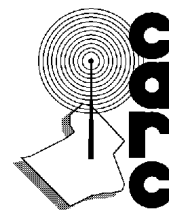




The Illuminator



The monthly newsletter of the Carbon Amateur Radio Club

January 2002

January Meeting

The next regular meeting of the Carbon Amateur Radio Club will be held on Thursday, January 17, at 7:30 p.m. at the EOC in Nesquehoning. See you there!



ARRL Study Panel Recommends Eliminating Novice Bands

On the basis of nearly 5000 survey responses, the ARRL Novice Spectrum Study Committee has recommended that the ARRL petition the FCC to eliminate the Novice CW subbands and allow Novice and Technician with Element 1 credit licensees to operate CW on the General 80, 40, 15 and 10-meter CW allocations at up to 200 W output. The panel suggested setting aside portions of those bands for "slow CW operation" to aid new CW operators in enhancing their skills. The committee recommended refarming the current Novice/Tech Plus subbands in part to allow expansion of the phone allocations on 80, 40 and 15 meters.

The committee's complete report will be presented to the ARRL Board of Directors for consideration during its annual meeting in January. The committee's determinations were based on opinions expressed by 4744 respondents to an ARRL Novice Spectrum Study survey launched in June. Those expressing their opinions included ARRL members and nonmembers. Nearly 61% of those responding were Extra class licensees.

The committee, chaired by ARRL International Affairs Vice President Rod Stafford, W6ROD, has been studying the status and usage of the Novice/Technician Plus HF bands with an eye toward determining what changes to usage of that

spectrum might be needed now that the FCC no longer issues new Novice licenses.

The survey offered possible refarming options for each of the bands involved--including no change at all. Generally speaking, the predefined options proposed retaining Extra class CW subbands on the affected bands, setting aside expanded CW reserves for all license classes except Technicians lacking Element 1 credit, and dividing the remaining spectrum into expanded phone segments for General, Advanced and Extra class operators. A guiding principle was that no class of licensees would lose any privileges as a result of refarming.

The committee recommended expanding the phone bands in accordance with the most popular of the survey choices offered – three for 80, 40 and 15 meters and two for 10 meters. Here's a summary:

- On 80 meters, nearly 40% of those responding opted for a plan that would extend the US phone allocation to 3700 kHz, with Extras permitted on the entire subband, and with Advanced and General class subbands starting at 3725 and 3800 kHz respectively.
- On 40 meters, nearly half of the respondents picked the plan to extend the primary US phone allocation to 7125 kHz, with Extra and Advanced licensees allowed on the entire segment and Generals from 7175 kHz and up. (The committee's report suggested no changes to the special allocations for amateurs on certain Pacific or Caribbean islands and in Alaska.)
- On 15 meters, again, nearly half of those responding wanted the US phone allocation extended to 21,175 kHz, with Extras permitted on the entire allocation, and Advanced and General subbands beginning at 21,200 and 21,250 kHz respectively.

- On 10 meters – where Novice and Tech Plus licensees already may operate CW, RTTY and data from 28,100 to 28,300 kHz, nearly 55% of the respondents favored a plan to retain the US phone allocation from 28,300 to 29,700 kHz and to extend CW access to Novice/Tech Plus operators to 28,000 kHz – an additional 100 kHz. The current Tech Plus 28,300 to 28,500 kHz phone segment would be retained.

The committee's report says that if the ARRL Board adopts the plan, the League should include any request to the FCC to implement the changes within an omnibus filing encompassing other issues, rather than as a separate petition. Consideration of any necessary ARRL Band Plan changes would follow.



A Year In Review – Propagation By Larry, N3CR

Greetings All! Happy New Year to all! It came in at midnight in a big way after a year many of us would like to forget. But first let us remember 2001. I hope your logbook looks a lot like mine. Hundreds of contacts from contests and a few memorable QSOs in between. The number of new prefixes is astronomical as many special event and year long stations are set up commemorating those special occasions in countries all over the world. With Canada and England setting up special call signs for use, I was continually digging for my countries list to figure out what country I was hearing next. Prefixes not used for 20 years are now reactivated and being added to the DXCC list.

The year started off as normal. Officials around the world proclaim we have past the solar cycle peak that is said to have occurred the previous October (2000). Radio conditions sure did not appear like any previous solar peak I remember, and nothing like the one back in 1969 or the DX of 1979. A few watts cw worked the world. The first quarter remained the same with DX on the bands but 10 meters never really opened for late night operations. This was the year to invest in the 50 MHz, six meter band. Every few days the band would open to many areas of the country and Canada. As the year continues, the six meter band gets longer and longer with all areas of Europe, Yukon, Alaska, Hawaii and

Africa showing up on the "magic band." As the months pass, more countries allow operation on six meters which previously had been near the military frequencies in those foreign countries. The year ends with six meters reacting to several solar flares, a productive Geminids meteor shower, and repeated aurora E's propagation with some early visual aurora activity. Could this be the beginning of winter propagation? Certainly, seasonal propagation enhanced what was to be a mediocre year of "peak" radio activity.

Ten meters really opened up after July with propagation extending later into the evening and the weeks pass. Finally, Japan, Korea, Russia and the rest of the orient appear on ten meters at dusk and remain for a few hours filling many a logbook. With summer noise subsiding, more Asia signals are worked by more hams, many running only 100 watts and wire antennas. More vertical antennas have been appearing the past couple years and lay claim to working many new call areas on a regular basis. RTTY makes a comeback as many more DX stations use this mode for quick "QSO in a can" contacts from DXpeditions abroad. PSK31 also becomes popular among many stations as the low power ERP mode finds its place next to RTTY. Computers make these new digital modes easy to handle using simple interfaces. CW IS DEAD? Could have fooled me as the DX bands become full on an almost daily basis. Propagation throws everyone a curve as high A and K Index numbers turn bands into crowded DX frenzies. What would normally indicate a dead ten meter band now becomes the band to be on!

The upper bands are also doing well. 160 meters begins seeing more activity as new rigs with autotuners bring more stations up on frequency. Anything is tried to get on 160 meters after dark and the contacts are made. DX appears but seldom is more than sporadic activity with weak signals. 75/80 meters and 40 meters have a regular serving of DX from all over the world especially in the last quarter of 2001. Stations generally pick one or two bands to settle on and roll up the contacts.

QSL bureaus are flooded and the cost of mailing the cards goes up. Then the nasty A WORD = ANTHRAX. The mail slows to an even slower crawl than normal. Snail mail does not even come near what mail service becomes. Email becomes the recommended source of printed info. A world continues and Euros is the new currency in Europe. QSLs via the INTERNET increase as a way of

decreasing the costs of delivering cards. DX reflectors show up all over the country on vhf packet, dial up DX Clusters, and DX Summit on the Internet. Pileups are forming seconds after stations appear on any of the bands.

What is to come? Tweak up that 2m rig! With early aurora activity, it can only be thought that the best is yet to come. Using 2m SSB, working Aurora E propagation and contacting stations around the country by pointing your 2m antenna to the north could prove to be a worthy effort. Not only that, the 2m SSB stations sound like broadcast FM! Great audio. Don't forget 10 meter FM starting at 29.600 MHz. Many stations with 20 watts and a vertical can be heard/worked on an almost daily basis. Europe can be worked between 9 am and 3 pm local time. Watch out for Fort Worth, Texas! They are in there 10 hours daily and better than any beacon! So why are you reading this on the INTERNET when you could be doing it on HF NOW! Have a Happy New Year and Good DX. 73s de n3cr Larry Lilly



Reflections: The Cell Tower Dilemma By Larry, N3CR

It has been some time since this subject has come up and though it may be new to us other areas of the country have had some time gaining experience in the placement of cellular towers. Like those areas, we will have to deal with them the same way. It will be years and several individual trials before the rules will be fairly written. In ways, it appears almost like a covert operation with lack of proper advertising and notification to the whole community as to the impact of things new towers I refer to as steel trees. They seem to be sprouting up all over.

The latest tower appears to be rising from the property of the Thruway U Pull It and Thruway Towing Service area previously the Hoffman Auto Parts Garage off State Route 248, one mile from Leighton and adjacent to the Pa Turnpike milemarker 74.5. If you take a close look, you will see a giant "gin pole" used to raise the upper section and antennas to the top of the tower. Though it does not appear to be on of those 195 foot unlighted giants, it is one of those towers I wouldn't mind having my antennas on! I find this one hardly hidden but there may be some method to the madness. If you detect some animosity, you are right.

Being only my opinion on this subject, I see no reason why more than one service can not utilize one of these towering monsters. Area towers only seem to have one antenna array on them. Those of the Philadelphia area appear to have as many as three or four services on them. I do not feel the tourists of Jim Thorpe, my home area, would be enough to support up to six towers. When you get one tower approved, others show up rather quickly. Look around Franklin and Penn Forest Townships. Towamensing Township is next to gain the "steel forest" with more near ready for construction. The only plus I see, construction of new towers has not taken place until contracts have been signed to have a service placed on the towers.

Among the negatives, these large tower construction companies are not working with the whole community. They are talking tower locations and construction dates before commitments for services are approved. Town meetings have been held but the lasting impact of these additions is not realized until the towers are well in place. Towers should not be placed in the vicinity of schools or high population areas such as shopping malls. I never did like the idea of the old WSAN AM radio towers at the Whitehall Mall. I would get shivers seeing that situation. I could not see myself working at WYNS AM Leighton. I always felt sterilization would be my choosing! I didn't see block buildings stopping high rf radiation.

So what does appear new to us has been an old wound to others. The term "communication tower" will remain part of the resolution whether the tower is commercial or of the amateur radio type. To some there will be no difference although the ham radio FCC Part 97 regulations already covers such situations. I can guarantee you court proceedings related to ham radio towers will take place in our area until these shortcomings are corrected. Now is the time to get your tower in place. Carbon County is about to make it's ruling. Your operating practices could be severely limited without some immediate response. Your ability to communicate when other county communications become temporarily disabled is at risk. Who gets the first word out when a natural disaster occurs? Ham radio. By Larry Lilly N3CR
Jim Thorpe, PA.



ARRL DX Bulletin

DX Bulletin 1 ARLD001
From ARRL Headquarters
Newington CT January 3, 2002
To all radio amateurs

This week's bulletin was made possible with information provided by Tedd, KB8NW, the OPDX Bulletin, WA7BNM, DS1BHE, OA4AHW, 425DXnews, DXNL and Contest Corral from QST. Thanks to all.

MALDIVES, 8Q. Giovanni, I5JHW will be active for one week as 8Q7CG beginning January 6. QSL to home call.

UNITED ARAB EMIRATES, A6. Huraiz, A61AU has been active on 20 meters SSB usually after 0400z and on 10 meters SSB around 1300z. QSL to home call.

BAHAMAS, C6. John, WZ8D is active as C6AIE from Abaco, IOTA NA-080, until January 10. He hopes to work as many F2 contacts as possible on 6 meters during the daytime. If 6 meters is not open he may be QRV on 40 to 10 meters using CW and some SSB. QSL to home call.

SOUTH SHETLAND ISLANDS. Oleg, CE9/R1ANF is QRV from Ripamonti Base, Ardley Island. QSL via RK1PWA.

REUNION ISLAND, FR. Roland, FR5AB has been QRV on 10 meters using SSTV and PSK31 around 1100z and 1030z, respectively. He has also been active on 20 meters using RTTY. Joseph, FR5HA has also been QRV using PSK31 on 20 meters after 1630z and again after 0245z. QSL to home calls.

SOUTH KOREA, HL. The Korean Amateur Radio League is QRV using Special Event call HL17FWC in celebration of the 17th FIFA World Cup until May 30. QSL via HL0HQ.

OGASAWARA, JD1. JA9XBW/JD1 has been QRV on 40, 30, 20, 17 and 12 meters using CW. JD1BIA has been QRV on 12 meters just after 0000z. JE1PIO/JD1 has been QRV on 40 meters CW just before 1300z. QSL via operators' instructions.

MIDWAY ISLAND, KH4. Dick, AH7G, Barbara, NH7YL, Norm, NH7CT, Lori, AH6OS and NH6FP

are QRV as AH4/homecalls. Activity is on 40, 20, 17, 15, 12 and 10 meters. QSL to home calls.

PERU, OA. Rene, DL2JRM and Daniel, DL3SE are QRV as 4T4X and 4T4V, respectively, on 160 to 10 meters, using mostly CW, with some SSB, until January 13. QSL to home calls.

CURACAO, PJ2. Martin, NW0L is active as PJ2/NW0L until January 9. He plans to operate as PJ2T in the ARRL RTTY Roundup as a Single Op/High Power entry. QSL PJ2/NW0L to home call and PJ2T via KN7Y.

SEYCHELLES, S7. Luca, I5IHE is active as S79LC from Praslin Island, IOTA AF-024, using mainly SSB and RTTY, with some CW and SSTV until January 11. QSL via I5JZP.

WEST KIRIBATI, T30. Steve, T30ED has been QRV on 15 meters around 0630z. QSL via 3D2SJ.

INDIA, VU. Sabu, VU2ELJ has been QRV on 80 meters long-path around 1400z.



How do I Get On That Band

By Larry, N3CR

Recently I was asked "How do I get on that band?" The answer at first was easy but the second question was harder "Why would I want to get on that band?" Let's start with the second question first. WHY BOTHER TURNING THE RADIO ON! But the uninformed want to know and I seem to be INFORMATION CENTRAL.

Why would I want to get on 15 meters? After all, there is DX all over 20 meters most any time of day or night. Besides, 10 meters is usually hopping just before noon. Well now! You say you are tired of talking within PA on 40 meters. Why not try loading that antenna up on 15 meters? After all, if the antenna is cut for 7.1 MHz, you probably have a dual band antenna you weren't aware of. It may even do well for 20 meters but watch out for harmonics due to the fact the antenna is not resonant. Your neighbor may not like the DX you are working. Using 450 ohm ladder line may help but then perhaps your feedline may radiate and your XYL may not like your lines in the tv or wipe out that plastic boom box she is listening on, not to mention

your teen Internet hacker upstairs in his bedroom. Anything is worth a try. 15 meters opens before 10 meters and tends to be longer distance than 10 meters.

This is why we learn about MAXIMUM USABLE FREQUENCY or MUF. They always had a question on MUF on any ham exam I took. MUF is based on the daily solar flux, A (24 hr) Index, and K Index (hourly). If you know about the propagation, you can determine the MUF and know which band to choose for the type DX you expect to work. If you are looking for daily schedules on the DX bands, this becomes very important. And it changes with the season, the point in the solar cycle where you are now, and most importantly the geomagnetic activity taking place within the 24 to 72 hours. You say, "wow, this is a lot to learn!" Actually, it all falls into place rather quickly. Soon you will be able to predict what time and frequency to use to make a scheduled contact with that friend of yours in Miami, Florida or Zurich, Switzerland. All of a sudden you can fill in the holes in your logbook of all those places you wished to talk to.

For years I used only one or two bands and was happy with that. I fell into a habit of one antenna for each band. Things generally worked better that way. Besides, a 75 meter dipole was hard for me to locate on my small property. But I have one. In the beginning, attic antennas solved a lot of my problems, out of sight, out of mind. They didn't freeze up in winter either! Then I found that my 40 meter antenna worked rather well on 15 meters when I had a decent tuner. But the DX seemed to always be on 20 meters. That was at the bottom of the sunspot cycle. Now that I have believed to have worked everything, I am finding DX prefixes I never have worked. Guess where they have been! Well, for 2002 look for me to be spending more time on late evening 40m DX and daytime 15m DX using the 40 meter antenna and a tuner. I have an easy 15m dipole from copper tubing that is flat across the whole band and works everything I hear. Between the two, I should have all directions covered. The 15 meter dipole could easily be made into a two element beam. That may be better! I will let you know but until then use what you have and put it as high as you can. K3II told me that a long time ago. 73s all de Larry Lilly N3CR

A Contester's Christmas Poem

By Jim, K3II

It was the night before the contest and all thru the house not a creature was stirring 'cept Murphy the louse. The rigs were all tuned with infinite care in the vain hope that Murphy would not be there. Friday night at the appointed time, Murphy showed up with his eyes all a-shine. With his hands on his hips came these words from his lips. Of all the hams I ever knew and I have known quite a few, contesters are the nuttiest crew. Old hams, their hair turning gray, they never quit they just fade away. The beam won't turn north, the final goes south. What is happening in this darn house? The high voltage arcs with a horrible sound, just as a new multiplier is found. VQ9R cries just as the receiver dies. You would think after 40 years of this stuff a man would be tempted to sit on his duff. But each year instead after looking ahead, I wind up each contest feeling half dead. And so with this lament still fresh in your ears I look forward to many more pleasurable years.



FCC Denial Leaves League Eyeing Congressional Action On Deed Restrictions

The ARRL got the proverbial lump of coal in its stocking in late December, but it wasn't from Santa. The FCC affirmed a November 2000 staff-level decision that declined to include privately imposed deed covenants, conditions and restrictions--CC&Rs--under the limited federal preemption known as PRB-1. That policy requires municipalities to "reasonably accommodate" amateur communication in antenna-related zoning and regulation.

The ARRL a year ago appealed to have the full FCC review the earlier denial. The Commission turned down the League's Application for Review December 18 in a Memorandum Opinion and Order released December 26.

"There has not been a sufficient showing that CC&Rs prevent Amateur Radio operators from pursuing the basis and purpose of the Amateur Service," the FCC said. The Commission said hams still can get on the air without installing residential antenna systems by operating away from home, while mobile or at club stations.



The FCC said it recognizes the importance of preserving the integrity of contractual relations that CC&Rs represent. It asserted that the ARRL had submitted no specific evidence that would persuade it to abandon its long-standing policy of excluding CC&Rs from PRB-1.

ARRL President Jim Haynie, W5JBP, expressed disappointment in the Commission's ruling. "The biggest problem Amateur Radio operators face today is being able to put up an antenna," Haynie said. "Our only approach now is to get a bill into Congress."

The FCC itself even hinted that Congressional action ought to be a next logical step. "However, should Congress see fit to enact a statutory directive mandating the expansion of our reasonable accommodation policy," the FCC declared in its MO&O, "the Commission would expeditiously act to fulfill its obligation thereunder."

Haynie conceded that extending PRB-1 protection to CC&Rs would be "a tough sell" to members of Congress. He noted, however, that it's getting more difficult all the time for amateurs to find desirable housing that does not come with deed covenants and restrictions. "It's extremely serious for the amateur community, because it restricts what hams will be able to do in the future," he said.

The topic is likely to be the focus of additional discussion at this month's meeting of the ARRL Board of Directors.

In its Application for Review in late 2000, the ARRL maintained that the FCC should have the same interest in the effective performance of an Amateur Radio station and in the promotion of amateur communications regardless of whether the licensee's property is publicly regulated or privately governed by homeowners' associations and their architectural control committees.

A copy of the FCC's Memorandum Opinion & Order in RM-8763 is available on the FCC Web site <http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-01-372A1.doc>.



FCC Still Singing The Postal Blues

E-mail it or fax it, but – at least for now – if you've got something to send to the FCC, don't put it in the mail if you expect the FCC to receive it anytime soon. The FCC said this week that, because of the mail situation, it still is not processing Amateur Radio vanity call sign applications – even those filed electronically – because hard copy and electronic vanity applications get equal processing priority.

In the aftermath of the recent anthrax incidents involving the mails, the FCC began diverting mail destined for Gettysburg and for its Washington, DC, Headquarters to special-handling facilities. The Commission likely will not resume vanity processing until the mail situation is untangled.

The FCC has processed vanity applications received through October 14. Vanity applications received after that still are on hold, but vanity fees paid by credit card for electronic filings are being charged to holders' accounts.

FCC staff members in Gettysburg, Pennsylvania – the office that handles vanity processing and issues all Amateur Radio licenses – say they're working on a two-week mail backlog. In mid-November, the Gettysburg office began diverting mail addressed to its 1270 Fairfield Road location to another site in town for special handling. But, staffers say, some earlier mail to Gettysburg was diverted to FCC Headquarters for decontamination with other federal mail and is yet to be returned.

Since October 19, the FCC has been urging all of its customers to avoid using the mails to conduct business with the agency and to use electronic means to file comments or applications. The FCC has been acting on amateur renewals and administrative updates filed on-line via the Wireless Telecommunications Bureau's Universal Licensing System <<<http://wireless.fcc.gov/uls/>>>. As of December 3, all applicants must include an FCC Registration Number (FRN) when filing.

Mail sent to FCC Headquarters has been diverted to a warehouse facility in Capitol Heights, Maryland, since late October. The FCC has indicated that it continues to track the date of receipt for each piece of mail.

An FCC spokesperson in Washington has assured that no mail has been destroyed and that the Commission probably would permit additional time to include any comments filed on paper in a proceeding that might be caught in the special-handling and

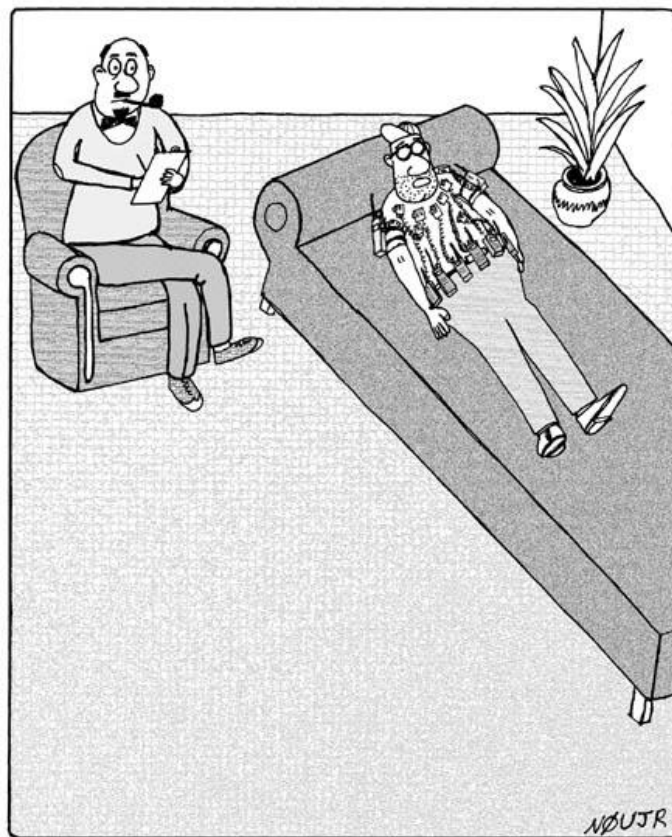
decontamination process. The FCC staff member invited those who had filed paper comments in a proceeding to file their comments again electronically, using the FCC's Electronic Comment Filing System (ECFS) <<http://www.fcc.gov/e-file/ecfs.html>>.

The FCC said the US Postal Service will continue to accept and will divert all mail addressed to 1270 Fairfield Road, Gettysburg – the office's physical location – to the off-site mailroom. The Gettysburg office now only accepts hand and courier deliveries at the rear entrance of 35 York Street, Gettysburg.



Ducie Island DXpedition Set for March 2002

With assistance from an ARRL Colvin Award, the Pitcairn Island Amateur Radio Association (PIARA) plans to mount a DXpedition to Ducie Island in March. Ducie – which became the newest ARRL DXCC entity as of November 16, 2001 – has not yet been activated, making it the most-wanted DXCC entity. Poor weather scuttled the initial attempt to land a DXpedition team on Ducie Island in November. PIARA President Tom Christian, VP6TC, has announced that a DXpedition team now plans to depart by boat from Mangareva on March 12. Once on Ducie Island, the DXpedition will use a VP6 call sign to be announced at the start of the operation, which will include both SSB and CW and possibly RTTY on 160 through 6 meters. Six-meter QSLs go to JA1BK. Log checks will be available on the "DX Cluster from Japan" Web site, <<http://www.big.or.jp/~ham/dx.html>>. More information is available on the VE3HO QSL Manager Web page <<http://www.ve3ho.com/ve3ho-qslmgr.htm>> and on WD4NGB's DX Is Web site, <<http://www.qsl.net/wd4ngb/ducie.htm>> – Tom Christian VP6TC



"Well it all started when I was a child...I felt that I had difficulty communicating with people..."

Check out <http://incolor.inetnebr.com/n0ujr> for other cartoons and to purchase N0UJR's book, "N0UJR and His Friends."

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CARC Email Reflector: see www.qth.net CarbonARC list for details

CARC Membership Information

Regular Membership is \$15.00, which includes autopatch privileges.

All amateur radio operators are invited to join the CARC ARES / RACES net held 21:00 local time every Wednesday on the W3HA repeater at 147.255 MHz + offset, PL 131.8. Any amateur radio operator or anyone with an interest in ham radio is welcome to attend our monthly meetings which occur the third Thursday of each month at 7:30 PM at the Carbon County EMA Center on Route 93 in Nesquehoning.

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