



Presidents Message

Your humble servant is finally having cataract surgery, the right eye on August 14 and the left eye sometime in September. Everyone tells me that the surgery is a piece of cake—which it is. No one says anything about what must transpire leading up to the surgery. One has the preliminary exam, then the transfer of records from Dr. A to the eye surgeon, then the eye measurement appointment, then a complete physical—including an EKG, by the family Doctor, then, finally, the cataract surgery, the follow-up exam, then the other eye surgery, follow up, and finally new glasses exam and fitting by your optometrist. Oh well, consider the alternative of only a few years ago, that of going totally blind! I would be blind today (retinopathy) via the technology available when I was a young 50 years old. The miracles of science are worth the wait!

I am still talking about the really FB Field Day we had this year! AA2WN, our scorekeeper, calculates we reported a total of 10,700 points, which was the best we have done since 1999, when we reported 10,860! And both of those years we operated as 9A precedence. Last year we scored 6,064, but then we were 7A. So, you can see the really FB progress we made this year. This year we had some 28 operators and 13 visitors according to our sign-in log. And we had some 30 club members participate. This was a very FB showing by any method of measurement. Congratulations to the Club and to Vinnie, KC2NXV, our overall chairman.

I also want to add a special thanks to Charlie, K2PQD. Our mystery gifts at our Club drawings, for the better part of the past year, have been donated by Charlie. These gifts have one thing in common; they are all useful shack items and are in working condition. Next time you see K2PQD, shake his hand and thank him for the Club. Charlie is a charter member of our club, only he and Art Goldman, K3WIN, Milt's son who lives in Maryland, are the only charter members left.

Jumping around a bit, you will see a notice concerning our upcoming Club meeting program elsewhere in this issue. You won't want to miss this exceptionally interesting program. And Dave, WA2TVS is an exceptionally fine speaker and very knowledgeable.

Also, I am sure you all received a recent Email from Harry, K2ATX, asking for a donation of your spare parts for use by the 4H youth Radio Club, which, as you know, we sponsor. They want to use the parts to build code oscillators as a club project. BE SURE to bring along some items to our August Club meeting! Just put them in a box of some kind and give the box to K2ATX at our meeting. He will, and the Club will, be most grateful for your help.

Finally, our next big event on the docket is our annual Hamfest which will be held on September 20th at the 4H Fairgrounds. This year, because it is our 50th Anniversary year, we are having some extra events at the Hamfest (more about these next month). Regardless, because these events will be unique and extra, we will need YOUR help to bring them about. Hence, when Chairman Harry, K2ATX, solicits your help, please find the time to lend your assistance. That's about all for this month. Hope to see everyone on Aug. 5th, 7:30 PM.

Down Jersey DXing

By Bill Grim, W0MHK

FR/G, Glorioso, disappointed the DX world again with a "postponement" of activity notification to hams around the time of the Yemani airline plane crash in July. Best we can do is hope for an attempt in late August or September. Little additional news on this operation (basically by French Military hams) has come forth since this recent cancellation.

Sunspots have also played the "disappointment game"! We had the best looking active spot in about two years in July bringing hope for increased solar flux. However thirteen days later no new sunspots have appeared except one possibly emerging spot in the southern regions on the sun designated a "left-over" from Cycle 23. Predictions continue that we'll have a less-than-robust cycle with sunspots not appearing in intensity as the most recent cycles we have enjoyed.

Six Meter DXing seems to have been dealt a shorter sporadic-E season than previous years with openings of short duration or none at all. But our Triple-Play-Meister, W2YC, has managed to bag 21 new DXCC entities this season! W0MHK added five new DXCC entities to his total on the Magic Band so no complaints from these two slaves of the sunspot cycle. Hope you got in on some of the openings on 6 Meters. Some East Coast qsos with Japan on 6M were posted on clusters this season.

10 and 12 Meters lagged behind in DX openings but were still the sources of some DX-excitement and new band countries. Sporadic-E and the appearance of some persistent DXpeditions in Latin America and Africa provided opportunities to utilize these bands. You basically took what was available.

August should show a bit more life in HF band openings with summer QRN still a major problem on the lower bands. 30 Meter activity has increased a bit recently with more openings to Europe. With days starting to get shorter, gray-line openings may occur before leaving for your workday. Signal peaks due to this phenomenon might start fitting into your morning routine at more accessible times.

DX prospects for the month of August appear below. Remember that a 5 is the rarest of entities and 1 is the most common.

STATIONS	DATES	FQ & MODES	RARITY	ENTITY
SU8LH	8/1- 8/8	HF&6M/MOST	3	EGYPT
3DA0SS	8/1-8/14	-	2	SWAZILAND
JD	8/8-8/14	160-6M/MOST	3	OGASAWARA IS.
OY	8/10-8/16	160-2M/MOST	2	FAROE IS.
3B7FQ	8/10-8/30	40-10M/SSB&CW	3	ST. BRANDON IS.
5W	8/16-8/19	40-6M/SSB&CW	3	SAMOA
C21TI	8/17-8/23	160-6M/CW,SB,RTTY	3	NAURU
V7	8/24-8/29	80-10M/CW,SB,RTTY	2	MARSHALL IS.
FT5GA	8/31-9/21????	SEE JULY ISSUE	5	GLORIOSO IS.

CREDITS: Thanks to ADXO and N3GK

August General Membership Meeting

The program for this month's meeting will be a presentation about the German Enigma coding and decoding machine of WW II fame and the British Ultra project to break the Enigma Code. Dave, **WA2TVS**, has acquired a library of photos and text about the Enigma Machine and its use. Some of these photos go into great detail of the construction, wiring, interaction, and operation necessary to generate an "unbreakable" message coding system. **WA2TVS** and his XYL Margaret, **KB2BRR**, are both very active officers (Dave is Chief Engineer) of the Battleship NJ Radio Club and also members of the Old Barney ARC. Both have been heavily involved in the restoration of the Ship's Radio Rooms and other electronics since the Ship was first moored in Camden.

Although new to the subject of decoding, Dave will provide a brief review of the efforts taken by several world governments to decode the German messages. Also, part of the program is a short video showing the actual operation of an Enigma Machine during a military recreation show held each year in Pennsylvania. There is a brief moment of CW use in the video, hence, the tie to Ham Radio. There will be time for questions at the end of the program.

4-H Radio Club Startup Donations

By Cory Sickles, **WA3UVV**

As Harry, **K2ATX** emailed earlier, we are looking for some donated equipment and parts to set up a station and test bench for the 4-H Amateur Radio Club. Already, a few **GCARC** members have stepped up and contributed and for that we are grateful. The kids have expressed a real interest in learning CW, so anything along those lines would be appreciated as well.

If you have an older transmitter, a receiver, computer, amateur radio related books, test equipment, parts, soldering station, etc. that are surplus to your needs, contact either of us and we'll make arrangements to get it from you.

We appreciate your tax-deductible generosity!

Field Day, 2009

By Doug Gehring,

Field Day, 2009, is now history, but what a great chapter in **GCARC** History it was! A more perfect Field Day would be hard to repeat! The weather was ideal, the participation was great, and Murphy's visits were few and far between! First off, we must congratulate our overall Field Day Chairman, Vinnie, **KC2NXV**, for an overall outstanding performance. It appeared Vinnie had all bases covered, especially the bonus point categories. We acquired a grand total of 1,670 bonus points, more than any previous Club FieldDay in memory. Vinnie even arranged a site visit by State Senator and Freeholder Director Steve Sweeney which gave us an additional 100 points. And the food was again outstanding as Food Chairman Wayne, **WA2LET**, assisted by professional cooks Pinky and Martha (Mrs. **WA2LET** and **N2CQ**, respectively) really cooked up a gourmet feast for all attendees. And again, our technical whiz Ray, **WB2NBJ**, had the generator purring along. Even a cooling system leak could not escape Ray's sharp eye and was immediately repaired with the help of a bit of stopleak.

Please see "Field Day" on Page 4.

“Field Day” continued from Page 3.

With regard to the operation, we had a number of heroes this year. Special kudos must go to Dave, W2YC, and Bill, W0MHK, who, at the last minute, switched bands from 80 meter phone to 80 CW, and proceeded to amass 408 QSOs on 80 CW to go with their 142 CW QSOs on 15 CW. And 80 meter SSB was ably covered by Harry, K2ATX, and Stu, N2WUP, who amassed 264 QSOs, or some 2.5 times better than in 2007. Overall, all HF phone stations did exceptionally better this year turning in QSO totals in excess of two times that of last year. Congratulations to SSB chairmen Ray, WB2NBJ, Wayne, WA2LET, Art, K2WAS, and Larry, AD2L, for a much improved performance. And, although the cycle is still not with us, nevertheless, we bravely offered stations on ten, six, and 2 meters. These stations took first prize for good looks and impressive set-ups and band chairmen Lou, KC2FXK, Marty, W2ILT, and Mark, W2OCY, deserve much credit for their efforts and their pioneering ventures into bands which heretofore had been given only cursory Field Day exposure by GCARC. And, perhaps with some antenna modifications and more sunspots, next year may bring a few more QSOs. Also, special thanks to Kyle, W2KBT, who made the youth rounds of the various stations and gave us extra bonus points in addition to wrapping up all 6 meter stations within our local area. Last, but not least, our CW stations turned in their usual great performance on 80m (cited above), 40, 20, and 15 meters. Chris, WK2W, with his computer giving a 24 hour performance this year, significantly improved his 20 meter total compared to last year, and the 40 meter crew (AA2WN, AA2YO, N2CQ, K2SE, K2HPV, and WA2NPD) nearly topped 700 QSOs. Special recognition must go to Bill, NJ2S, for providing his bucket truck which made erection and dismantling of many of the antennas much simpler. Also, the 20 meter SSB Yagi and tower, courtesy of Ray, W2RM, certainly gave the WK2W yagi a run for its money with regard to uniqueness and performance. And let’s not forget AA2WN who again took the time to tabulate and report our Club score to the League. Finally, thanks to all Club members who are not mentioned above but nevertheless took the time and effort to help in some way to make this one of the best Field Days in GCARC history.

FIELD DAY CONTACT TOTALS

Band (M)	CW	Digital	PHONE
80	408		264
40	696		244
20	525	52	279
15	142		50
10			3
6			18
2			11

Best QSO total since 1999!

Ten Meters is Open, You’re Just Not Paying Attention...

By Cory Sickles, WA3UVV

Yes, I know that right now the face of our nearest star looks like it got hit with a case of OXY-10, but the lack of sunspots shouldn’t be keeping you off 10 meters. Many times there are propagation paths available and other hams to talk to, but the problem is that everybody is “just listening”. Well, almost everybody.

Please see “Ten Meters” on Page 5.

“Ten Meters” continued from Page 4.

Between the range of 28.100 and 28.300 MHz there are dozens of propagation beacons. These transmitters are identifying with call signs and usually some related information about QTH or Maidenhead Grid Square. Many are running just 5 watts or less into a basic antenna. As you tune through this sub-band, being able to pick them out of the noise will let you know what direction(s) you may be able to communicate to.

A special group, known as the NCDXF/IARU International Beacon Network is on 28.200. They transmit their individual call signs and a dash at 100 watts first, then a dash at 10, 1 and finally 0.1 watts. The most famous of these may be the one at the United Nations Building in Manhattan. Once you copy a beacon’s call sign (another good reason to know code), you can look it up and determine the QTH.

Alternately, you can use an old CB rig. Many ham fests and flea markets have these available for \$5. Once you start to hear more chatter/noise on a particular “DX” channel, it’s a fairly good indicator that 10 (and maybe 12) is worth a CQ call on your part. If you spend a bit more on a used CB with SSB capability, the upper channels like 38 LSB is a somewhat quieter place to listen, with the absence of annoying heterodynes.

Whatever you do, don’t just sit there listening, give a call once in a while and see what happens.

Tour de Lune

By Cory Sickles, WA3UVV

By now, all of the media coverage of the 40th anniversary of the Apollo XI flight and first manned moon landing has passed. Some of it was good and some – not so much. One of the cable networks even ran a 30-minute cut down (actually 22 + commercials) of CBS’s coverage of the landing. Of course, they couldn’t resist adding in all that “noise” in the lower third with flashy graphics telling you what was coming up next, what was coming up after that and (just in case you have a really short attention span) what you were watching now. Certainly, these were things we didn’t have to put up with in 1969.

Technically, the coverage brought back memories of primitive titling and graphics that are amusing by today’s standards. These were driven by circuitry that filled equipment racks. Today, you can hold everything that was and so much more in your hand. The images of interviews and simulation models showed color cameras that were huge by modern standards. They had problems with reflections and movement that we took for granted then, but are glaring deficiencies, now. Those old tubes were no match for the solid state designs which were to follow. But tubes were important. Tubes were at the heart of much of the technology that got us to the moon and back. They played a big role in getting those low resolution, 10 frames per second, black and white images of Armstrong and Aldrin into homes all over the world. The moon seemed a bit closer that day.

The space program was responsible for so many innovations and resulting technologies that we soon took for granted it would be impossible to list them all here. While tubes were important and still in use for certain things, solid state electronics and some of the first integrated circuits were developed during this time. It was all about weight and power budgets. As it was, it took a lot of fuel to get a Saturn V flying. For that matter, the Titan, Atlas and Redstone ICBM boosters weren’t all that fuel efficient either.

A vivid memory of how proud I was to be an American (even as a kid) came as I saw “U S A” rise up on the screen during each launch. It still manages to evoke an emotional response after all these years. Please see “Tour” on Page 6.

“Tour” continued from Page 5.

If you travel to Arizona, be sure to visit the Titan Missile Museum. Take a good look at what’s sitting in the silo and imagine replacing the multiple warhead package with a capsule carrying 2 Americans and you’ll have a good picture of what a Gemini configuration looked like. Also, take along an HF rig. There’s a rather large antenna that they allow hams to hook up to and use. More information on that antenna is available at <http://www.titanmissilemuseum.org>. There is a nice group of folks there, too.

Back to the electronics of Apollo, you can build your own version of the Apollo Guidance Computer for far less than the original \$150,000 (less development costs) price tag. Although so much of the space program was going on before the foundations of the internet saw life, here too, you can visit the web site http://klabs.org/history/build_agc/ and see how it’s done. Would you believe a clock speed of only 1MHz?

During the 60s I met a ham who liked experimenting with such things and had managed to build a converter and fairly low-noise preamp setup to receive military aircraft band and S-band communications. (microwave homebrew involved a lot of metal work and plumbing skills back then) He had an impressive array of antennas. I was invited over and heard the telemetry streams and some noisy voices from Apollo 8 and 10.

Also during those years, my uncle was stationed at Langley AFB. There is a NASA facility there, as well. I still have vivid memories of watching astronaut training exercises and saw a lunar rover (behind a lot of barbed wire fencing) and the “Flying Bedspring” – a notoriously unstable Lunar Module simulator. As a kid, it was just fun to be there. As an adult, they are lasting memories of a great time in our nation’s history – even with all the unrest at home and in the world.

I had dozens of books on virtually every aspect of space. From the astronauts to vehicles, to the ground equipment, to you name it, I had to have it. Once I found out you could get materials directly from NASA, I had an ongoing letter campaign. At one time, I think I knew just about every acronym there was. I wore my pocket protector and used my slide rule (a real oddity with the elementary school crowd) with pride.

Yes, all the coverage brought back some great (and a few sad) memories from my childhood, many of which spurred an interest in electronics. The first one however, was of Alan Shephard’s suborbital flight. On television, was a black and white image of a man talking with a series of clocks on a wall in the background. The man talking on camera was Walter Cronkite, later to become KB2GSD.

Did you know that Yuri Gagarin, the first man in space (and the first to survive a Soviet launch) was a ham? Yep, he was UA1LO. He did not complete the first space flight, however. That honor rightfully goes to Mr. Shepard. You see, the Russians were concerned that the capsule would not land “properly” and that Gagarin would not survive. So, he parachuted out. A small detail that, like much of the mystery of their secretive efforts, would not emerge for several years. By commonly held flight rules, Shepard – who stayed on board to the end of the mission, was the first to actually complete the first suborbital flight. Go USA!

If you lived through this era of exploration, technological development, vision and national pride, consider how it has shaped your life and the radical changes you have seen in these past 40 years. If you were a ham then, compare the equipment you had at that time with what is available today. Funny thing – although a solid state computer from 40 years ago is not very useful, you can still have fun with a tube-based transmitter and receiver from that time!

August Birthdays

Congratulations to these members celebrating birthdays in August:

Harry Jackson, WB2GSF
James Mollica Jr., N2NRD
James Mollica Sr., K2OWE
Curtis Myers, WA2JSG
Harry Strahlendorf, W3DNQ
Leonid Surrin, W2/UT5ZF



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.

Submission deadline for August issue:
8/19/2009

Club Website

<http://www.w2mmd.org>

President-Doug Gehring, WA2NPD
Vice President-Wayne Wilson, WA2LET
Treasurer-Ken Newman, N2CQ

Darrell Neron, AB2E
Bill Blakeley, WA2ADB
Chuck Colabrese, WA2TML

Steve, W2TDS
Cory, WA3UVV

GCARC Officers

Recording Secretary-Al Arrison, KB2AYU
Corresponding Secretary-Harry Ewell, K2ATX

Board of Directors

Gene Schoeberlein, AA2YO
William Grimm, W0MHK
Harry Bryant, AA2WN

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Ray, WB2NBJ
Mike, N2SRO

Committees

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Awards-Dave, W2YC
Budget-Steve, W2TDS
Clubhouse Site-Al, KB2AYU
Club License Trustee-Darrell, AB2E
Constitution-As needed
Crosstalk-Gene, AA2YO
Database-Ken, N2CQ
DX-Bill, W0MHK
Field Day-Vinney, KC2NXV
Hamfest-Harry, K2ATX
Historian-Marty, W2ILT

Hospitality-Ray, WB2NBJ
Membership-Cory/Ray, WA3UVV/WB2NBJ
Nominations-Doug, WA2NPD
Programs-Doug, WA2NPD
Publicity-Cory, WA3UVV
Repeaters-Al, KB2AYU
Scholarships-Greg, WN2T
Special Services, Darrell, AB2E
Sunshine-Ray, W2RM
Technical/TVI-Cory, WA3UVV
VEC Testing-Harry, K2ATX
4H Liaison-K2ATX

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

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

Nets

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

10 Meter- Sunday
following the
ARES/RACES Net
(28.350 Mhz)

August Meeting

The Enigma Machine
Dave, **WA2TVS**

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

