKN? Do you still have any gear from your early days as a ham? There’s still time to order a kit and have it put together in time, if you hurry. Even if you use the latest rig you have with all the bells and whistles, banging out some CW with a straight key can be a lot of fun! Try it!

## Tick, Tick, Tick...

By Cory Sickles, WA3UVV

If you are reading this, then the Mayan calendar did not foretell of the apocalypse. Much like the “A Year of Cute Puppies” calendar (Christmas gift from a past employee) ended in 1988. In the 50+ orbits I’ve made of the sun, I can remember various cults and other con artists predicting the end of the world usually with disaster for their deceived members, or just egg on their faces. (Oh, err, uh, I must have read the prophecy wrong. Yeah, that’s it...)

I’ve also seen the doomsday alignment of the planets (late 1970’s) come and go. The best thing that happened out of that event was a once-in-a-lifetime opportunity for the long-duration flights of Voyager 1 and 2, giving us some very cool pictures and science along the way.

There was the Y2K debacle, where everyone “got their knickers in a twist” once again over potential problems with older computer systems that used 2 numbers for the year. (Hey, when you’re writing software on 9” floppies that only hold 241K, every byte counts.) This turned out to be nothing more than an opportunity for software companies to rake in a bundle, upgrading old code. Plus, it was the basis for the timeless cinematic classic “Office Space”.

A few years ago, some old geezer wrongly predicted (for the third time, if memory serves) the end of the world. More than one guy got suckered in and sold everything he had to buy billboards proclaiming in the end his gross amount of stupidity. Good news for those printers and advertising companies, though.

And so now, we survive the Long Count of the ancient Mayan Calendar. All their important numbers were based on 20, as in fingers and toes. Thus, through various multiples, their epoch got us near to the end of 2012 (on the Julian calendar) and got more people to panic. Here again, money was made and a special effects extravaganza was produced – now available on Blu-Ray.

Fact of the matter is all these things are silly and make us look even sillier in the long run. After all, everyone should know that the real calamity facing us will occur at 03:14:08 UTC on January 19<sup>th</sup>, 2038. That’s the moment when all 32-bit unix-based computer systems will reach their highest-possible clock count and rollover to January 1<sup>st</sup>, 1970. Think of the horrors! Start to panic now! Because who knows how many of those non-essential systems will still be functioning, without having been upgraded, a quarter century from now!

One thing’s for certain, someone, somewhere will be making a buck (or Euro) from it...

## January Birthdays

Congratulations to these members celebrating birthdays in January.

James Alston, AC2BY  
Alan Arrison, KB2AYU  
Mark Clark, N3QMJ  
John Czuba, K2AEN  
Joe DiNovi, WA2GFK  
Adan Maskery, KC2YJX  
Gary Reed, N2QEE  
Gene Wallace, N2IMK



## Crosstalk Submissions

This is your Club newsletter. Make use of it. Feel free to contribute general interest articles and ideas for articles.

All submissions, queries, comments and editorials should be addressed to Gene Schoeberlein at [aa2yo@arrl.net](mailto:aa2yo@arrl.net).

Submission deadline for the February issue: 1 /21/13

## Club Website

<http://www.w2mmd.org>

President-Tom Gorman, KE2ES  
Vice President-Jim Wright, N2GXJ  
Treasurer-Al Arrison, KB2AYU

Art Strong, K2AWS  
Chuck Colabrese, WA2TML  
Mark Townsend, W2OCY

Ray Schnapp, WB2NBJ  
Bill Szkromiuk, N2VIL

ARES/RACES-Gary, N2QEE  
Awards-Kenny, W2KRD  
Budget-Al, KB2AYU  
Clubhouse Site-Al, KB2AYU  
Club License Trustee-Darrell, AB2E  
Constitution-As needed  
Contests-Ken, W2KRD  
Crosstalk-Gene, AA2YO  
Database-Ken, N2CQ  
DX-Bill, W0MHK  
Field Day-Vinnie/Bill, N4NYY/NJ2S  
Hamfest-Vinnie/Bill, N4NYY/NJ2S  
Historian-Art, K2AWS

### GCARC Officers

Recording Secretary-Sheldon Parker, K2MEN  
Corresponding Secretary-Cory Sickles, WA3UVV

### Board of Directors

Gary Mirkin, WA3SVW  
Dave MacDonald, WB3JOY  
Jeffery Garth, KC2WCS

### Trustees

Cory Sickles, WA3UVV  
Martin Wilt, W2ILT

### Committees

Hospitality-Dave, WB3JOY  
Membership-Cory/Ray, WA3UVV/WB2NBJ  
Nominations-Tom, KE2ES  
Programs-Jim, N2GXJ  
Publicity-Cory, WA3UVV  
Repeaters-Tom, KE2ES  
4H Liaison-Cory, WA3UVV  
Special Services, Darrell, AB2E  
Sunshine-Ray, W2RM  
Technical/TVI-Cory, WA3UVV  
VEC Testing-Gary, N2QEE  
Website-Jeff, KC2WCS

### **The W2MMD Repeaters**

147.78/18 Mhz-Pitman  
(CTCSS 131.8Hz)

223.06/224.66 Mhz-Sewell

447.1/442.1 Mhz-Pitman  
(CTCSS 167.9Hz)

1272.4/1284.4 MHz-Pitman

### **GCARC Meetings**

#### **General Membership**

7:30 pm 1st Wednesday every month  
Pfeiffer Community Center  
Williamstown, NJ

#### **Board of Directors**

7 pm 3rd Wednesday every month  
GCARC Club site  
Harrison Twp. 4H Grounds  
1 mile south of Mullica Hill on RT77

### **Nets**

GCARC 2 Meter Net  
Third Thursday of the Month  
8:00PM  
147.78/18Mhz (PL131.8Hz)

ARES/RACES  
Sunday 20:00 Hrs  
(147.78/18 and  
223.06/224.66  
repeaters)

### **January Meeting**

**Why RTTY?**  
Cory Sickles, WA3UVV

Gloucester County Amateur Radio Club  
P. O. Box 370  
Pitman, NJ 08071