



Presidents Message

The big news this month is the battle between Mother Nature and the Club's 100 ft. VHF/UHF tower which was convincingly won by Mother Nature! On or about March 6th, the tower succumbed to 80-90 mph winds and buckled at about the 20 ft. level and then was bent to the ground. All of the antennas were destroyed. The good news is that the tower missed hitting any of the nearby objects. The bad news is that, replacing the tower and antennas will take a chunk out of the Club's treasury. Presently, Al, KB2AYU, and Ken, N2CQ, are gathering data for our insurance claim and the adjuster has already examined the calamity and taken pictures. This tower was generously donated to the Club some 21 years ago by Ray, W2RM, and was built by Morrison, Inc. We will keep everyone posted as this saga progresses.

On a brighter note, our Saturday morning after-the-Club-meeting technical sessions at the site are beginning to show signs of increasing activity. We had some 5-6 "students" attend the last session. We are hoping the interest in this activity will continue to expand and thereby justify more frequent sessions. We could hardly have more qualified instructors, namely Al, John, and Cory. In fact, Al will present a program at this month's Club meeting on SWR, and you won't want to miss that.

We want to thank Herb, K2HPV, for having donated last month's mystery gift at our 50:50 drawing (a pair of brand-new meters). We will continue throughout the year having donated mystery gifts of value during our 50:50 drawings. Those who missed last month's meeting missed a very relaxing, enjoyable time over plenty of delicious pizza. Thanks to Dave, WB3JOY, for the arrangements. Also, on a very bright note, Harry, K2ATX, our Hamfest chairman, reports having received our signed contract from the 4-H folks giving us our September 21st first-choice date! Also, we are listed for that date on their Web page. So, looks like we are in good shape for our Hamfest this year. So far so good! As of this writing, we are still seeking someone to chair Field Day this year. Is anyone interested?

Dave, W2YC, is hard at work computerizing all of our previous Club certificate award earners and hopes to have this completed within the next few weeks. It is not too early for those wishing to earn their initial certificate to have QSOs with fellow club members and log the contacts. A good place to log the HF QSOs is on the Club ten meter net (28,350 MHz) after the Sunday night RACES net is completed. Last, but far from least, we welcome Rick, N2PHI, back into the fold following a years leave of absence. I hope to see you all at our April 2nd Club meeting at 7:30 PM.

April General Meeting Program

Alan Arrison, KB2AYU, one of our very knowledgeable members, will give a program on SWR-Truths, Myths, and Urban Legends. Al is currently our Secretary as well as Chairman of the Club House and Repeater Committees.

Down Jersey DXing

By Bill Grim, W0MHK

With the change of seasons upon us, we have a slight increase in the chance of success at HF. The global equalization of sunlight at this time of year can enhance some DX paths despite our relatively "spotless" sun. Some sporadic-E spots have also been showing up on the clusters stateside.

We may have been spoiled a bit by the super VP6DX record-breaking DXpedition and successive large-scale DX efforts from TX5C and 9X0A (which I am still pursuing as I type). If you follow different DX clusters on the net in search of DX, you might have noticed some of the disparaging remarks about the operating decisions made by these dedicated DXers. Remarks have ranged from second-guessing to downright nasty! Possibly we need to pause in our unquenchable desire to work the new one to realize that these individuals would probably like to work each and every one of us on all bands and modes possible! Unfortunately, if TX5C is an example, 40 knot winds, ferocious thunderstorms that can be heard for an hour or two before they hit, and 110 degree temperatures are a far cry from the comfortable shacks we are calling them from while we demand to be heard for our personal satisfaction.

Sure, there are some big-time DX egos out there, but the vast majority of radio amateurs that participate in DXpeditions place their time, money and health on the line for a unique dimension of our wonderful hobby. I think they deserve to be cut a little slack. Keep listening and enjoying the bands. The DX is out there!

Our DX list is a bit short this month but you might still need one or more of the following:

STATION	DATES	FQ/MODES	RARITY	ENTITY
6V7I	4/6-4/12	160/10M	2	Senegal
V63	4/9-4/16	80-10M	3	Micronesia
GB0U	4/19-4/26	80-10M	2	Guernsey
A7/G0MKT	4/1-6/30	40-6M	3	Qatar
T8	4/16-4/19	HF/CW/SSB/RTTY	3	Palau

CREDITS: The Daily DX, NG3K ADXO

New Club Member

This month the Club welcomes Rick Tighe, N2PHI, as a member. Rick lives in the Blackwood area and had previously been a member of the Club. Welcome back Rick and we hope to see you at Club meeting and functions in the near future.

Technical Information Exchange

John Zaruba, AA2BN, reminds us that the Technical Information Exchange meetings are now being held on the first Saturday of each month at the Clubhouse. The Saturday after the first Wednesday schedule was getting too confusing so for simplicity the meetings were changed to the first Saturday of each month.

ARES/RACES Ramblings

By John Zaruba, AA2BN

I would urge you to consider adding some 222 MHz gear to your communications arsenal. The 1.25 meter band is much underutilized and is an outstanding band for EMCOMM operations. It has propagation qualities similar to that of 2 meters yet is a "wide open space" like 70 cm. In a widespread disaster 2 meters will be a zoo with many stations that are not regular EMCOMM participants crowding the band. To get better communications, moving some of the voice net activities to 222 MHz will provide some much needed "elbow room". Unfortunately, while there is used gear from every manufacturer available only Alinco makes new 222 MHz equipment. The good news is their gear is very economically priced, the 5 watt handheld retails for under \$200 and the 25 watt mobile for under \$250. GCARC operates a repeater on 224.6 MHz with very good coverage. I hope to work you there.

In the April 2008 issue of QST there is a very good article on a packet radio program called Outpost designed for ARES/RACES use. It takes a lot of the drudgery out of using packet radio for digital messaging, making it a much more usable communications tool. I have enabled the mailbox function of the TNC that provides Winlink services on 145.07 MHz, so if you would like to try Outpost there is something for you to connect to. Outpost is also useable with Winlink, but in a reduced functionality mode. To use the EOC mailbox connect to GCMBX with Outpost. There are some bulletins posted there, feel free to add your own messages as well.

Group Build Project

By Cory Sickles, WA3UVV

The Rock Mite Group Build has been postponed, indefinitely. Sadly, no one expressed any interest in the project. I would like to know why that is. Perhaps all of you already own one and are having a ball using it on the air. Perhaps soldering is something you don't do well. Perhaps there is no interest in QRP, CW, or building things. Perhaps the project wasn't challenging enough. Anyway, I'd really like to hear from you and see if there is something that a group of would be interested in building.

Amateur News

By Cory Sickles, WA3UVV

Time was, when you wanted to get any news related to amateur radio, you had to copy the CW bulletins, subscribe to the ARRL Letter and/or wait for the monthly issues of 73, Ham Radio, CQ and QST to arrive in your mailbox. Thankfully, that's no longer the case. You can go to the League's web site and get all sorts of stories anytime. Same with a number of other on-line sites, as well.

If you are looking for something more "high tech", however, there are more alternatives. At Amateurlogic.com, you can watch a show put together by a small group of hams about different topics or see tours they've taken of manufacturer's sites and hamfests. On Soldersmoke.com, you can listen to programs about different technical topics and the host's ongoing interest in operating in Europe. Other sites like Twiar.org provide you with news stories from This Week in Amateur Radio.

As some of you have already noticed, I have been anchoring and reading stories for this service from time to time. There are long and short versions of these reports. All of the Podcasts from these sites can be played on your computer while you do something else in the room, or can be downloaded to your iPod or other media player.

If you get tired of hearing the weather forecast for the fourth time, listen to one of these either through the car radio or with an earphone (one ear only, please) while playing in traffic. As Bill Cosby says, "If you're not careful, you might learn something".

The Maunder Minimum, or Adjusting to Ham Radio Without Sunspots

By Darrell Neron AB2E

I have to admit, while over the years I had heard reference to an extended period in history when few or no sunspots were recorded, I did not remember the name for the phenomena until reminded by a recent post on the FRC reflector. I'm going to attempt to present as much information as possible to inform you of the possibilities of this event recurring, and the implications for ham radio.

History and the Maunder Minimum

The period of time referenced by the Maunder Minimum occurred from 1645 to 1715. During that time sunspots were recorded at a fraction of their normal frequency. Typical modern sunspot cycles would yield 40 to 50,000 sunspots in a 50 year period. From 1645 to 1715 only about 50 sunspots were recorded. Basically, 50 observed sunspots spread out over 70 years, means that for a number of years, no sunspots were observed at all. Edward Maunder, the British astronomer for whom the phenomena is named, also observed that the few sunspots which were observed were in the lower latitudes of the sun. This seems to reinforce something known as Sporer's Law (that the beginning of a solar cycle starts in the range of 15 degrees latitude, and drifts lower from there to about 7 degrees). It would appear that the cycles were never able to progress during those years.

Implications for Current Operating

Any amateur attempting recently to operate on the HF bands have been greeted with generally dismal conditions. Ten meters has been so dead that even big contesting stations had 0 QSOs there in the most recent ARRL DX contest for 2008. Fifteen meters has not been much better, with twelve meters somewhere between the two, but exhibiting occasional long haul openings for the diligent and patient operator looking for some of the active DXpeditions. Twenty meters is generally good during daylight hours for midrange communications, with occasional openings to EU from the US. The low bands are often touted as the bands to be on during solar cycle minimums. To a degree, this has been true, with lots of DX still appearing with relative reliability on 80M, and to a lesser degree on 40M. 160M requires decent antennas and hardware to work long haul DX, but the band has seen lots of activity in the past year. For the WARC bands, 30M seems the most reliable. The author has seen almost daily openings at least to EU, and has had no trouble working the major DXpeditions such as VP6DC and TX5C, which are quite long haul from the W2 area. 17M is not great, but at least comes alive for brief periods during the day.

The days of calling CQ on 10M with just a few watts and working around the world are over for the moment, and it appears it may be that way for sometime if the sunspots remain at such low levels. Hopefully, we will see a progression of activity in the coming months that will signal a normal cycle once again.

If the dreaded Maunder Minimum once again occurs, we would have to adjust to the new conditions. We would likely see more hams using higher power in order to achieve more QSOs. There would be a lot more activity on the low bands, since the high bands would not normally be open, and more limited

openings would be seen on 20M, and sometimes 40M.

Another good approach will be to improve your antenna system. A gain yagi will be more important than ever on the high bands. If you don't have space for yagis, at least try to raise your dipoles or put up a vertical with a good radial system. The point is to try to improve what you currently have; you will definitely need it for the next year two, even if a new Maunder Minimum does not occur.

As an interesting aside, the period known as the Maunder Minimum had great impact on the Earth's climate, the period being known historically as the Little Ice Age. During that time, temperatures fell globally dramatically, and snowfalls increased dramatically. Also, glaciers grew at rapid rates during that time. Many scientists feel there is a strong correlation between the level of solar activity, and climate conditions on Earth. The premise of the recent movie The Day After Tomorrow was a variation of the conditions found in the Maunder Minimum. If indeed a new Maunder Minimum were to occur, there could be considerable implications for everyday living, just as many are fearful of global warming. Some scientists such as Beckman and Mahoney feel that global warming may be a function of solar activity rather than manmade, with warmer periods occurring during greater solar activity. If their theory proves to be true, then we would not likely be entering another Maunder Minimum.

Editor's note: Thanks to Darrell for putting this together. It was shortened from Darrell's original version and the table's, pictures and references were deleted. If anyone wants a copy of the full paper send me an e-mail and I will forward it to you.

Gene-AA2YO

Technological Changes

By Cory Sicles,WA3UVV

There's an interesting web site where you can watch full episodes of some of your favorite television shows, both classic and contemporary, Fancast.com. Watching the old shows it is fun to reflect on just how much technology has changed since those shows were written. Police shows like Five-O and Dragnet have scripts that simply wouldn't work today as they have characters unable to be contacted by telephone when walking or driving, plus fingerprints and blood evidence were treated in a pre-DNA and pre-networked computer age. Still, it brings back memories seeing punch card readers and computers that took up entire rooms clacking away

Yes, technology has really changed since then. In fact, the world of just 20 or even 10 years ago is drastically different than today. Check out the changes in common home appliances like TV, computers, video games and even refrigerators. What about in the ham shack? How old is your rig? Does it have, DSP, IF shift, a stable digital VFO or is it fully solid state? What are your accessories like? When was the last time you checked and did some preventive maintenance to your antenna system? Things need to be upgraded. The rig that was the latest and greatest a decade ago is not any more. Even an "entry level" radio of today can beat the pants off a top of the line rig from the 70's.

Better weather is coming and the sun will have a good case of acne before you know it. Maybe it's time to try out one of the new rigs on the market and give some of those new features a try. Check out your antennas. Has water invaded or are spiders living in your coils? Do you need some help to access things or figure out what upgrades you should be looking at? That's why the Club has a Technical Committee. And that is why we meet the first Saturday of each month in Mullica Hill to discuss technical issues. Come join us at the Technical Information Exchange meeting.



APRIL **CONDUCTED BY N2SS** **2008**

WARC BANDS

<u>30 Meters</u>	<u>17 Meters</u>	<u>12 Meters</u>
W2YC. 312	N2SS ...325	WØMHK310
N2SS297	WØMHK.. 322	N2SS.....303
WØMHK ..279	W2YC 316	W2YC.....280
WA2NPD ..216	WA2NPD . 221	N2CQ.....99
AA2WN....171	AA2WN ... 122	WA2NPD...96
AB2E147	AB2E..... 122	AB2E92
N2CQ..... 111	N2CQ 115	AA2WN.....20

When the same call heads all 3 WARC bands we will have that elusive, undisputed **KING OF WARC**

160 Meters

W2YC..... 208	N2SS 79
WØMHK 152	AA2WN 36
AB2E 100	N2CQ 9
WA2NPD..... 96	

W2YC continues as our undisputed **Top of Top Band.**

RTTY **DIGITAL**

W2YC..... 287	N2SS 53
AA2WN..... 187	WA2JSG 10
N2CQ..... 151	

MOBILE DX

W2YC276	WØMHK 141
N2SS.....234	AA2WN 131

Looks like Dave and I have spent entirely too much time behind the wheel!

1.5K Club

W2YC1598	AA2WN 1369
N2SS.....1543	AB2E 1185
WØMHK 1478	N2CQ..... 1135
WA2NPD ... 1453	

Islands On The Air

N2SS.....846	AB2E 205
W2YC.....674	N2CQ..... 159
WØMHK381	

6 METER DXCC

WØMHK..... 106	W2YC.....38
N2SS55	AA2WN.....15

GRID SQUARES

WØMHK..... 540
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Rules for GCARC Honor Roll Listings
Provide me with your total IOTAs worked, or countries (including deleted) worked for: WARC Bands, 160 Meters, Digital modes, Mobile, 6 Meters or your total for 80,40,20, 15 and 10 for 1.5K Club. Final category is Grid Squares – just send me your total worked. Lastly, you do not have to participate in every category to be listed; just send me your totals for any of the categories listed.

CURRENT OFFICIAL ARRL DXCC STATISTICS

Active Count	338
Deleted Count.....	58
Last Addition.....	KH8/S
Last Deletion.....	STØ

April Birthdays

Congratulations to these members celebrating birthdays in April:

Irma Colabrese, N2FNF
Daniel Damiano, KC2ELC
Thomas Litle, AB2YG
Raymond Metzger, AI2B
Mike Mollet, N2SRO
Whitney Myers, KB2ZTL
Gregory Potter, WN2T



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 May issue:
4/26/2008

Club Web-Site

<http://users.tellurian.com/freddie/w2mmd/>

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

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

Cory, WA3UVV
Steve, W2TDS

GCARC Officers

Recording Secretary-Al Arrison, KB2AYU
Corresponding Secretary-Al Arrison, KB2AYU

Board of Directors

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

Trustees

Ray, WB2NBJ
Mike, N2SRO

Committees

ARES/RACES-John, AA2BN
Awards-Dave, W2YC
Budget-Steve, W2TDS
Clubhouse Site-Al, KB2AYU
Club License Trustee-Darrell, AB2E
Constitution-As needed
Crosstalk-Gene, AA2YO
Database-Ray, W2RM
DX-Bill, W0MHK
Field Day-Open
Hamfest-Harry, K2ATX

Hospitality-Ray, WB2NBJ
Membership-Ray, W2RM
Nominations-Doug, WA2NPD
Programs-Dave, WB3JOY
Publicity-Cory, WA3UVV
Repeaters-Al, KB2AYU
Scholarships-Greg, WN2T
Special Services, Darrell, AB2E
Sunshine-Ray, W2RM
Technical/TVI-Cory, WA3UVV
VEC Testing-Ray, W2RM

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)

April Meeting

SWR-Truths, Myths, and Urban Legends
by Alan Arrison, KB2AYU

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

