CrossTalk

Issue 60:08 60 Years Of Service To Our Community August 2019

2019 Club Officers

President :	**James Clark Sr, KA2OSV**
Vice President :	**Anthony Starr, WA2FZB**
Treasurer :	**Alan Arrison, KB2AYU**
Recording Secretary :	**John Zaruba Jr, K2ZA**
Corresponding Secretary :	**Ronald Block, NR2B**

Trustees - 4 year term

Mark Gottlieb, KK2L	***(2016-2019)***
Robert Fields, KC6AOH	***(2017-2020)***
Charles Lanard, KD2EIB	***(2018-2021)***
James Wright, N2GXJ	***(2019-2022)***

Board of Directors - 3 year term

Robert Durham, W2RAD	***(2019)***	**William Price, NJ2S**	***(2018-2020)***
Herb Dyer, KT2Y	***(2019)***	**Jeffrey Garth, WB2ZBN**	***(2019-2021)***
Charles Colabrese, WA2TML	***(2018-2020)***	**Jeffrey Welsh, KD2AZI**	***(2019-2021)***

This Month's Calendar

General Membership Meeting
Wednesday, August 7, 2019 @ 1930 Hours
Pfeiffer Community Center

VE License Testing Session
Thursday, August 8, 2019 @ 1900 Hours
Franklin Township Public Library

Tech Saturday Forum
Saturday, August 10, 2019 @ 0900 Hours
W2MMD Clubhouse

10 Meter Swap Meet
Saturday, August 10, 2019 @ 2000 Hours
Tune-In on 28.465 MHz or 28.475 MHz

Board of Directors Meeting
Wednesday, August 21, 2019 @ 1900 Hours
W2MMD Clubhouse

10 Meter Rag Chew Net
Every Tuesday @ 2000 Hours
Tune-In on 28.465 MHz or 28.475 MHz

2 Meter Rag Chew Net
Every Thursday @ 2000 Hours
Tune-In on the 147.180 MHz Repeater

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Gloucester County

Amateur Radio Club

2019 GCARC Family Picnic
60th Anniversary Special Event Station W2MMD/60
Saturday, August 17, 2019
W2MMD Clubhouse
1130 - 1500 Hours

We will have hamburgers, hot dogs, rolls, baked beans, and standard items like ketchup, mustard, along with chips, soda, water, coffee, paper plates, silverware, cups, napkins, and similar supplies covered by the Club. We have picnic tables with umbrellas already setup. We will have an additional canopy or 2 with tables and chairs.

If you would like, you can bring a little something extra like a side dish and/or dessert to share with others.

To celebrate our Club's 60th Anniversary, Mark KK2L will be operating Special Event Station W2MMD/60

Please e-mail Jeff WB2ZBN at : jeff.garth@comcast.net with a list of things you will be bringing to the Picnic.

President's Message

Dear Fellow Members,

Can you believe it, It's August ALREADY. Time sure flies bye quickly when you are having FUN. Field Day 2019 is history and how did we do, as compared to the rest of the country? Well we are just going to have to wait until the results are posted in QST come December. All in all, I think things went pretty well, the food was GREAT; all stations were on the air at 1400 Hours and there were no injuries reported. I want to thank everyone who came out and participated in Field Day this year. I have established a Field Day committee, something we have never had before, to discuss Field Days past, present and future and the lessons learned. My intent is to improve on the ways we go about FD each year and to improve attendance at this very important event. There is only 325 days till Field Day 2020.

Don't forget our Annual Club Picnic on Saturday, 17 August 2019 from 1130 Hours until 1500 Hours at the W2MMD Clubhouse site. COME ONE COME ALL - bring your wives, your girlfriends, and the kids. If you would like to bring a covered dish or some dessert, bring that too. I promise everyone a GOOD TIME. We will also be having a Special Event Station on the air, if you care to operate. Our hosts will be Jeff WB2ZBN and Herb KT2Y.

The GCARC Hamfest is to be held at the 4-H Fairgrounds, Mullica Hill, NJ on Sunday, 15 September 2019 at 0600 Hours. As most of you may already know, this is our biggest source of income for the Club. However, to make this event a true success takes many volunteers. I am asking everyone to do their part and remember if you work the Hamfest buying a ticket is OPTIONAL. Please see Sheldon Parker, K2MEN or Bill Price, NJ2S for further details and to get your name on the list of volunteers. Let's all work hard to make this years Hamfest our very best.

This is your Club and I would like to hear from you and address any concerns you may have. If you cannot make it to a General Membership Meeting or a BOD Meeting, you can e-mail me at **kuffeekup@verizon.net** or give me a land line, if you care to chat. My phone number is 856-962-7458.

If any member needs a ride to any of our Meetings, Events, or Activities, please post your request with an e-mail via the Club reflector at **gcarc@mailman.qth.net**.

This year marks the 150th anniversary of the birth of ARRL's first President and co-founder Hiram Percy Maxim, W1AW, born on September 2, 1869.

This month, we welcome two new members : **Jackson Snyder AI2D** of Deptford and **Philip Mastroeni KD2SGG** of Wenonah. Welcome and hope to see you on the Radio!

Well that's about it for now. See you all in the pile-ups.

73 es God Bless Us All

JIM CLARK, USN (Ret.)
KA2OSV
President GCARC

"Ask not what your Club can do for you, but what you can do for your Club"
- KA2OSV

August 7, 2019 General Membership Meeting

Carol Richards, N2MM

The 10 Commandments of DXing & Contesting

Carol will also be a guest speaker at our Hamfest Programs Forum

Plus hamfest volunteer sign-ups and picnic food sign-ups

Welcome New Club Members :

Jackson Snyder, AI2D, who has an Amateur Extra Class license and lives in Deptford, NJ.

Philip Mastroeni, KD2SGG, who has a Technician Class license and lives in Wenonah, NJ.

We are glad to have you as members of the Club and hope to see you regularly at Club meetings, events, and activities.

At the August 7th General Membership Meeting, Sheldon Parker, K2MEN, will be signing up volunteers for our hamfest in September. You can also sign -up on our website by going to the "2019 Hamfest Sign-Up Sheet" page.

Look over the list of activity positions or if you just want to help out your Club , select "Other" at the bottom (we can always use more helpers).

Our General Membership Meetings are broadcast live on Periscope.TV

If you have an Android or iOS device, go to the app store and download the Periscope application

Using the search function, just search for W2MMD

Need a ride to a Club meeting, event, or activity?

Just send a message to the Club's e-mail reflector asking if a member can pick you up

GCARC <*at*> MAILMAN <*dot*> QTH <*dot*> NET

All Club members have access to this FREE e-mail service

Tech Saturday Forum
August 10, 2019 @ 0900 Hours
W2MMD Clubhouse

Open Discussion Of All Amateur Radio Related Topics

We would like to invite all of our new members as well as our veteran members to our Tech Saturday Forums to help answer any questions and discuss any and all issues the new members have come across as they progress through the ***Amateur Radio Experience.***

The Discussion Theme is a QSO starting point - a way to initiate a conversation. All Tech Saturdays are an open QSO of all subjects of Amateur Radio interest.

All questions are welcome as well as a venue for hams to show off their latest ham radio projects or gadgets. Have a problem programming that HT, we can help! Not sure what radio or antenna to buy, we can help!

All Club Members who would like Clubhouse access to use its radio equipment would have to have some brief "Elmering" on the Clubhouse rules, such as using the alarm system, the A/C and heaters, the antenna system, and the radio equipment.

All are welcome - Hams and Non-Hams - Club Members and Non-Club Members. Take a guided tour of our Clubhouse. Visit our HF and VHF/UHF/Satellite Operation Facilities and our vast antenna farm.

As always, refreshments and snacks will be served at every Tech Saturday.

The Tech Saturday Forum is held on the Saturday after the General Membership meeting.

Best Down Jersey DX Picks

August 2019

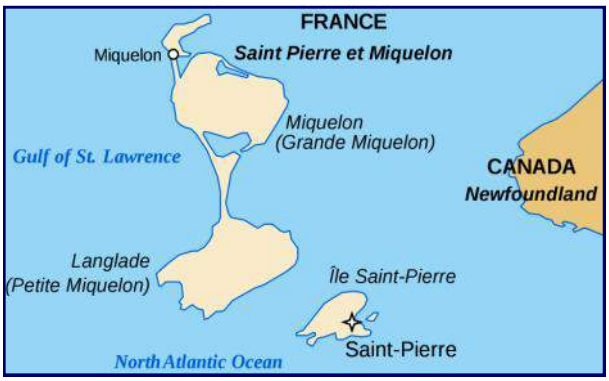
By Bill Grim, W0MHK

CALL	DATES	HIGHLIGHTS	DIFFICULTY (5=MOST RARE)	ENTITY
HC2	08/01 - 09/01	160-6M/?Modes?	1	Ecuador
VK9APX	08/01 - 08/10	40-17M/CW, FT8	3	Lord Howe Island
OH0UDG	08/03 - 08/17	80-6M/CW, SSB, Digital	1	Åland Islands
5R8PX	08/03 - 08/17	HF/SSB, Digital	3	Madagascar
8Q7GB	08/06 - 08/18	80-15M/CW, SSB, FT8	3	Maldives
TO5M	08/10 - 08/18	160-6M/CW, SSB, FT8	1	Saint Pierre & Miquelon
OJ0O	08/17 - 08/24	HF/?Modes?	2	Märket Reef
H44	08/23 - 09/02	80, 40, 20, 15, 10, 6M /SSB, FT8, RTTY	3	Solomon Islands
9U3TMM	08/31 - 09/17	60-6M/SSB, FT8, RTTY	3	Burundi

Credits : NG3K Announce DX Operations : www.ng3k.com/Misc/adxo.html

Entity Of The Month : Saint Pierre & Miquelon

Saint Pierre and Miquelon, officially the Overseas Collectivity of Saint Pierre and Miquelon, is a self-governing territorial overseas collectivity of France, situated in the northwestern Atlantic Ocean near the Canadian province of Newfoundland and Labrador. It is the only part of New France that remains under French control, with an area of 93 square miles and a population of 6,080 at the January 2011 census. The islands are situated in the Gulf of St. Lawrence near the entrance of Fortune Bay, which extends into the southwestern coast of Newfoundland, near the Grand Banks of Newfoundland. They are 2,373 miles from Brest, the nearest point in Metropolitan France, and 16 miles from the Burin Peninsula of Newfoundland.



Portuguese João Álvares Fagundes landed on the islands on 21 October 1520 and named the St. Pierre island group the 'Eleven Thousand Virgins', as the day marked the feast day of St. Ursula and her virgin companions. They were made a French possession in 1536 by Jacques Cartier on behalf of the King of France. Though already frequented by Mi'kmaq people and Basque and Breton fishermen, the islands were not permanently settled until the end of the 17th century: four permanent inhabitants were counted in 1670, and 22 in 1691. In 1670, during Jean Talon's tenure as Intendant of New France, a French officer annexed the islands when he found a dozen French fishermen camped there

www.wikipedia.org/wiki/Saint_Pierre_and_Miquelon

DA's and DIT's

Gary Reed, N2QEE, reports about the July 11, 2019 VE Licensing Session :

- 2 Candidates :
  - **Joseph, KD2SHJ** - Upgrade to General Class
  - **Stephen, KD2SJU** - New Technician Class

The VE's attending were : **Jim N2GXJ, Frank W2FJM,** and **Urb W1UL.**

The **World Wide Radio Operators Foundation ("WWROF"),** in collaboration with the **Slovenia Contest Club ("SCC")**, is pleased to announce the first annual **World Wide Digi DX Contest** ("WW Digi"). The new contest taps into the excitement being generated by the new digital modes pioneered by Joe Taylor K1JT and the WSJT-X development team. The contest will occur over 24 hours on **August 31 and September 1, 2019** using the FT4 and FT8 modes on the 160, 80, 40, 20, 15, and 10-meter bands. The full rules and other information are available on the WW Digi DX contest website at : **www.ww-digi.com**

A Big Club Get Well to Ken Newman, N2CQ.

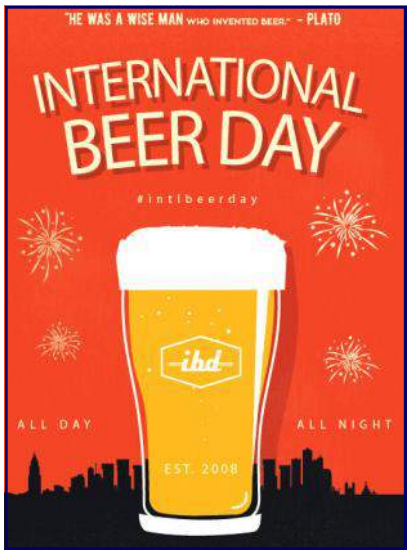
Bill Price, NJ2S, reports about helping Club member **Bob Gibison, KB2YBQ**, put up an HF dipole and setting up an HF radio. Hope to see you, Bob, on the air soon!

Jeff Garth, WB2ZBN, reports, I was sent this ARRL Radiogram on July 17, 2019 :

#855 Routine K9ZMI 14 Arlington Heights, IL July 14
TO: Gloucester County ARC W2MMD c/o Jeffrey Garth WB2ZBN
Thanks for 6A SNJ contact on forty meters in 2019 ARRL FD contest x-ray, 73 Dennis K9ZMI

A nice QSL confirmation to our Field Day contact!

Jim Wright, N2GXJ, reports, As mentioned earlier in the July edition of CrossTalk, the next version of the "WSJT" software suite, which includes the new FT4 digital mode, is now generally available. Have at it world! Already, 14.080 MHz is quite busy with the FT4 signals. Included there right now is K2M, one of the Apollo XI special event stations on the air there in this mode. If interested, the official site to download it from is : **www.physics.princeton.edu/pulsar/k1jt/wsjtx.html**. There is an updated user's manual, worth reading, linked from there also for this new 2.1.0 version.



August 2, 2019

Herbert L Schuler, K2HPV

February 10, 1926 - July 24, 2019

President 1977
Club member since 1967

Herb was a real gentleman. I first met him in 1967 when I got my novice at age 15 (WN2BVV). I was attending my first GCARC meeting in Pitman. Herb was one of the first to welcome me to the club and was always a big help when I had antenna questions.

RIP Herb, you will be missed.

73
Darrell AB2E

Very sad day for me as Herb was a great guy and always looked forward to seeing him at field day when I was just a young 25 year old new to field day operations. I was always asking members if anyone had heard from him. He was one of the original 40 meter cw guys. Talk about a really nice guy.

RIP my friend. Thanks for the short time that I knew you.

Merrill
WK2G

Herb introduced me to QRP CW and the G-QRP and QRP ARCI clubs back in the late 80s...

RIP Herb.

73,
John K2ZA

Obituary can be found at : **www.mcbridefoleyfh.com/obituaries/Herbert-Schuler-2/#!/Obituary**

60 Years Ago This Month
1959 Club History : Part 8

THE OFFICIAL PUBLICATION OF THE GLOUCESTER COUNTY AMATEUR RADIO CLUB

Volume 1 : Number 5 **August 1959**

Where : Owens-Illinois Onized Club House, Glassboro, NJ
When : August 5, 1959 @ 2000 Hours Sharp
Who : All members and interested parties
What : Regular meeting of the Gloucester County Amateur Radio Club

- **Pictures and films of the Field Day operation**

de K2JKA

Well, I've just about recuperated from the Field Day, although a few minor wounds are still apparent. I found out that the combination of sweat and sand don't come out of white socks so easily. By the way I have one pair of sandy headphones that I didn't have before Field Day, if they are yours, grab me at the next meeting.

Starting in this month's issue we have part one of a series of articles on the subject of satellite tracking, written by **Dave Gross of Paulsboro, ex W2HMP.** Let me know if you like these types of articles.

I am still looking for articles! How about you writing one! Anything that you would like to write about is accepted.

CROSSTALK STAFF
Editor : Jack Layton, K2JKA
Assistant Editor : Al Roche, K2HHJ
Swap and Shop : Ray Gianchetti, WA2CUB

Lou Seeberger, W2TNB, has moved to sunny California from Woodbury and he hopes that he can work the boys back here soon, so keep an ear out for him.

Due to circumstances before the publication deadline, Swap and Shop will not be in this issue. Look for it in next month's.

THRU THE CO-AX

Way back in 1914, a young teenager visiting neighbors a block away from his home became interested in amateur radio by virtue of the fact that they were ham radio operators, Preston Polk and Ed Patterson, 3BP. It wasn't long after that he had built up his own receiver and transmitter and was copying code from the commercials such as NAA, 4C3, and POZ in Germany. In 1918 at the age of sixteen he enlisted in the army and saw service in

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Plattsburg, NY. When he returned home, he got back on the air using the "self assigned" call 3JM. Shortly there-after he took the regular examination and was assigned the call 3JM by the Department of Commerce on January 27, 1920.

His first rig was a 1/4 KW spark, then a 1/2 KW, and finally a full gallon. His best DX from Merchantville was 5ZA in Roswell, New Mexico, and 7CC in Moscow, Idaho. This you may recall was down around 200 Meters (1.498 MHz or what is now the upper end of the AM broadcast band) where radio as we know it had its beginnings.

Our young friend used to sit for hours and copy 1HAAA up on Cape Cod, old Ed Vermilya, 9ZN Harry Mathews in Chicago and 5ZA Lou Falconi in Roswell. They didn't have TV sets way back there and radio was still in its infancy, but even then the ugly head of interference was rearing its ugly head. Every time the old spark transmitter was keyed the lights in the area would start blinking at 20 or so words per minute. And this situation was brought to the attention of our young friend on many occasions.

As ham radio grew so did our young friend push pull 45's etc. In the year 1936 our ham moved to Chicago and became W9EVG, from there to the west coast where during the war he was stationed at the Santa Anna Air Force Base, where he was commissioned a major. He returned to New Jersey in the year 1945 and was given the call W2RFS, but this call was never used because within a month the FCC issued him his present call because of his long activity on the air.

He left the good old spark days in 1924 by the way. He recalls putting a 1/4 KW transformer in the basket of his bicycle and pedaling all the way from Merchantville to Laurel Springs to sell the thing so he could buy a 1/2 KW transformer.

One evening as he sat glued to the receiver, he heard 3BQ, Gordon of Camden, NJ, who was on board ship in the Caribbean Sea in the middle of a great storm, sending QST QST (contact mother and notify her that he was alright). This he was only too glad to do, and perhaps that is why even today and especially over the holidays he can be heard on 10 Meters phone patching the boys overseas to their loved ones in the states and never asks that the toll be paid on a patch, bearing the expense himself. He is at this writing 57 years old has a wonderful wife who is always after him to spend a little loot for radio gear and a daughter who is his private chauffer in the summer months. Barbara, his daughter, will enter college in the fall. His home and shack is located in Jacksonville. Most activity is on 10 Meters, but he does work all bands with a DX-100 and SX-96 receiver. Loves to Ragchew.

He is now the president of the Gloucester County Amateur Radio Club and radio officer of Gloucester County. This then is a brief story in the life of **Frank Van Turner, W2KE**, who was instrumental in organizing our radio club…AR

FIELD DAY

Well now that it is past, we can look back and laugh. I don't think I can remember any time that I was so hot, gad!, so much sunburn or so sandy. However, on the brighter side, I had a swell time and I am sure that all those who took part did likewise. With all the setting up to do, tents to go up, equipment to hook up, it seemed for awhile that it was just going to be too much, but with George Stuart, K2SOL's guidance and direction, things finally got shaped up to the point where things looked like they were about set to go, at least

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all this work looked like it was going to pay off. George was sure hoping so anyway. To add to the problem it seemed as though there was an itinerant mocking bird that wanted to get into the act.

Transmitters were put on the air on 10, 20, 15, 40 and 80 Meters with beams on 10 and 2. A trap on 40 and 80 and a vertical, it looked like a real antenna farm up there on Woody's hill HIHI! Fortunately there were no major difficulties that Jack and his crew of maintenance men couldn't handle and things were ready to roll on Saturday with a minimum of crosstalk between rigs. Novices were operating on 2 and on taking turns on 80 CW and I believe that we have quite a few good contest operators in the making.

I would like to mention the names of all those that took part in the operation, but I am afraid that some would be missed, so I think that it would better if we waited until the next issue to be sure that no one is slighted.

A lot was learned during that historic weekend. For instance...Jim Livezy, K2SJL, learned that you need gasoline to run the generator and also how to put the radiator cap back on. Charles Sketchley, K2PQD, found out that a tent can become a Turkish bath in the hot sun. And last but not least, George found out that you need a frying pan to fry eggs. Yours truly K2JKA, learned that too much sun can lead to misery. Publicity wise, we had a good picture on the cover of the Woodbury Daily Times. Thanks to the efforts of Jack Layton, K2JKA and Johnny Struckel of WKDN, a ten minute tape of the field day site operation was broadcast over their facilities the following Friday nite. The club owes a great debt of gratitude to all who took part in the effort.

Especially to George Stuart, K2SOL, for the wonderful job he did in coordinating things and running things so smoothly with a minimum of confusion. Well done, George.

To all the operators for their time, effort, and patience, you are to be congratulated on a good job.

To Dempsey's Truck Service of Mantua for their kindness and co-operation.

To Bill Hopely's Mobil Service of Barnsboro for his generosity in hauling the generator to and from the site free of charge.

To Dink Wilkinson for the use of his truck over the weekend and any others that I may have missed, we want to express our sincere appreciation.

As I have it, we made 534 contacts and a score of about 3400. Not bad for a first try. George will have a report at our regular meeting. See you there!

The First In A Series Of Articles

The Radio Observation of Artificial Satellites
By S. D. Gross, ex-W2HMP
Paulsboro, NJ

The age of artificial satellites was introduced to the world on October 4, 1957 when Russia successfully launched its first satellite. This satellite was immediately dubbed "Sputnik" in the daily press releases.

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Fortunately this satellite (Sputnik 1) radiated radio signals on the frequencies of 20.005 and 40.002 megacycles so that many radio amateurs could tune there all band receivers in on one of these frequencies and hear the historic beep - beep - beep. Anyone who listened with reasonable care soon noticed that the signal appeared about once every 96 minutes and the steady beeping could be followed for 25 to 35 minutes.

The world had hardly recovered from its shock due to Sputnik 1 when Russia successfully launched Sputnik 2 on November 3, 1957. This time the satellite had a living passenger (Laika the dog) and again the radio signals were on the frequencies of 20.005 and 40.002 megacycles so that again radio amateurs could easily listen in.

The United States seemed to be having bad luck with its rockets especially with its Vanguard vehicle. Success was finally achieved when the US Army launched Explorer 1. This time the radio amateurs could not listen in on the radio signals unless previous preparation had been made. Explorer 1 radiated at an initial power of 0.06 watts on 105.03 megacycles and at an initial power of 0.01 watts on 105.00 megacycles, these frequencies not being in the tuning range of the usual amateur radio receiver. Many no doubt thought of using their broadcast FM tuners, but on second thought, they realized that the sensitivity of the average FM tuner was inadequate.

In March, there was rapid progress in the satellite age. On the 17th, the US made a successful Vanguard shoot and as a result Vanguard 1 went into orbit. This time the radio signal on 105.03 was obtained by a solar powered transmitter with an initial power of about 5 milliwatts, (this radio signal being radiated only while the satellite was in sunlight). On March 26 the Army's Explorer 3 was placed in orbit. The orbit of Explorer 3 turned out to be more eccentric than intended and as a result the satellite did not have a long life. Explorer 3 radiated signals at the same frequencies as Explorer 1 as will apparently all future vehicles launched by the United States.

This year has seen many satellites launched and some are still in the heavens and there will no doubt be many more. On March 27, President Eisenhower announced the approval of the Defense Department's plans to send up several lunar probe vehicles. A failure of the first lunar probe was experienced on August 17, but the odds are that a successful launch will be made. If a radio amateur wants to experience the thrill of listening to these signals from outer space, he will need 105 megacycle receiving equipment.

To be continued in the next issue

Newsy Notes

Al Roche, K2HHJ, and **Jack Layton, K2JKA,** recently paid a visit to **Mal Mason, W2MMD's QTH**. That’s a real nice crank up tower you have there, Mal!

George Stuart, K2SOL, camped up in the Pocono Mountains on his recent vacation. He really got warmed up to the idea on the field day trip.

Al Roche, K2HHJ, lost all his antennas in the recent storm along with the chimney that held them up. Temporarily QRT.

If any of the younger fellows getting started find it a little hard financially to get those needed parts, get in

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touch with **Frank Van Turner, W2KE**, on the whereabouts of a stockpile of used but good parts.

Starting in the next issue of your paper, **Bob Hoy, WA2PFJ,** will begin his question and answer problem column. If you need an answer to a question contact Bob of Glassboro. He tells us that if he hasn't got the answer he knows where to get it. So here's your chance.

Many thanks to the XYL of **Frank Van Turner, W2KE**, for the wonderful reception we received on our recent visit. Mrs. Van Turner, we certainly want to thank you for a wonderful evening.

Don't forget the board of directors meeting that is scheduled prior to the regular membership meeting. Please be prompt as there are several things of importance to be discussed. August 5, 1959 @ 1930 Hours Sharp.

There is still a lot of space in this column to get your activities mentioned so what say…Wots Cookin???

We are hoping that in the next issue we will have a complete list of all officers and committees listed and possibly their phone numbers.

The refreshment committee, **Della Parker, W2AFZ,** and **Woody Frantz, K2AQL,** are doing a swell job back of the counter. Don't forget the kitty when you go by.

Just a reminder to all to be careful when you use the facilities at the clubhouse. We should all be mindful that we do not damage anything or jeopardize our welcome to our wonderful meeting place.

Wonder who the oldest and youngest club member is? Or won't they say? HIHI.

Code classes are showing quite a bit of interest and there has been talk of holding sessions on a weekly basis. If you are interested you might let the instructors know and it just might be arranged.

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, August 5, 1959

The meeting was called to order by the Club Treasurer Horace Simpson W2JOZ, in the absence of the President and Vice President @ 1910 Hours.

The secretary's report was read and approved after a minor correction.

The treasurer's report showed a balance of $264.14 as of this date. The Club approved payment of $2.91 to Albert Roche K2HHJ, covering mailing cost of "CrossTalk".

George Stuart K2SOL, reported on the Field Day activity of the Club and announced our score to be a total of 3,450 points.

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Question was raised from the floor concerning steps taken toward incorporation and when said question could not be answered by the presiding officer, it was taken under advisement.

The following visitors were introduced :

- Clifford Lloyd W3LIB/2
- Paul Walton W2YNR
- Eric Walton WV2FMO
- Dr. John Laurusonis W2IVZ
- Richard Mehner W2PQU

A discussion followed regarding transmission of code practice by the Club and an appeal was made for a code punching machine.

Meeting adjourned @ 1953 Hours.

Movies were shown covering some of our Field Day activities by Paul Scarpa, W2HSE.

Signed : Edwin S Stetser Sr, K2JJC, Recording Secretary

Remote HF Station : Now Available To Club Members

By John Hill, W2HUV

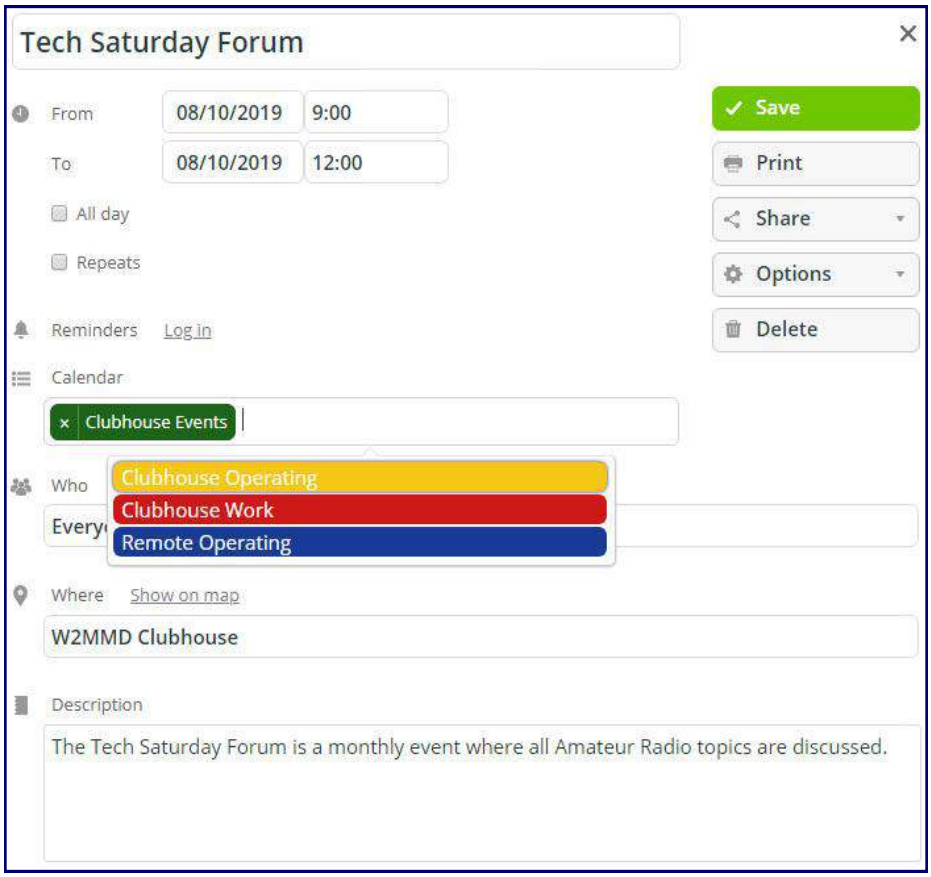
The Remote HF Station is finally ready for prime time. The station consists of an ICOM IC-7300 transceiver, a 54 foot crank-up tower with a 12/17 Meter beam, a 10/15/20 Meter beam, a 40 Meter beam, a common rotator and an inverted-V for 80 Meters. Free software available from **RemoteHams.com** is used for remote control. The **RCForb Server** is used at the Remote station (W2MMD IC-7300) and the **RCForb Client** is used at the Control station (your Windows laptop or PC).

Help topics are provided under "Remote HF Station" on the GCARC website. Prospective users are encouraged to read **Getting Started.PDF** and install the **RCForb Client** as directed. That includes sending an email to **w2huv@arrl.net** requesting addition to the **Authorized User List.**

Clubhouse Calendar

Whether you are going to the Clubhouse to operate or using Remote Operating, all users are required to use the "Clubhouse Calendar" on the website to book time slots for operation. See page 16 on how to use the Clubhouse Calendar

Clubhouse Calendar



Whether you are going to the Clubhouse to operate or using Remote Operating, all users are required to use the "Clubhouse Calendar" on the website to book time slots for all operating.

1. There are two ways to access the Clubhouse Calendar : Go to Clubhouse Calendar menu on the left hand menus on the website or click the Clubhouse Calendar button on the Remote HF Station page.

2. Select a date and click on a time slot.

3. Enter the event title (e.g., CQ WPX CW Contest, etc).

4. Make sure the date and time are set. It defaults to one hour, but you change it for more time.

5. Under the **Calendar** field, you have four options :

- **Clubhouse Events** is used for such things as Tech Saturday or the Board meeting.
- **Clubhouse Operating** is used if you are going to the Clubhouse to operate, either using the IC-7300 radio or bringing your own radio.
- **Clubhouse Work** is used if you planning to do some work at the Clubhouse such as cut the grass, weed whack, paint the shed, etc.
- **Remote Operating** is used if you will be operating the IC-7300 remotely.

6. Under the **Who** field, just enter your name and callsign.

7. Under the **Where** field, enter W2MMD Clubhouse if you will be there, blank if you are remoting.

8. Under the **Description** field, type a brief description of what you will be doing (e.g., remote operating for a contest, cutting the grass (hint-hint), etc.).

Be advised that everyone is an administrator on this calendar, so yes, you can delete someone else's appointment. So let's have a little respect for our fellow members and use this calendar correctly.

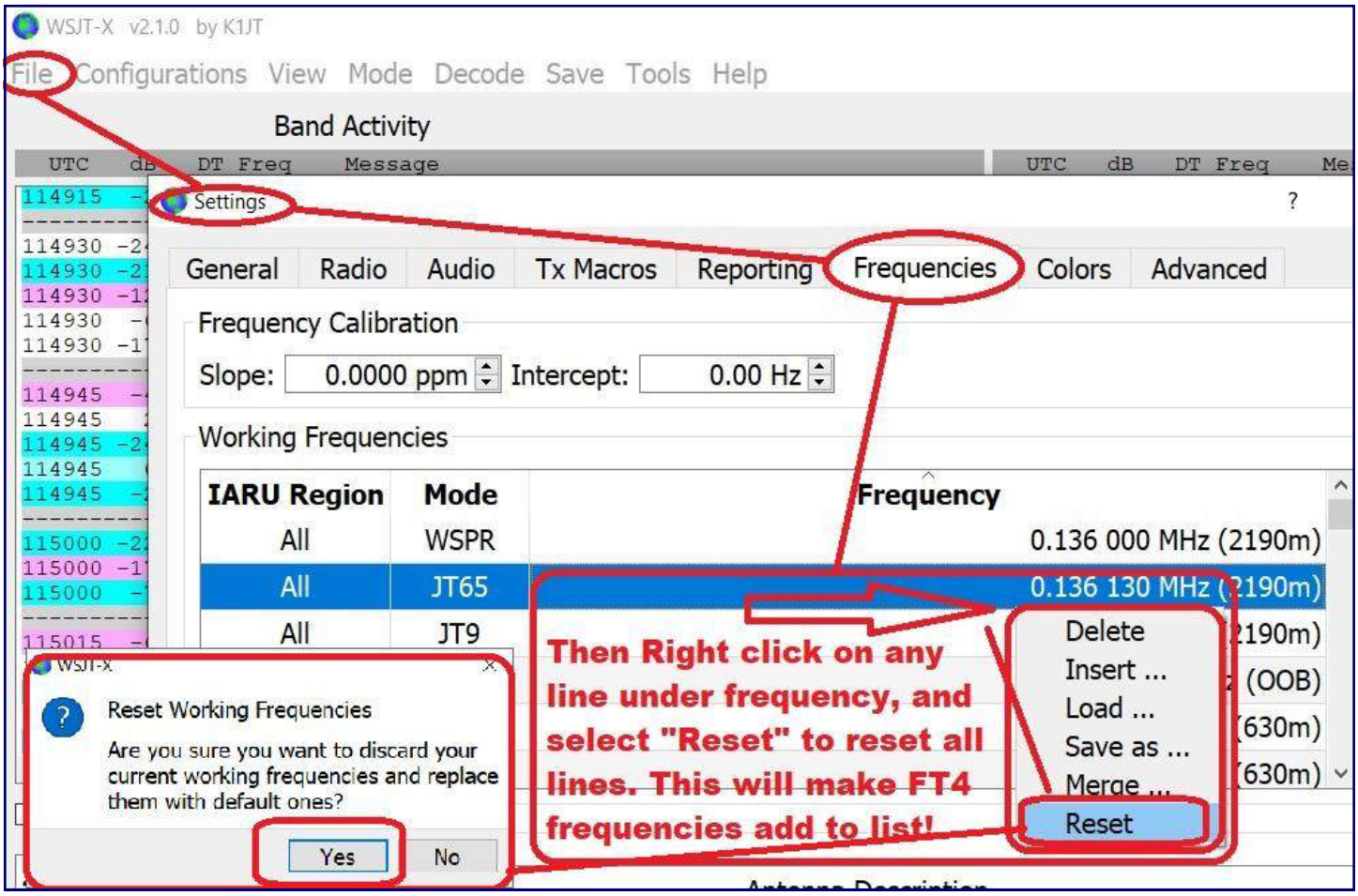
The Teamup Calendar app is available for iPhone and Android devices. Once the app is installed, the URL to enter into the app is : **https://teamup.com/ksfzzr4y6atkr45biv.**

How-To Fix Frequencies List To Use For FT4

By Jim Wright, N2GXJ

A common problem seen when upgrading WSJT-X to the latest version 2.1.0 is that, when you switch the mode from FT8 to the new FT4 mode, the displayed frequency, such as 14.074 on 20 Meters, gets highlighted in bold red. This indicates you are not on the "normal" frequency for use of the FT4 mode on this band. But the common problem is that you can't select the drop down on the left to pick the right frequency for the FT4 mode because the suggested working frequencies for the FT4 mode don't seem to have been added during the software install. How to fix this?

It is actually quite simple. You just need to reset the working frequencies. The trick is figuring out how to do that. See the screen picture below to illustrate how this is done. Once you do this for 20 Meters, you should now see 14.080 as the suggested working frequency. That's it! Good luck and have fun!



IARU President Offers Assurances Regarding French 144 - 146 MHz Allocation Proposal

International Amateur Radio Union (IARU) President Tim Ellam, VE6SH/G4HUA, said his organization empathizes with the concerns of radio amateurs worldwide regarding a French proposal to allocate 144 - 146 MHz to the Aeronautical Service on a primary basis, essentially sharing it with Amateur Radio. The band is currently allocated to Amateur Radio on a primary basis around the world. Ellam this week offered assurances that the IARU is on top of the matter, which is still a regional issue, and is already working to keep the band in the hands of radio amateurs. While the issue could end up on the agenda of World Radiocommunication Conference 2023 (WRC-23), a lot would have to happen first.

"There is a lot of misinformation circulating as to what the proposal is seeking and how IARU is responding to it," Ellam told ARRL. "While the proposal is a concern, petitions and the like, while well intended, are going to have very limited value and, in fact, may harm the steps being taken in the regulatory environment."

The French proposal, submitted last month to a pre-WRC-19 European Conference of Telecommunications and Postal Administrations (CEPT) meeting, included 144 - 146 MHz within a range of frequencies to be studied for future airborne, non-safety applications in the Aeronautical Service. Germany opposed the move, and IARU "objected strongly," Ellam said. "Nonetheless, the proposal was carried forward to the next meeting of the CEPT Conference Preparatory Group in late August." IARU anticipates that other countries attending the August meeting will oppose the inclusion of 144 - 146 MHz as a frequency range to be considered for the WRC-23 agenda, Ellam said.

IARU President Tim Ellam, VE6SH/G4HUA

Since the June meeting, IARU Region 1 (Europe, Africa, and the Middle East) has asked its member-societies to contact their national administrations (i.e., governments) to explain the importance of the 144 - 146 MHz primary allocation, Ellam recounted. "IARU is also taking other actions to make its views known to those involved in the proposal," he said.

"If accepted as a WRC-23 Agenda Item, this proposal would require 4 years of studies by administrations," Ellam stressed. "Considering the challenges of sharing spectrum with aeronautical systems, it seems inevitable that the conclusion of such studies would be that sharing with a widely used part of the amateur spectrum presents too many problems to be viable."

Ellam encouraged individual radio amateurs who want to help to become members of their IARU member-society. "If anything," Ellam concluded, "this recent news should serve as a timely reminder that defense of the amateur spectrum does not just happen. Your member-societies and the IARU constantly work at defending the amateur allocations." **Read more**.

Article Credit : The ARRL Letter for July 11, 2019 - www.arrl.org

ARRL Announces "Happy 150!" Hiram Percy Maxim Birthday Celebration

This year marks the 150th anniversary of the birth of ARRL's first president and cofounder Hiram Percy Maxim (HPM), W1AW, born on September 2, 1869. ARRL will hold an operating event to celebrate HPM's legacy, getting under way at 0000 UTC on August 31, and continuing until 2359 UTC on September 8. The event is open to all radio amateurs.

The goal is straightforward : Contact as many participating stations as possible. W1AW and all ARRL members will append "/150" to their call signs during this event (DX operators who are ARRL members may identify as <call sign>/150, if permitted by their country of license.) Participating stations will exchange signal report and **ARRL/RAC Section**. DX stations will send signal report and "DX." Those taking part may use all Amateur Radio bands, excluding 60, 30, 17, and 12 meters.

Permitted modes : CW, phone (any voice modes), and digital. Submit Cabrillo log or ADI files. ARRL will calculate all final scores based on participants' uploads to the ARRL event web app (link not yet active).

The 84 available multipliers only count once. These include the 83 ARRL/RAC Sections (RAC Sections include the Canadian Northern Territories, encompassing VE8, VY1, and VY0) and DX. The W1AW operating schedule during this period may be adjusted as necessary to accommodate on-air celebration operating activities. Contacts with W1AW/150 will earn 3 points each. Contacts with any ARRL member will earn 2 points each. These stations will also identify as <call sign>/150. Contacts with nonmembers will earn 1 point each.

Participants can earn 150 bonus points by :

- Contacting W1AW/150 on each band and mode
- Uploading entries (ARRL members only)
- Using social media to publicize this event and/or participation before, during, and/or after the event
- Operating with 5 W PEP output or less throughout the event
- Making at least 20 contacts while operating portable
- Completing at least 150 contacts

Online certificates will be awarded, and are available **via download** only.
Updates and results will be **publicized**.

There are no power or operator categories. Participating ARRL members who use Logbook of The World (LoTW) are encouraged to create a separate **LoTW certificate** for uploading <call sign>/150 contacts. Members then should upload logs for this event using their /150 certificates. Submissions must be via the online web app. No email or paper submissions will be accepted.

Article Credit : The ARRL Letter for July 11, 2019 - www.arrl.org

Building The Raspberry Pi NOAA Satellite Station

By Jon Pearce, WB2MNF

After building the **station** to receive the GOES geostationary weather satellite, constructing the NOAA satellite station was a relative breeze. The NOAA series of satellites (NOAA 15, 18 and 19) are much more similar to amateur satellites than the GOES satellite - they operate in the 137 MHz band, are in low-earth orbits and transmit analog images rather than the complex error-corrected digital images of the GOES satellites. I simply followed the "**Instructables**" project design and it mostly worked the first time.

The overall concept is simple - the project uses a inexpensive **RTL-SDR** radio and a **Raspberry Pi** computer along with free software that you install on the Pi. There are several components to the software - first it uses the Gpredict program to set up times (cron jobs) for each satellite based on the next pass for each of the three satellites. At the scheduled time the Pi runs a script that will enable the RTL-SDR receiver, set it to the frequency for the respective satellite, and will pipe the output to the wxtoimg program that will record the output in a format to be processed. At the end of the pass the wxtoimg program will process the output into images based on the parameters given to that program. It will then schedule the next pass for that satellite and go dormant again until the next satellite pass.

Change to instructions

The instructions from the **Instructables** site were quite accurate and helpful, with one exception - they reference the original website for the wxtoimg software. But apparently the author of that software has disappeared, it's no longer being supported and the original wxtoimg.com website no longer exists. That meant that anyone wanting to use this program (which is outstanding and apparently used by everyone decoding this data) had no place from which to download it. Fortunately a guy named Kevin Schuchmann created a site called **WxToImg Restored** with all of the code for downloading as well as the keys to unlock the premium versions of the programs. Therefore, when the Instructables instructions say to get the wxtoimg file here : wget http://www.wxtoimg.com/beta/wxtoimg-armhf-2.11.2-beta.deb
you need to instead use this site : wget **https://wxtoimgrestored.xyz/beta/wxtoimg-armhf-2.11.2-beta.deb**

Otherwise everything worked fine for me.

Image output

The program places the RTL-SDR output file and the decoded images in the /home/pi/weather folder, so that's where you'll find them for viewing. Sooner or later we'll need to do some cleanup on that folder, but the images are pretty small so it's not an immediate concern.

Although wxtoimg can produce multiple decoded images from the downloaded data the Instructables project only used one of them. K2QA and I played around with the Windows version of the program and its output and figured out a couple of additional command line options that can be added to produce additional images. They're shown in the script in Figure 1 on page 21, which is in the /home/pi/weather/predict folder. These produce the images in Figure 2, Figure 3 and Figure 4 on page 22.

Adding pictures to the website

Viewing the images on the Pi is a little cumbersome so we wrote a script to find the most recent of each picture file type and copy it into a folder from which it could be viewed on a website (you'll need to install **Apache** on the Pi first). The script on page 21 will copy the most recent MCIR file into a file named current_mcir.png in the html folder from which it can be displayed on a web page.

Raspberry Pi NOAA Satellite Station - Continued on page 21

Raspberry Pi NOAA Satellite Station - Continued from page 20

```
#!/bin/bash
MCIR_FILE=$(ls -l /home/pi/weather | grep mcir | sed 's/^.*NOAA/NOAA/' | sort -k 1.7 | tail -1)
cp /home/pi/weather/$MCIR_FILE /var/www/html/current_mcir.png
```

That can be displayed by an HTML script like the one below :

```
<DOCTYPE html>
<html>
<head>
    <title>W2MMD NOAA Pictures of the Day</title>
</head>
<body>
    <h1>W2MMD NOAA Pictures of the Day</h1>
    <img src="current_org.png" alt="POTD" height="800" width="800">
    <img src="current_no.png" alt="POTD" height="800" width="800">
    <img src="current_mcir.png" alt="POTD" height="800" width="800">
</body>
</html>
```

RF Hardware

Although the NOAA satellites use the 137 MHz frequencies they appear to be pretty readable using 2 Meter antennas, so we simply put a T connector in the feedline for the Lindenblad antenna used for our Fox-In-A-Box receiver and fed it to the RTL-SDR (the antenna has a mast-mounted broadband preamp so we didn't worry about connector loss). That gave us decent but not exceptional pictures, but adding the **SAW filter** in front of the RTL-SRD receiver caused a significant increase in picture quality - almost all of the passes now generate very good images. Signals from these satellites are significantly stronger than from ham satellites (perhaps the US government has a higher satellite budget than AMSAT) so marginal antennas may still work well.

```
  GNU nano 2.7.4                File: receive_and_process_satellite.sh

/usr/local/bin/wxtoimg -m ${3}-map.png -e ZA $3.wav $3.png
/usr/local/bin/wxtoimg -m ${3}-map.png -e ZA $3.wav $3.png
#!/bin/bash

# $1 = Satellite Name
# $2 = Frequency
# $3 = FileName base
# $4 = TLE File
# $5 = EPOC start time
# $6 = Time to capture

sudo timeout $6 rtl_fm -f ${2}M -s 60k -g 45 -p 55 -E wav -E deemp -F 9 - | sox -t wav - $3.wav rate $

PassStart=`expr $5 + 90`

if [ -e $3.wav ]
  then
    /usr/local/bin/wxmap -T "${1}" -H $4 -p 0 -l 0 -o $PassStart ${3}-map.png

    /usr/local/bin/wxtoimg -m ${3}-map.png -e ZA $3.wav $3.org.png
    /usr/local/bin/wxtoimg -m ${3}-map.png -e MCIR $3.wav $3.mcir.png
    /usr/local/bin/wxtoimg -m ${3}-map.png -e NO $3.wav $3.no.png
fi
```

Figure 1 : File processing script

Raspberry Pi NOAA Satellite Station - Continued on page 22

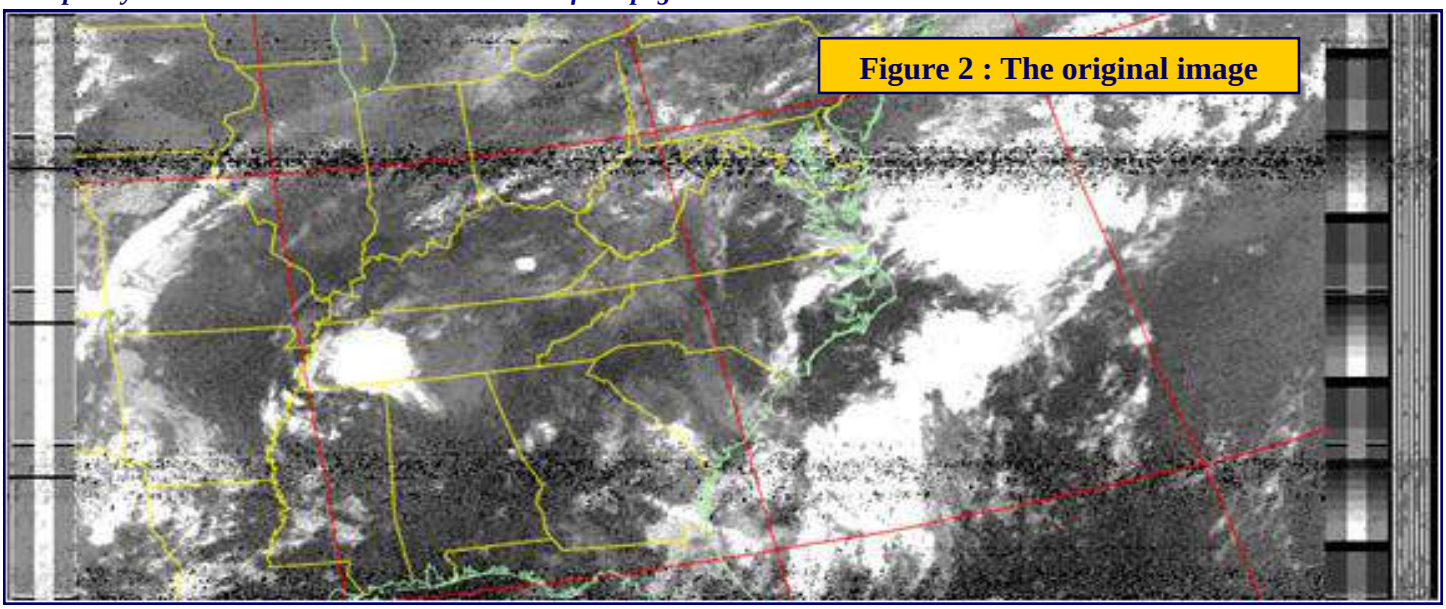


Figure 2 : The original image

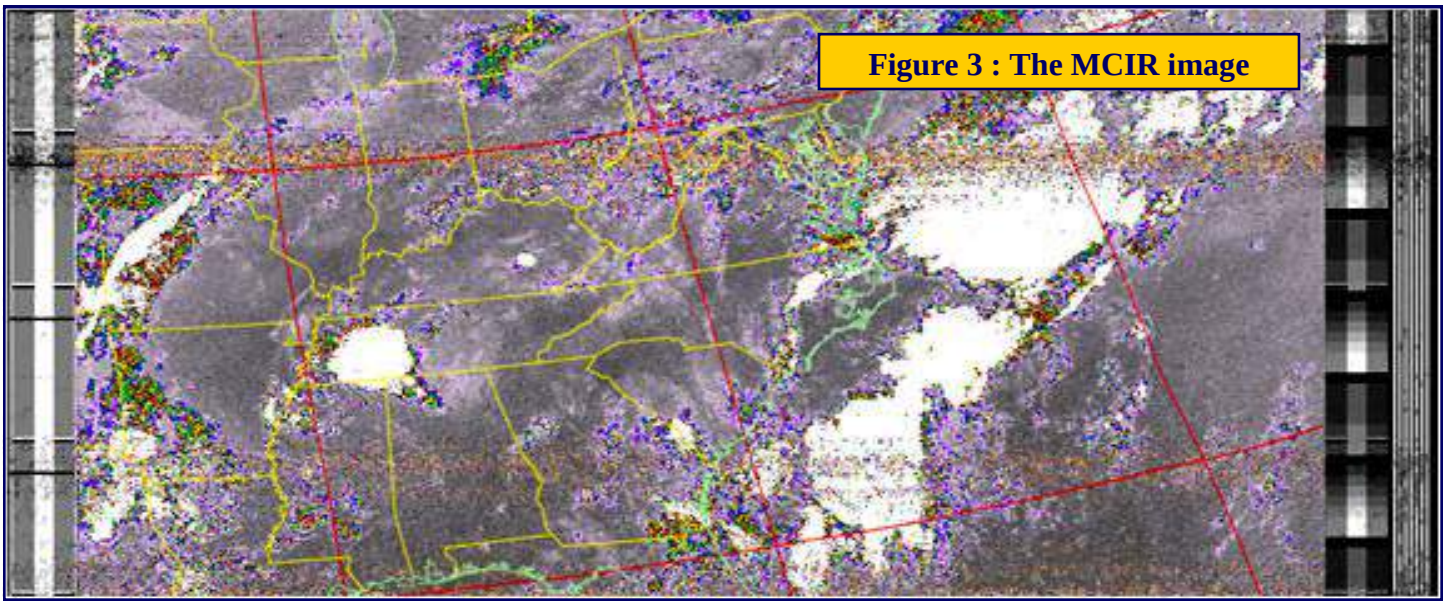


Figure 3 : The MCIR image

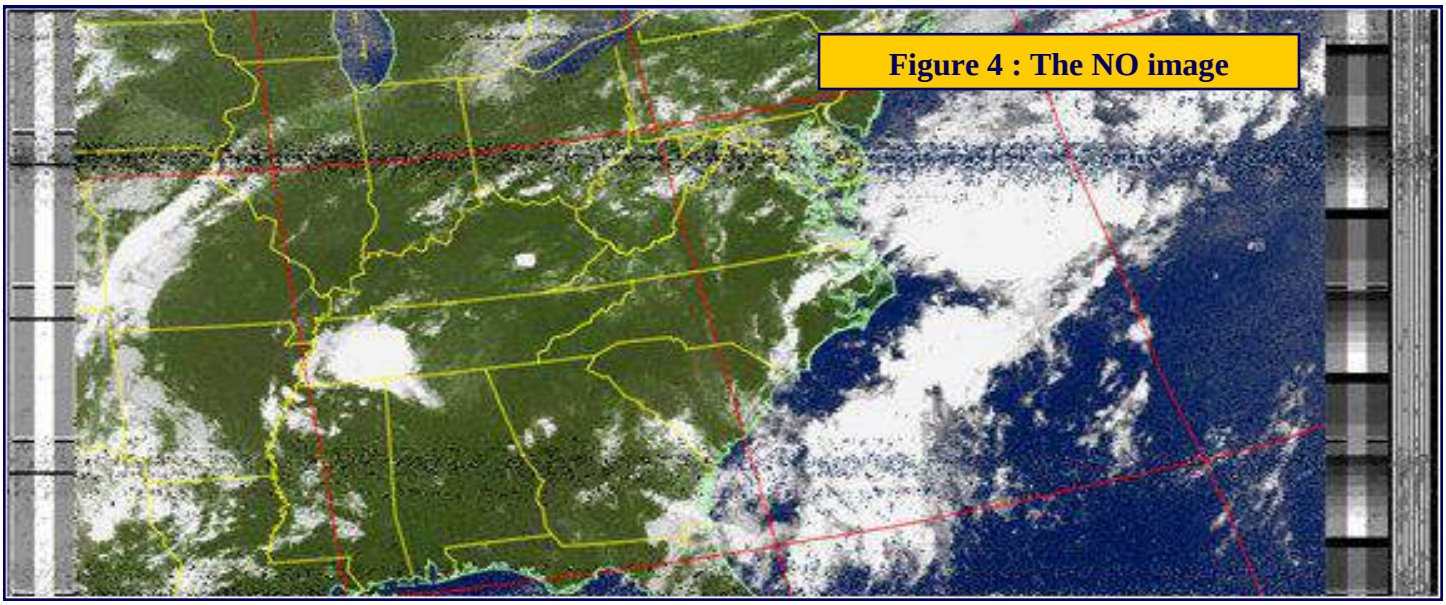


Figure 4 : The NO image

Using PSKREPORTER As A Health And Welfare Hack?

By Jim Wright, N2GXJ

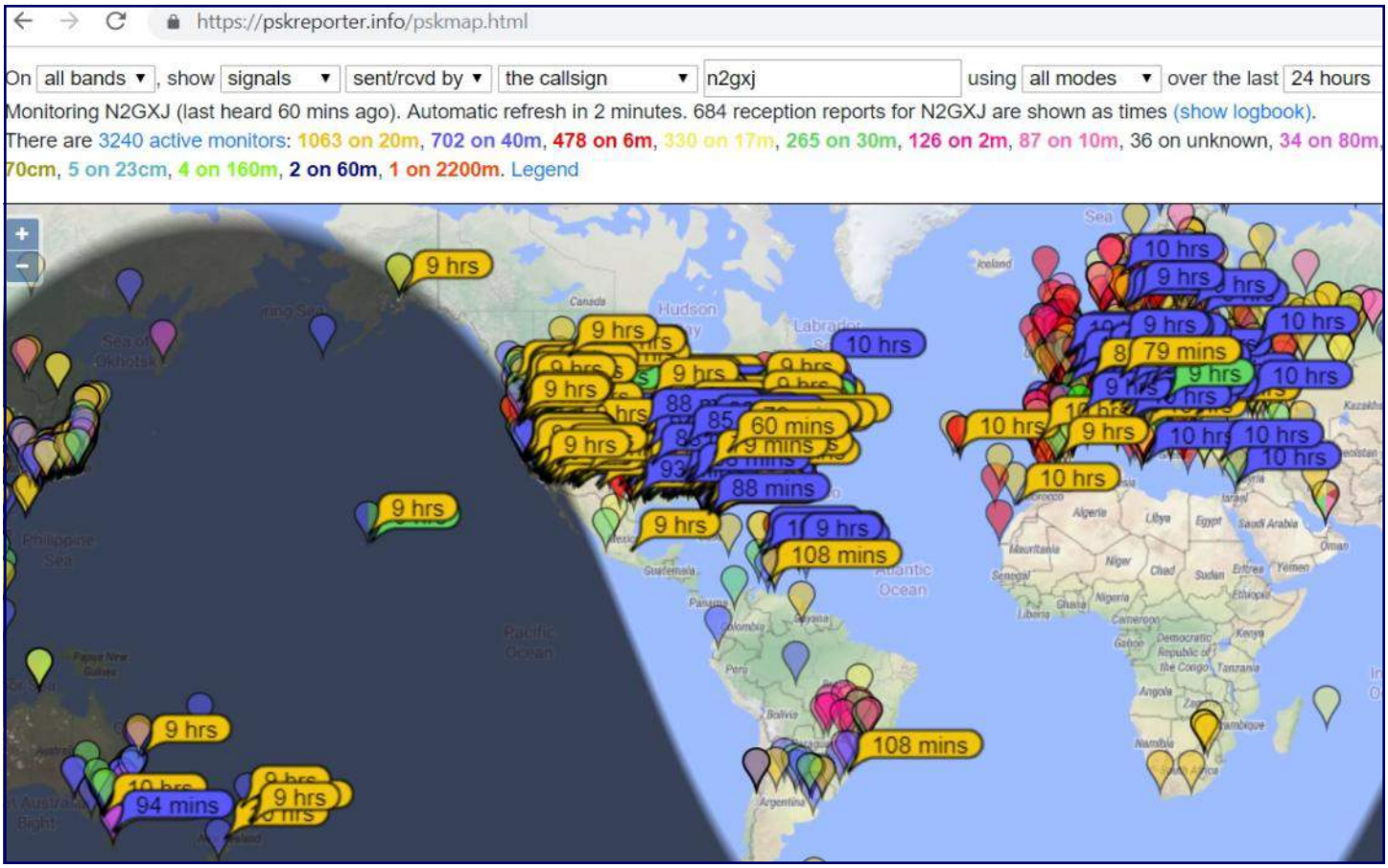
Perhaps as a follow-up to the recent earthquakes in California, I stumbled across this thought-provoking post on the Facebook page : **www.facebook.com/groups/FT8.Digital.Mode**

> **Tim Goeppinger :** I'm not making a joke. You can use FT8 as a way to let your relatives back East that you are OK. If you CQ on an HF band, your family can find you on PSKREPORTER.

Very interesting. Even if his relatives were not hams, or even if they were and their radio was not on at the time, or if it was on, but propagation did not favor his relatives being able to respond with a confirmation (a QSL) at the time, there likely would still be a record of him having transmitted at a particular time. This is because of the vast network of WSJT-X users out there today that have their software configured to automatically report whatever signals they can decode as reception reports sent to be logged at PSKREPORTER.

Those reception report records are easily publically visible to anyone using the map display, filtered by the caller's callsign, for up to 24 hours at : **www.pskreporter.info**.

See the PSKREPORTER map display example below, using my "n2gxj" callsign as an example. The map is showing who and where others were able to receive my "FT" mode digital transmissions over the past 24 hours, even if they didn't all call me back. Hey, look at that! That blue colored bubble in Australia shows that a 40 Meter signal from my attic dipole made it all the way to there about an hour and a half ago. Didn't know an attic dipole could reach that far on 40. Guess it can! Not bad! Perhaps after seeing this, you'll want to give PSKREPORTER a try for yourself?



KB6NU's Ham Radio Blog

Can You Copy At 20 Words Per Minute By Hand?

By Dan Romanchik, KB6NU

About a month ago, this email from the ARRL was send to the CWops mailing list :

From: Fusaro, Norm W3IZ [mailto:w3iz@arrl.org]
Sent: Monday, July 1, 2019 4:00 PM
Subject: W1AW Code Proficiency Certificate

Greetings Morse Code Enthusiasts.

I have some exciting news that I want to share with you! The ARRL has reinvigorated the W1AW Code Proficiency Certificate program. Several things have changed beginning with our new sponsor, Vibroplex, a legend in Morse telegraphy equipment. If you see Scott Robbins W4PA and the Vibroplex team at a

hamfest or convention please be sure to thank him for his support. The Vibroplex logo will appear on the newly designed certificates (see below) and in the award recipient page that will appear every month in QST.

That's right, each month in QST we will publish the most recent recipients of the W1AW Code Proficiency Certificate, beginning with all the 2019 recipients. As a bonus, we are sending all the 2019 CPC holders a new certificate at no cost to replace their older style award.

The award is available to anyone who copies one solid minute of code during the qualifying runs. Complete program details can be found on the web at : www.arrl.org/code-proficiency-certificate.

And to make the award available to more people we will double the number of opportunities to copy the CW text. Beginning September 2019, the qualifying runs will increase from twice per week to four times per week.

I am sharing this advanced notice with the Morse code clubs so that you can share it with your members. I have attached PDF files of the new certificate and the announcement that will appear in August QST, available in digital format July 8. I hope you are as excited about this as I am.

In closing, I want personally thank all of you who promote the use and proficiency of Morse code on the air waves and ask that you challenge your club members to submit their copy for the W1AW Code Proficiency Certificate.

73,
Norm Fusaro, W3IZ
Director of Operations

KB6NU's Ham Radio Blog - Continued on page 25

KB6NU's Ham Radio Blog - Continued from page 24

Almost immediately after I posted this to my blog (**KB6NU.Com**), my friend, Paul, KW1L, replied, "How does one copy legibly at 40 wpm?" When I replied, "Typing," he countered, "On page 98 of the July 2019 QST, it says, 'Legibly copy at least 1 minute of text by HAND...'"

To this, I replied, "Well, I guess you and I are both screwed then. I can't copy by hand at 20 wpm, and it's really not worth it to me to practice and get that fast. I'm guessing that I'm not alone in this regard. The upshot is that the ARRL is going to be sending out a lot fewer of these Vibroplex certificates than they think."

I then emailed W3IZ for a clarification. He shot back, "By hand is to mean not using a code reading machine." I suggested that he clarify this, both on the ARRL website and in QST. Of course, they haven't yet taken my suggestion, and the website still reads, "Copy one of W1AW's qualifying runs and submit one minute of solid copy (legible)."

==========

Dan Romanchik, KB6NU, is the author of the KB6NU amateur radio blog (**KB6NU.Com**), the "No Nonsense" amateur radio license study guides (**KB6NU.Com/study-guides**), and is one of the presenters on the **ICQPodcast**. Feel free to reply to his CW CQs at any speed you so choose.

Regional (Atlantic & Hudson Divisions) Hamfests & Events

August 3, 2019 : Reading Radio Club's Hamfest, Heritage Park Railroad Station, 992 Clematis Street, Sinking Spring, PA. **www.qsl.net/w3bn**

August 3, 2019 : Tompkins County Amateur Radio Association, Ithaca Hamfest, Trumansburg Fairgrounds, 2150 Trumansburg-Ithaca Road, Trumansburg, NY. **www.tcara-ny.org**

August 17, 2019 : Keuka Lake Amateur Radio Association Hamfest, Howard Community Center, 7481 Hopkins Road, Howard, NY. **www.klara.us**

August 17, 2019 : Ramapo Mountain Amateur Radio Club 41st Annual Hamfest, Saint Catherine's RC Church Parish Center 112 Erskine Road, Ringwood, NJ. **www.qsl.net/rmarc**

August 24, 2019 : ROC City Net 2nd Annual Hamfest, Log Cabin Restaurant, 2445 West Walworth Road, Macedon, NY. **www.roccityhamfest.com**

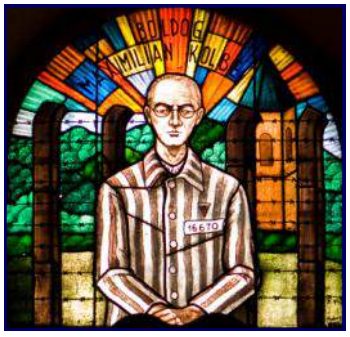
August 25, 2019 : Chautauqua Amateur Radio Service, CARS Annual Hamfest, Lakewood Rod and Gun Club, 433 East Terrace Avenue, Lakewood, NY. **www.chautauqua-ars.org**

August 25, 2019 : Skyview Radio Society "Swap N Shop", Skyview Clubhouse, 2335 Turkey Ridge Road, New Kensington, PA. **www.skyviewradio.net**

August 31, 2019 : Uniontown Amateur Radio Club, 70th Annual Gabfest, UARC Clubhouse Property, 433 Old Pittsburgh Road, Uniontown, PA. **www.w3pie.org**

W2Saint Maximilian Kolbe - W2SMK
Patron Saint of Amateur Radio
Special Event Station - 20 & 40 Meters
August 14, 2019 - 08:00 EDT Until ?

Maximilian Kolbe, SP3RN
Patron Saint of Amateur Radio Operators



Maximilian Maria Kolbe OFM Conv. was a Polish Conventual Franciscan friar who during the World War II German occupation of Poland, volunteered to die in place of a stranger in the concentration camp at Auschwitz. Kolbe's call sign was SP3RN and in the early years of the Polish occupation he used his station to report the atrocities being committed by the Nazis. Kolbe has been recognized by the Catholic Church as the Patron Saint of Amateur Radio.

August 14, 2019 marks the 78th anniversary of his death at Auschwitz. On that date members of the **Cape May County Amateur Radio Club, N2BSA** and **KC2ATK**, will operate a **Commemorative Special Event Station at the Parish of Saint Maximilian Kolbe, 200 Tuckahoe Road, Marmora, New Jersey**. The station will be on the air from 08:00 EDT until ??? Operations will be both CW and SSB on 20 and 40 meters. Amateur operators are encouraged to listen for and work the station.

August 14 - 18, 2019 0000Z -0000Z : N7C Special Event Station, Window Rock, AZ, 14.265 MHz, 7.265 MHz and 18.133 MHz, Commemorating the Navajo Code Talkers serving with the 3rd US Marine Division Signal Unit during WWII in the South Pacific.

International Lighthouse Lightship Weekend 2019
0001 UTC August 17th to 2400 UTC August 18th

Area clubs sponsoring special event stations for the International Lighthouse Lightship Weekend

Hereford Inlet Lighthouse
Audubon Amateur Radio Club, W2H
14.225 MHz
www.k2aud.org

Cape May Lighthouse
Cape May County Amateur Radio Club
www.cmcarc.org

Barnegat Lighthouse
Old Barney Amateur Radio Club, N2OB
www.obarc.org

Remote HF Station : Summer EURAO Party Premier Of FT4

By John Hill, W2HUV

The new **European Radio Amateurs' Organization** (EURAO) and the Summer EURAO Party were introduced in the ARRL Letter for July 18, 2019. The party was a gathering of FT4 users that occurred on the weekend of July 27 - 28 for 24 hours starting at 1200 UDT on Saturday. I took advantage of the gathering to try out FT4 for the first time using the Remote HF Station. It looked like a great way to practice for the WW Digi contest to take place on August 31 - September 1 sponsored by the World Wide Radio Operators Foundation (WWROF), in collaboration with the Slovenia Contest Club (SCC). It was announced in the same ARRL Letter.

It didn't help that I didn't previously read Jim Wright, N2GXJ's excellent article, "How To Fix Frequencies List To Use For FT4" under "The Elmer's Shack" on the GCARC website. His articles are not just for newbies, they are for everyone!

Anyway, it turns out that the frequencies listed in the EURAO Party announcement for 80, 40 and 20 were incorrect! I determined the frequencies needed by observing the frequencies used by stations monitoring FT4 transmissions on those bands on the PSKREPORTER.

I must say that I enjoyed FT4 operation more than FT8 operation due to the rapid pace. It felt more like I was in a contest.

Here are my statistics for the "gathering":

- Bands : 20M and 40M
- Contacts : 112
  - 20M 68
  - 40M 44
- Entities : 34
- Hours : 6.55

You too may use the Remote HF Station to operate in the FT8 and FT4 modes. There is some preparation required though. Read **WSJT-X Operation.PDF** located under "Remote HF Station" on the GCARC website for more information.

National Lighthouse Day - August 7, 2019

Peggy Richey, K2PAR, and John Calhoun, KC2ATK, will be operating from Friday, August 2 to Sunday, August 4, 2019.

They will be at the East Point Lighthouse on the mouth of the Maurice River on the Delaware Bay in Heislerville in Cumberland County, NJ.

Peggy will be on 2 Meters and John will be on 40 and 20 Meters.

WWV 100th Anniversary Special Event Operation in the Planning Stages

It's a celebratory year for the WWV stations. The fiscal year (FY) 2019 budget -- once signed -- will include full funding for the stations, which also mark their 100th year this fall. The **WWV Centennial Committee** has a tentative agreement with the National Institute of Standards and Technology (**NIST**) to mount a special event station this fall adjacent to the **WWV** site in Colorado to mark the 100th anniversary of the time and frequency standard station, the world's oldest continuously operating radio station. A memorandum of understanding is in the works.

Dave Swartz, W0DAS, of the Northern Colorado Amateur Radio Club (**NCARC**) heads the committee, which is developing plans for an NCARC special event from September 28 through October 2, with a NIST centennial observance tentatively set for October 1.

The NIST budget for WWV, WWVH, and WWVB will remain level for FY 2019. With the funding suspense over, Swartz told ARRL, "our committee is moving forward."

Swartz and committee members Darren Kalmbach, KC0ZIE, and Kevin Utter, N7GES, met on February 8 with WWV/WWVB/WWVH Station Manager John Lowe, WWV Electronics Technician Glenn Nelson, and WWV Chief Engineer Matt Deutch, N0RGT.

The WWV Building near Fort Collins, Colorado. [Photo courtesy of NIST]

"This was the first meeting for the committee and the first to include NIST upper management," said Swartz, who called the meeting "very productive." Swartz said NIST management is "on board" with the celebration, and Deutch plans to attend Hamvention May 17 - 19 to promote the centennial event.

Although the US government cannot fund any Amateur Radio special event expenses, the club members will be allowed to use a 15-acre parcel on WWV property, Swartz explained on the WWV Centennial website. "The operating site lies outside the security fence and simplifies logistics," he said.

Swartz hopes that other clubs in Colorado will be able to pitch in to make the WWV Centennial a success.

The ARRL Letter for February 14, 2019 - www.arrl.org

Greetings To All Amateur Radio Operators Young and Old, Newbie or Veteran, Male or Female

Some folks start the summer on Memorial Day. Some start it on the first day of the Summer Season. A lot of our community start the summer with Field Day.

N3MSS starts the summer with this communication to announce our communities big event of :
The 2019 Ride MS - City to Shore

Over the many years in the past, we have always risen to the task of doing all that was asked by the National Multiple Sclerosis Society. Starting as just some guys on the side of the road looking for problems, we now are trusted with helping to bring off an event of up to 7,000 riders, over 1000 volunteers, and a countless number of supporters, family, and folks living with MS to raise over $6 million dollars that mostly stays within our community to help the folks that are living with this debilitating disease, by having operations primarily in Communications, but add to that Route Support, Command Support, SAG, Situation Teams, Transportation Support, Rest Area Operations, and The Motorcycle HAMS picking up all the areas in between.

Once again we grew last year. With operators and our own support folks, our group brought 141 volunteers to the event.

Once again I say...We Need 150 Volunteers To Support This Event Completely And once again I say...WE CAN DO THIS !!!!!!!!!!

We can do this by having the tried and true return, and everyone spreading the word on how our community is a major force at this event and help with putting the word out as a recruitment tool for the event.

Come as an individual, a club, a family - it doesn't matter how you come, only that you come.

Well, enough of my begging this early in the process. Here are the particulars : The event is **September 21st and 22nd, 2019.**

The on-line sign up link is : **www.signupgenius.com/go/CTSCommunicators2019**

Deadline to register is **August 15, 2019**.

Please check you calendars, and sign up early so that we can try to fill all requests for positions. Remember, if you are bringing a significant other or family member to assist you, we need a sign-up form for them also.

As always, it is an HONOR to call myself a HAM and be a part of this elite group of people. Make our hobby proud and volunteer today.

Joe DiBartolo, KC2SFB

With Much Appreciation
73
EvComm 609-316-8220

Maidenhead Grid Square Introduction

AXLES AND ANTENNAS.com
CQ maps
Overland & On Air
Custom Ham Radio Maps
Azimuthal Projection (QTH Centered)
Maidenhead
World DX Entities
Yaesu Rotor Controller
Waterproof USGS Topo Maps
Overlanding Communication Information

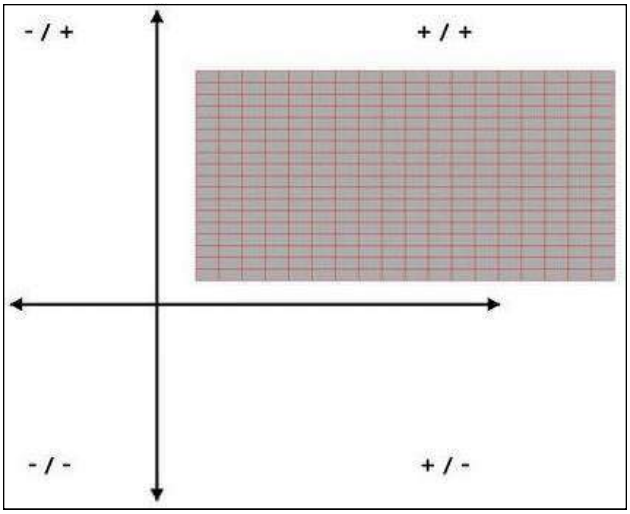
Introduction to Maidenhead Grid squares

"W1AW this is N4EGA and my grid square is Echo Mike Seven Six X-ray Bravo (EM76xb)."

As Amateur Radio operators, many of have used or heard this type of exchange before. A great number of us even know what our "Maidenhead" grid square is. But how many of us really know what it means? This is a question that I am asked by hams and non hams alike. When hams new to Amateur Radio see a Maidenhead map, their first question is usually about all the grid squares, letters and numbers.

Before I began designing maps for hams, I too was aware of Maidenhead but not really the how and why. Developing the Maidenhead Grid square layer in the Geographic Information System/Software (GIS), a few things became very apparent that I had never thought of.

As Earth is an ellipsoid (squished sphere), representing a system of grid squares requires the Earth to be flattened (also known as a projection) in order to understand the system. Thinking back to high school geometry, Maidenhead is much like the typical Cartesian coordinates that are represented on a +/- quadrant graph. As we only want to think in terms of positive, this flattened projection of Earth is placed into the +/+ quadrant, the upper right as in **Figure 1** →



Typically, when we speak of coordinates, we speak of latitude and longitude as it begins at 0 degrees north or south and 0 degrees east or west, which is just off the coast of the central Western Africa. In the case of Maidenhead, our origin is at 180 (or 0) degrees West and 90 degrees South which is the South Pole. This is to ensure that all grid squares only advance up the alphabet.

As such, all grid squares designations from west to east start with "A" and end in "R." Each grid square from South to North also begins with the letter "A" and ends in "R." West to east boundaries of the grid square are 20 degrees wide while South to North boundaries are 10 degrees. Therefore, the origin grid square has a designation of "AA" (lower left) and the last grid square is "RR" (upper right). **See Figure 2 on Page 32.**

The grid squares are not really squares, but rectangles. Yes, because of the way Earth is shaped. As an ellipsoid, lines of longitude are spaced far apart at the equator and converge at the poles. Latitude lines are evenly spaced from pole to pole. This actually causes the grid squares to be shaped as trapezoids. When viewed on a globe or any map projection that causes curvature, this becomes very apparent. Also keep in mind that there are 360 degrees of longitude while there are only 180 total degrees of latitude.

Reading the grid

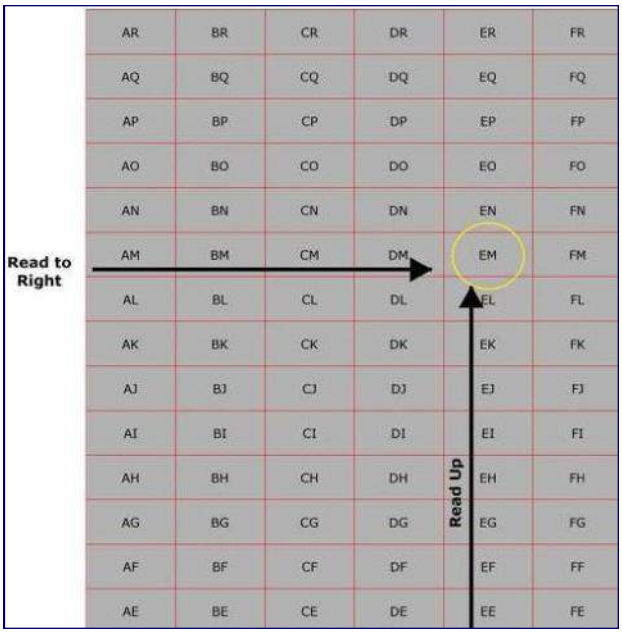
A very simple way to remember how to read these grids is that each letter is a direction to read. The first letter is read from left to right and the second is up. So if a ham tells you "EM", then you would read on your map from left to right until you find "E" and then you would read up until "M". Right then up.

Maidenhead Grid Square Introduction - Continued on page 32

Figure 2

AR	BR	CR	DR	ER	FR	GR	HR	IR	JR	KR	LR	MR	NR	OR	PR	QR	RR
AQ	BQ	CQ	DQ	EQ	FQ	GQ	HQ	IQ	JQ	KQ	LQ	MQ	NQ	OQ	PQ	QQ	RQ
AP	BP	CP	DP	EP	FP	GP	HP	IP	JP	KP	LP	MP	NP	OP	PP	QP	RP
AO	BO	CO	DO	EO	FO	GO	HO	IO	JO	KO	LO	MO	NO	OO	PO	QO	RO
AN	BN	CN	DN	EN	FN	GN	HN	IN	JN	KN	LN	MN	NN	ON	PN	QN	RN
AM	BM	CM	DM	EM	FM	GM	HM	IM	JM	KM	LM	MM	NM	OM	PM	QM	RM
AL	BL	CL	DL	EL	FL	GL	HL	IL	JL	KL	LL	ML	NL	OL	PL	QL	RL
AK	BK	CK	DK	EK	FK	GK	HK	IK	JK	KK	LK	MK	NK	OK	PK	QK	RK
AJ	BJ	CJ	DJ	EJ	FJ	GJ	HJ	IJ	JJ	KJ	LJ	MJ	NJ	OJ	PJ	QJ	RJ
AI	BI	CI	DI	EI	FI	GI	HI	II	JI	KI	LI	MI	NI	OI	PI	QI	RI
AH	BH	CH	DH	EH	FH	GH	HH	IH	JH	KH	LH	MH	NH	OH	PH	QH	RH
AG	BG	CG	DG	EG	FG	GG	HG	IG	JG	KG	LG	MG	NG	OG	PG	QG	RG
AF	BF	CF	DF	EF	FF	GF	HF	IF	JF	KF	LF	MF	NF	OF	PF	QF	RF
AE	BE	CE	DE	EE	FE	GE	HE	IE	JE	KE	LE	ME	NE	OE	PE	QE	RE
AD	BD	CD	DD	ED	FD	GD	HD	ID	JD	KD	LD	MD	ND	OD	PD	QD	RD
AC	BC	CC	DC	EC	FC	GC	HC	IC	JC	KC	LC	MC	NC	OC	PC	QC	RC
AB	BB	CB	DB	EB	FB	GB	HB	IB	JB	KB	LB	MB	NB	OB	PB	QB	RB
AA	BA	CA	DA	EA	FA	GA	HA	IA	JA	KA	LA	MA	NA	OA	PA	QA	RA

For you military members out there familiar with the Military Grid Reference System (MGRS), it is the same concept. **See Figure 3**



Now that the largest grid squares have been laid out it's time to work on the sub grids, the "Numbers." These are created nearly identically to the larger grid squares in that they are placed in a positive ascending manner from west to east and south to north. However, the sub grids are only 2 degrees wide from west to east and 1 degree from south to north for a total of 100 sub grids. Keeping with the same logic as the main grid squares, these sub grids are also read from west to east and then south to north, but this time with ascending numbers beginning with "00" and ending with "99."
See Figure 4 on Page 34.

So now you have been given a Maidenhead grid of "EM76" and you want to find it on the map. You will read to the right to E and then up to M. Now that you are in grid square EM, start at 00 and read to the right until see 7 and then read up until you find 6. Right then up and will land on EM76!

The last part of EX76xb is a little bit different in that the smaller sub grids are 5 minutes from west to east and 2.5 minutes (2 minutes and 30 seconds) south to north. So now we are back to letters but use lower case instead.

Maidenhead Grid Square Introduction - Continued on page 33

Maidenhead Grid Square Introduction - Continued from page 32

Why are these sub grids using 5 minutes by 2.5 minutes? One degree is made up of 60 minutes. If the units were divided by the same base 10 unit, our grids would be 12 minutes wide and 6 minutes tall. Making the grids 5 minutes by 2.5 minutes allows for a greater number of grid squares which in turn gives us a greater precision for location. Therefore, these sub grids are divided into a 24x24 letter pattern. The result is an origin of "aa" and ending in "xx." **See Figure 5 on Page 34.**

Looking at your map again, you are now ready to find EM76xb. Each first character in the grouping is read from west to east and then the second character is read from south to north. Right then Up. Read right to "E" and then Up to "M." Now read Right to "7" and then Up to "6." Lastly, read Right to "x" and up to "b." There you have it, the QTH of N4EGA!

With a 6 character grid square, a location can be found to within a 5'(minute) by 2.5' (minute) square. What does that mean? A couple things :

1. In the continental US, based on an Equal Albers Conic Projection (a projection is the Earth is flattened on a flat surface), each 6 character grid square covers about 12 square miles, or about 4 miles by 3 miles. This is fine for chasing grids but too coarse if you wish to locate a street address. For that, you will need to extend into fourth and fifth characters.
2. As these are grid squares, you should really think of them as two dimensional boundaries and not singular points as with traditional Latitude and Longitude. Each six character grid square encloses an area that is 5' by 2.5'. Your position could be within any location inside of that grid square which is about 12 square miles in the continental US. Even increasing your precision to a 4 or 5 character grouping still places you within an area, not a point. It would be as if telling someone you are in a specific park, but not which part of the park. And then you tell them you are in a specific building, but not which room and so on. With latitude and longitude, you are telling someone that you are sitting in a chair, in a room, in house, in a city, in a state in a country on Earth.

Obtaining your Maidenhead grid square is fairly easy now. There are online resources for direct conversion from latitude and longitude. As web address change often, simply do an online search for “Maidenhead Converter” which will result in many good site.

QRZ.com has a database of nearly every Amateur Radio in the US and DX. Look up your callsign or one you hear on the air, and you will normally find their Grid Square listed along with other information about them.

For you rovers out there, numerous Global Positioning System (GPS) devices will provide Maidenhead grid squares to a high degree of precision. Just be sure to set your map datum to the official WGS84.

That's it!

73! DE N4EGA

Article Credit : Axles And Antennas.Com / N4EGA
www.axlesandantennas.com/pages/maidenhead-grids-square-introduction

Maidenhead Grid Square Introduction - Continued on page 34

Maidenhead Grid Square Introduction - Continued from page 33

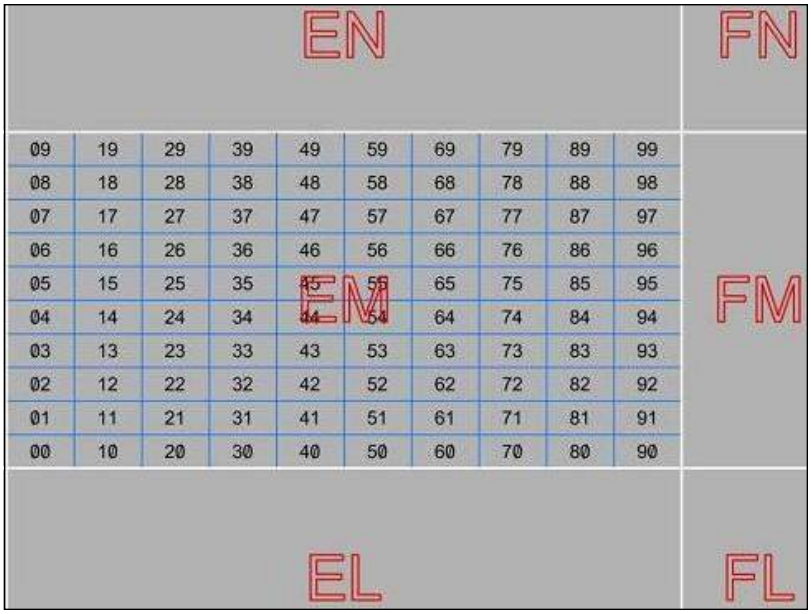
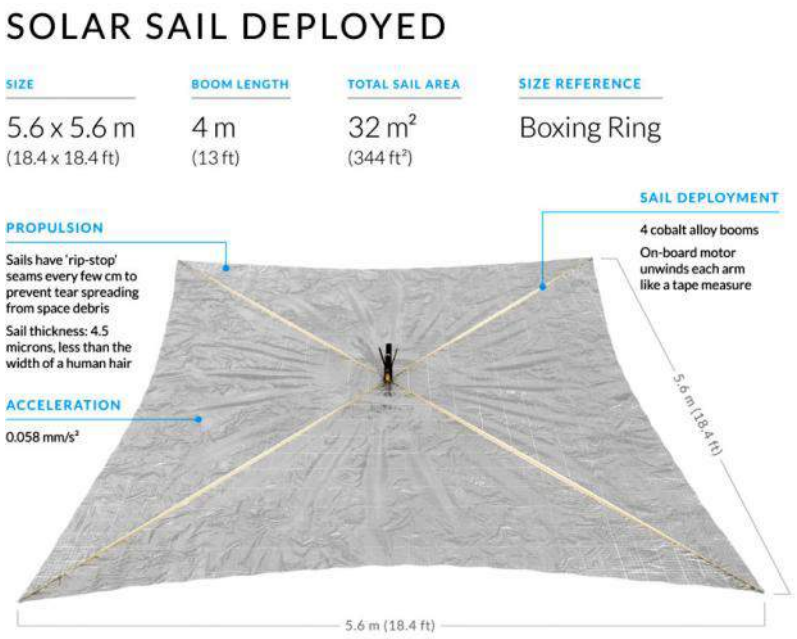


Figure 4

Figure 5

QST de W1AW
Space Bulletin 004 ARLS004
From ARRL Headquarters
Newington, CT June 27, 2019
To all radio amateurs

SB SPACE ARL ARLS004 LightSail 2 Launches, Will Transmit CW Beacon



The Planetary Society's LightSail 2 CubeSat, launched on June 25, will transmit Morse code from space. LightSail is a citizen-funded project to send a small spacecraft, propelled solely by sunlight, into Earth's orbit. The innovative satellite is due to be deployed on July 2 from Prox-1, a Georgia Tech student-built spacecraft the size of a small washing machine. Once deployed, LightSail 2 will automatically transmit a beacon packet every few seconds, which can be decoded into 238 lines of text telemetry describing the spacecraft's health and status, including everything from battery status to solar sail deployment motor state. Every 45 seconds, the spacecraft will transmit "LS2" on the spacecraft's frequency of 437.025 MHz, within the Amateur Radio 70-centimeter band.

Further details can be found online at : **http://www.planetary.org/explore/projects/lightsail-solar-sailing**.

LightSail 2 lifted off from Kennedy Space Center, Florida, carried by the SpaceX triple-booster Falcon Heavy rocket. The launcher also carried aloft two dozen spacecraft for the US Air Force STP-2 mission. Launch had been set to occur late on June 24, but SpaceX delayed the liftoff to make additional ground system checks.

"During its ride to orbit, LightSail 2 was tucked safely inside its Prox-1 carrier spacecraft," The Planetary Society said post-launch. "The Falcon Heavy upper stage's payload stack released Prox-1 about an hour and 20 minutes after liftoff, at an altitude of roughly 720 kilometers (446 miles). Prox-1 will house LightSail 2 for one week, allowing time for other vehicles released into the same orbit to drift apart so each can be identified individually."

Bruce Betts, Planetary Society chief scientist and LightSail 2 program manager, said, "After years of hard work, we are ecstatic with the launch and looking forward to doing some solar sailing." Some 500 Planetary Society members and supporters were on hand at the Kennedy Space Center Apollo-Saturn V Center to watch their crowd funded spacecraft take flight.

LightSail 2 team members will soon converge at Cal Poly San Luis Obispo in California, where the spacecraft's mission control is located. Once LightSail 2 is released from Prox-1, the team will spend several days checking out its systems before commanding its dual-sided solar panels to deploy. Following that, the spacecraft's solar sails will be deployed in approximately 2 weeks.

Two US Naval Academy student-built satellites carrying Amateur Radio payloads were on the launch. BRICSat-2 (call sign USNAP1) will function as a 1.2/9.6 k APRS digipeater on 145.825 MHz. Telemetry will be transmitted on 437.975 MHz. PSAT-2 also will operate on 145.825 MHz with APRS to voice and DTMF to voice/APRS, and it will carry a 28.120 MHz up/435.350 MHz down PSK31 transponder. An SSTV camera will transmit on the same downlink.

ARRL SNJ Section Convention and Hamfest

Presented By The

Gloucester County Amateur Radio Club

W2MMD

Celebrating Our 60th Year

www.w2mmd.org

Open to the public at 8 AM

41st Annual Hamfest - September 15, 2019

ADMISSION : $9.00

Non-Ham spouses and kids FREE

Vendors and Tailgaters of new and used radio and electronic equipment

Gates open at 6:00 am for vendors and tailgaters

Tailgating rules (open grassy areas only) :

- $8.00 per vehicle space, up to 10 feet
- No reserving or holding spaces for tailgaters not yet present
- First come, first serve

Table rules (covered pavilions only) :

- $11.00 per table (yours), or table space up to 8 feet
- Tailgating under pavilions will fall under "Table Rules" rates.

Some pavilion spaces have electric. Space price does not include admission.

Programs and Forums starting at 8:00 am

ARRL VEC License Testing starting at 9:00 am

- **Exam Testing @ W2MMD Clubhouse**
- **Exam Fee : $15.00**

DXCC-VUCC-WAS Card Checking at 11:30 am
GRAND PRIZE : $200 Cash
Door prize drawings throughout the day

Special Event Station : W2MMD/60

- We will be on-the-air from 8:00 am to 2:00 pm
- QSL cards will be mailed out after the event
- We plan to be on :
  - **147.180 MHz Plus (PL 131.8 Hz)**
    - **Talk-in Repeater**
    - **EchoLink : W2MMD-R**
  - **40 Meters**
  - **20 Meters**

Hog Day AFTERNOON

Food and beverages provided by
Hog Day Afternoon BBQ & Catering
www.hogdaycatering.com

Gloucester County 4-H Fairgrounds • www.w2mmd.org
235 Bridgeton Pike (Route 77) • Mullica Hill, NJ 08062
GPS : 39.715572°, -75.211944°

Contact : Sheldon Parker, K2MEN at sheldonparker@comcast.net
GCARC, PO Box 370, Pitman, NJ 08071

CWops Mini-CWT Test 0300Z
May 30, 2019

Call : WA2FZB
Operator (s) : WA2FZB
Station : WA2FZB

Class : Single Op HP
QTH : NJ
Operating Time (hrs) : 0.42
Location : USA

Summary :

Band	QSOs
80 :	12
40 :	25

Total : 37 Mults : 37
Total Score : 1,369

Club : Frankford Radio Club 03

Comments : *Trying out the vertical (Hustler 5BTV) as it will be my only antenna for a month or two while I upgrade my tower and tri-bander. Worked OK on 40 but amp kept tripping out on 80m above 3535. Needs a small adjustment up top.*
73 all!

Stew Perry Topband Challenge - Summer
June 15, 2019

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : Single Op HP
QTH : SNJ
Operating Time (hrs) : 2
Location : USA

Summary :
Total : QSOs : 35 Total Score : 66

Club : Frankford Radio Club 04

Comments :
Rig: IC-7800/Acom 2000A
Antenna: new improved 160m Inverted L. Now 90ft straight up and over 100ft tree, and fed 10ft off ground. 6 tuned radials. Being Sat night, the family took me out for Father's Day dinner. Wound up not turning the radio on until almost midnight. Easy to find a spot to call CQ. Hmm, not a good sign. Called CQ and got a few callers. Rate was slow. Where was everybody? I even missed W2GD.
The new inverted L was working great, but the band condx did not seem very good. No EU heard but KV4FZ was s9.

73 Darrell AB2E

IARU HF World Championship
July 13, 2019

Call : AB2E
Operator (s) : AB2E
Station : AB2E

Class : SOAB (A) CW HP
QTH : SNJ
Operating Time (hrs) : 4
Location : USA

Summary :

Band	CW Qs	Ph Qs	Zones	HQ Mults
80 :	155	0	16	18
40 :	43	0	10	12
20 :	39	0	16	9
Total :	237	0	42	39

Total Score : 47,547

Club : Frankford Radio Club 05

Comments :
Rig : Icom IC-7800 / Acom 2000A
Antennas : Wires. 80m half wave dipole @ 85ft,
40m delta loop @ 85ft
20m delta loop @ 65 ft

Thanks to all. Could not find much time to put into this one. Had a nice run on 80 CW in the late evening.

73 Darrell AB2E

IARU HF World Championship
July 13, 2019

Call : WK2G
Operator (s) : WK2G
Station : WK2G

Class : SOAB CW HP
QTH : PA
Operating Time (hrs) : 15
Location : USA

Summary :

Band	CW Qs	Ph Qs	Zones	HQ Mults
80 :	41	0	8	7
40 :	208	0	16	22
20 :	380	0	18	22
15 :	118	0	13	14
10 :	141	0	9	5
Total :	888	0	64	70

Total Score : 311,148
Club : Frankford Radio Club 06

2019-2023 Element 3 General Class License Question Quiz

This month we continue with **Subelement G1: Commission Rules** (Answers on 'Last Page Calendar')

G1A13
What is the appropriate action if, when operating on either the 30-meter or 60-meter bands, a station in the primary service interferes with your contact?
A. Notify the FCCs regional Engineer in Charge of the interference
B. Increase your transmitter's power to overcome the interference
C. Attempt to contact the station and request that it stop the interference
D. Move to a clear frequency or stop transmitting

G1A14
Which of the following may apply in areas under FCC jurisdiction outside of ITU Region 2?
A. Station identification may have to be in a language other than English
B. Morse code may not be permitted
C. Digital transmission may not be permitted
D. Frequency allocations may differ

G1A15
What portion of the 10-meter band is available for repeater use?
A. The entire band
B. The portion between 28.1 MHz and 28.2 MHz
C. The portion between 28.3 MHz and 28.5 MHz
D. The portion above 29.5 MHz

G1B01
What is the maximum height above ground to which an antenna structure may be erected without requiring notification to the FAA and registration with the FCC, provided it is not at or near a public use airport?
A. 50 feet
B. 100 feet
C. 200 feet
D. 300 feet

G1B02
With which of the following conditions must beacon stations comply?
A. A beacon station may not use automatic control
B. The frequency must be coordinated with the National Beacon Organization
C. The frequency must be posted on the internet or published in a national periodical
D. There must be no more than one beacon signal transmitting in the same band from the same station location

G1B03
Which of the following is a purpose of a beacon station as identified in the FCC rules?
A. Observation of propagation and reception
B. Automatic identification of repeaters
C. Transmission of bulletins of general interest to Amateur Radio licensees
D. Identifying net frequencies

General Class Quiz - Continued on page 39

General Class Quiz - Continued from page 38

G1B04
Which of the following transmissions is permitted?
A. Unidentified transmissions for test purposes only
B. Retransmission of other amateur station signals by any amateur station
C. Occasional retransmission of weather and propagation forecast information from U.S. government stations
D. Coded messages of any kind, if not intended to facilitate a criminal act

G1B05
Which of the following one-way transmissions are permitted?
A. Unidentified test transmissions of less than one minute in duration
B. Transmissions necessary to assist learning the International Morse code
C. Regular transmissions offering equipment for sale, if intended for Amateur Radio use
D. All these choices are correct

G1B06
Under what conditions are state and local governments permitted to regulate Amateur Radio antenna structures?
A. Under no circumstances, FCC rules take priority
B. At any time and to any extent necessary to accomplish a legitimate purpose of the state or local entity, provided that proper filings are made with the FCC
C. Only when such structures exceed 50 feet in height and are clearly visible 1000 feet from the structure
D. Amateur Service communications must be reasonably accommodated, and regulations must constitute the minimum practical to accommodate a legitimate purpose of the state or local entity

G1B07
What are the restrictions on the use of abbreviations or procedural signals in the Amateur Service?
A. Only “Q” signals are permitted
B. They may be used if they do not obscure the meaning of a message
C. They are not permitted
D. Only “10 codes” are permitted

G1B08
When choosing a transmitting frequency, what should you do to comply with good amateur practice?
A. Ensure that the frequency and mode selected are within your license class privileges
B. Follow generally accepted band plans agreed to by the Amateur Radio community
C. Monitor the frequency before transmitting
D. All these choices are correct

G1B09
On what HF frequencies are automatically controlled beacons permitted?
A. On any frequency if power is less than 1 watt
B. On any frequency if transmissions are in Morse code
C. 21.08 MHz to 21.09 MHz
D. 28.20 MHz to 28.30 MHz

Gloucester County Amateur Radio Club
General Membership Meeting Minutes
Wednesday, July 3, 2019

Meeting opened @ 1931 Hours by President James Clark Sr, KA2OSV

Attendance :

- 32 Members
- 1 Visitor :
  - Philip Mastroeni, KD2SGG

Previous meeting minutes as published in Crosstalk approved by voice vote of members present. Moved - Seconded - Unanimous approvable.

Treasurer's Report :

- YTD Income : $2710
- YTD Expenses : $2477
- Net : $233

Report approved by voice vote of members present.

Committee Reports :

Field Day : Al KB2AYU reported field day results: Class 6A Score:10,874. Jim KA2OSV thanked various member for their contributions to a successful Field Day.

Clubhouse : KB2AYU Getting closer to remote HF station general access.

Hamfest : Sheldon W2MEN sent e-mails to previous participants to gather volunteers for the event. Bill NJ2S discussed t-shirts for volunteers, needs sizes from participants.

Contests : Tony WA2FZB reported on the RAC Canada Day contest 7/1 as well as the IARU HF Championship 7/13-14. NA QSO Party RTTY. 13 Colonies event on-going.

Health And Welfare : Bill Price NJ2S sent out two cards.

Repeater : Herb Dyer KT2Y taking over as repeater committee chairman.

Old Business : None

New Business : Urb LeJeune, W1UL, thanked Cooper Hospital for hosting the June 1st Ham Cram.

Program for the night : **Dr. Edison Fong "J-Pole Antennas"** via Skype.

Meeting adjourned @ 1954 Hours

Respectfully submitted,
John Zaruba Jr, K2ZA
Recording Secretary

Gloucester County Amateur Radio Club
Board of Directors Meeting Minutes
Wednesday, July 17, 2019

Meeting opened @ 1905 Hours by President James Clark Sr, KA2OSV

Attendance :

President Jim Clark Sr, KA2OSV
Vice President Tony Starr, WA2FZB
Treasurer Al Arrison, KB2AYU
Recording Secretary John Zaruba Jr, K2ZA
Corresponding Secretary Ron Block, NR2B
Director Jeff Garth, WB2ZBN
Director Herb Dyer, KT2Y
Director Chuck Colabrese, WA2TML
Director Bill Price, NJ2S
Director Bob Durham
Trustee Mark Gottlieb, KK2L
Member John Hill, W2HUV
Member John O'Connell, K2QA
Member Jon Pearce, WB2MNF

Previous Board of Directors Meeting minutes approved as read by unanimous voice vote.

Treasurer's Report :

- YTD Income : $2782.00
- YTD Expenses : $2471.00
- Net : $310.00

Electric bill high again.

Treasurers report moved, seconded and approved by unanimous voice vote.

Another high electric bill, approaching our budgeted amount, $904 YTD.

Committee reports :

Hamfest : Bill Price NJ2S inquired about listing of last year's vendors and prize donors. Jon Pearce WB2MNF will be making a presentation on the Clubhouse and suggested having an open house at the Clubhouse afterwards.

Repeater : Application accepted for Yaesu DR-2X repeater upgrade program. They will advise on shipping.

Old business :

Discussion of Franklinville tower examination.

July 2019 Board of Directors Meeting Minutes - Continued on page 42

July 2019 Board of Directors Meeting Minutes - Continued from page 41

Clubhouse door project on hold until weather breaks.

John Hill W2HUV reported HF remote station is ready for use by membership. Discussion of user administration / logistics. John will provide a CrossTalk article.

New business :

Bill Price NJ2S suggested "Tailgate swap meet" to occur concurrent with a Tech Saturday Forum.

New members :

- Jackson Snyder AI2D of Deptford
- Philip Mastroeni KD2SGG of Wenonah

Meeting adjourned @ 1947 Hours

Respectfully submitted,
John Zaruba Jr, K2ZA
Recording Secretary

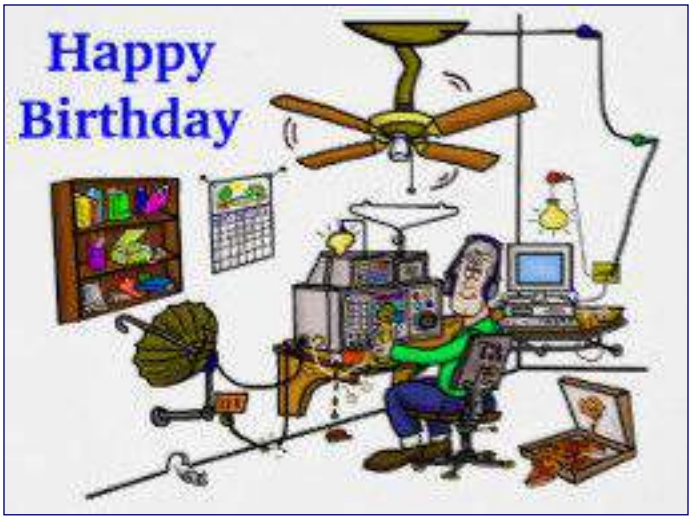
August Birthdays

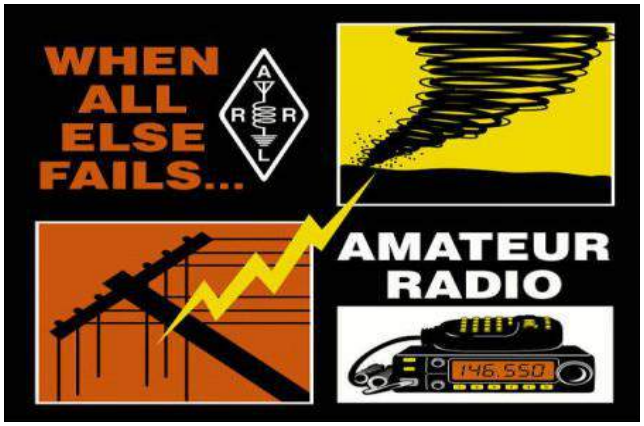
Congratulations to our members who are celebrating their birthday this month

Harry Jackson, WB2GSF (President 1982)
Curtis Myers, WA2JSG
Jon Pearce, WB2MNF
Harry Strahlendorf Jr, W3DNQ
Leonid Surnin, W2/UT5ZF
Richard Uznanski, KD2QHW
Brett Waller, K2BKW

In Memoriam - August Birthdays

Silent Keys :
James Bray Sr, N2AKI
Edward Bubelis, N2LCN
Vernon Byrd, N2DRD
Edward Egolf, WA2ZMS
Charles Emmel Sr, KT2ZZ
Steven Fidler III, N2GVR
Seth Horen, K1LOM
John Koch Jr, K2CR
John Lachenmayer KB2RGX
James Mollica Sr, K2OWE
Bruce Painter, N2ASN
Charles Pennington, K3NMF
Rev. James Thompson III, N2EDK





Crosstalk Submissions

This is your Club Newsletter. Make use of it.

If you have stories or photos of your hobby that you would like to share with the Club, please do so!

We will keep covering all of the GCARC events, but it is also nice to get those personal perspectives to include in every issue. Connecting through experiences is what makes the Gloucester County Amateur Radio Club a *REAL* Club.

All submissions, queries, comments and editorials should be addressed to Jeffrey Garth, WB2ZBN at jeff <*dot*> garth <*at*> comcast <*dot*> net.

Submission deadline for the September 2019 issue: Tuesday, August 20, 2019

Club Website www.w2mmd.org
Club E-Mail Reflector: GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net

August Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

August 2019	
NRAU 10m Activity Contest	1700Z-1800Z, Aug 1 (CW) and 1800Z-1900Z, Aug 1 (SSB) and 1900Z-2000Z, Aug 1 (FM) and 2000Z-2100Z, Aug 1 (Dig)
SKCC Sprint Europe	1900Z-2100Z, Aug 1
QRP Fox Hunt	0100Z-0230Z, Aug 2
NCCC RTTY Sprint	0145Z-0215Z, Aug 2
NCCC Sprint	0230Z-0300Z, Aug 2
10-10 Int. Summer Contest, SSB	0001Z, Aug 3 to 2359Z, Aug 4
European HF Championship	1200Z-2359Z, Aug 3
WAB 144 MHz Low Power Phone	1400Z-1800Z, Aug 3
North American QSO Party, CW	1800Z, Aug 3 to 0559Z, Aug 4
ARRL 222 MHz and Up Distance Contest	1800Z, Aug 3 to 1800Z, Aug 4
SARL HF Phone Contest	1400Z-1700Z, Aug 4
G3ZQS Memorial Straight Key Contest	2300Z, Sep 4 to 2300Z, Sep 6
ARS Spartan Sprint	0100Z-0300Z, Aug 6
Phone Fray	0230Z-0300Z, Aug 7
CWops Mini-CWT Test	1300Z-1400Z, Aug 7 and 1900Z-2000Z, Aug 7 and 0300Z-0400Z, Aug 8
QRP Fox Hunt	0100Z-0230Z, Aug 9
NCCC RTTY Sprint	0145Z-0215Z, Aug 9
NCCC Sprint	0230Z-0300Z, Aug 9
WAE DX Contest, CW	0000Z, Aug 10 to 2359Z, Aug 11
QRP ARCI European Sprint	0800Z-1100Z, Aug 10
SKCC Weekend Sprintathon	1200Z, Aug 10 to 2400Z, Aug 11
Maryland-DC QSO Party	1400Z, Aug 10 to 0400Z, Aug 11
4 States QRP Group Second Sunday Sprint	0000Z-0200Z, Aug 12
MMMonVHF/DUBUS 144 MHz Meteorscatter Sprint Contest	1200Z, Aug 12 to 1159Z, Aug 14
NAQCC CW Sprint	0030Z-0230Z, Aug 14
Phone Fray	0230Z-0300Z, Aug 14
CWops Mini-CWT Test	1300Z-1400Z, Aug 14 and 1900Z-2000Z, Aug 14 and 0300Z-0400Z, Aug 15
QRP Fox Hunt	0100Z-0230Z, Aug 16
NCCC RTTY Sprint	0145Z-0215Z, Aug 16
NCCC Sprint	0230Z-0300Z, Aug 16
SARTG WW RTTY Contest	0000Z-0800Z, Aug 17 and 1600Z-2400Z, Aug 17 and 0800Z-1600Z, Aug 18
ARRL 10 GHz and Up Contest	0600 local, Aug 17 to 2400 local, Aug 18
Russian District Award Contest	0800Z, Aug 17 to 0800Z, Aug 18
Keyman's Club of Japan Contest	1200Z, Aug 17 to 1200Z, Aug 18
Feld Hell Sprint	1600Z-1759Z, Aug 17
North American QSO Party, SSB	1800Z, Aug 17 to 0559Z, Aug 18
CVA DX Contest, CW	2100Z, Aug 17 to 2100Z, Aug 18
SARL HF Digital Contest	1400Z-1700Z, Aug 18
NJQRP Skeeter Hunt	1700Z-2100Z, Aug 18

August Contest Calendar - Continued on page 45

August Contest Calendar

WA7BNM Contest Calendar : www.contestcalendar.com

August Contest Calendar - Continued from page 44

ARRL Rookie Roundup, RTTY	1800Z-2359Z, Aug 18
Run for the Bacon QRP Contest	0100Z-0300Z, Aug 19
Phone Fray	0230Z-0300Z, Aug 21
CWops Mini-CWT Test	1300Z-1400Z, Aug 21 and 1900Z-2000Z, Aug 21 and 0300Z-0400Z, Aug 22
QRP Fox Hunt	0100Z-0230Z, Aug 23
NCCC RTTY Sprint	0145Z-0215Z, Aug 23
NCCC Sprint	0230Z-0300Z, Aug 23
Hawaii QSO Party	0400Z, Aug 24 to 0400Z, Aug 26
ALARA Contest	0600Z Aug 24 to 0559Z, Aug 25
SCC RTTY Championship	1200Z, Aug 24 to 1159Z, Aug 25
W/VE Islands QSO Party	1200Z, Aug 24 to 0300Z, Aug 25
YO DX HF Contest	1200Z, Aug 24 to 1200Z, Aug 25
Kansas QSO Party	1400Z, Aug 24 to 0200Z, Aug 25 and 1400Z-2000Z, Aug 25
YARC QSO Party	1600Z, Aug 24 to 0359Z, Aug 25
Ohio QSO Party	1600Z, Aug 24 to 0400Z, Aug 25
CVA DX Contest, SSB	2100Z, Aug 24 to 2100Z, Aug 25
50 MHz Fall Sprint	2300Z, Aug 24 to 0300Z, Aug 25
SARL HF CW Contest	1400Z-1700Z, Aug 25
QCX Challenge	1300Z-1400Z, Aug 26 and 1900Z-2000Z, Aug 26 and 0300Z-0400Z, Aug 27
SKCC Sprint	0000Z-0200Z, Aug 28
Phone Fray	0230Z-0300Z, Aug 28
CWops Mini-CWT Test	1300Z-1400Z, Aug 28 and 1900Z-2000Z, Aug 28 and 0300Z-0400Z, Aug 29
QRP Fox Hunt	0100Z-0230Z, Aug 30
NCCC RTTY Sprint	0145Z-0215Z, Aug 30
NCCC Sprint	0230Z-0300Z, Aug 30
Hiram Percy Maxim Birthday Celebration	0000Z, Aug 31 to 2359Z, Sep 8
World Wide Digi DX Contest	1200Z, Aug 31 to 1200Z, Sep 1
UK/EI DX Contest, SSB	1200Z, Aug 31 to 1200Z, Sep 1
Colorado QSO Party	1300Z, Aug 31 to 0400Z, Sep 1

w2mmd.org

www.facebook.com/W2MMD

twitter.com/w2mmd_gcarc

Facebook Page

Club Committees

Standing Committees	Committee Chairs
Membership and Publicity	**Bob Fields, KC6AOH**
Hamfest	**Sheldon Parker, K2MEN and Bill Price, NJ2S**
Repeater	**Herb Dyer, KT2Y**
Hospitality	**Jeffrey Garth, WB2ZBN**
W2MMD Clubhouse Site	**Al Arrison, KB2AYU**
Field Day	**Al Arrison, KB2AYU**
Nominations	**Jim Clark Sr, KA2OSV**
Health, Welfare, & Silent Keys	**Bill Price, NJ2S**
Budget	**Al Arrison, KB2AYU**
Constitution and By-Laws	**Ron Block, NR2B**
Membership Badges	**Chuck Colabrese, WA2TML**

Activity Committees	Committee Chairs
GC-ARES Emergency Coordinator	**Karl Frank, W2KBF**
GC-RACES Emergency Coordinator	**Ed Champion, N2RO**
Club Publications	**Jeffrey Garth, WB2ZBN**
License Testing/VEC Liaison	**Gary Reed, N2QEE**
Programs	**Tony Starr, WA2FZB**
Membership Roster Database	**Jeffrey Garth, WB2ZBN**
Club Historian	**Jeffrey Garth, WB2ZBN**
GCARC Family Picnic	**Laurie Love, KD2EYW**
Foxhunts	**Jim Wright, N2GXJ**
W2MMD License Trustee	**Darrell Neron, AB2E**
Contests and Nets	**Tony Starr, WA2FZB**
Holiday Dinner Party	**Jennifer Robinson, KD2EYR**
W2MMD Special Event Station	**Mark Gottlieb, KK2L**

GCARC <*at*> Mailman <*dot*> QTH <*dot*> Net e-mail reflector guidelines

1. **No attachments** (e.g. pictures, files) are allowed on the reflector.
2. If you have Club-related pictures that you would like to share, you can send them to the webmaster, he will put them on the website and he will send out a general e-mail to all the members.
3. Otherwise, the pictures will have to be sent to the members' addresses.
4. URLs/Hyperlinks are acceptable on the reflector.
5. Do not send any messages with e-mail addresses in the **BCC** (**Blind Carbon Copy**) field. The message will be rejected. Use only the **To:** or **CC:** fields.
6. Members are subscribed to the reflector using the member's e-mail address from the roster database. You must use that address when sending an e-mail via the reflector.
7. If you use another address on the reflector, the message will get rejected or "*bounced*", because the reflector does not recognize that address.
8. Whenever a message sent to reflector is rejected or *"bounced"* for various reasons, the administrator has to log-in to the Mailman.QTH website and approve the message. If the admin recognizes the address as belonging to a Club member, the message is accepted and passed on to the reflector.

FYI...If you use Comcast e-mail, you are limited to 100 addresses per message.
For more information about the e-mail reflector, goto : **www.mailman.qth.net**

The W2MMD Repeaters

2 Meter Repeater
Output: 147.180 MHz
Input: 147.780 MHz
Offset: +600 kHz - PL : 131.8 Hz
(Conventional FM plus C4FM Capability)
EchoLink : W2MMD-R

70 cm Repeater
Output: 442.100 MHz
Input: 447.100 MHz
Offset: +5 MHz - PL : 131.8 Hz
(Conventional FM)

The above 2 repeaters are all
located in Pitman, NJ
GPS: 39.728481°, -75.131088°

1.25 Meter Repeater
Output: 224.660 MHz
Input: 223.060 MHz
Offset: -1.6 MHz - PL : 131.8 Hz
Location: Sewell, NJ
GPS: 39.746738°, -75.077094°

SKYWARN™ Net
Sunday @ 1945: 147.180 MHz Repeater

Gloucester County ARES/RACES Net
Sunday @ 2000: 147.180 MHz Repeater

10 Meter Rag Chew Net
Every Tuesday @ 2000 Hours
Tune-In on 28.465 MHz or 28.475 MHz

2 Meter Rag Chew Net
Every Thursday @ 2000 Hours
Tune-In on the 147.180 MHz Repeater

10 Meter Swap Meet
2nd Saturday of the Month @ 2000 Hours
Check-in on 28.465 MHz or 28.475 MHz

Meeting Calendar

General Membership Meeting

Wednesday, August 7, 2019 @ 1930 Hours
Pfeiffer Community Center
301 Blue Bell Road
Williamstown, NJ
(Everyone is welcome)

Board of Directors Meeting

Wednesday, August 21, 2019 @ 1900 Hours
W2MMD Clubhouse
(All members are welcome)

August 7, 2019
General Membership Meeting

Skype Meeting With :
Alexandre Grimberg, PY1AHD

Plus hamfest volunteer and picnic food sign-ups

** Badges **

Need a new or replacement badge
Contact "The BadgeMan"

Chuck Colabrese, WA2TML
colabrese <*at*> comcast <*dot*> net

Question Pool Answers : G1A13:D; G1A14:D; G1A15:D; G1B01:C; G1B02:D; G1B03:A; G1B04:C; G1B05:B; G1B06:D; G1B07:B; G1B08:D; G1B09:D