PAMLICO AMATEUR RADIO SOCIETY 2022

OFFICERS NOV 2021-OCT 2023

President—Mike Marsh, K4NLC Vice President--Bruce Perkins, K4ONC Treasurer--Gail (Wally) Wallace, KK4ASP Secretary/Newsletter Editor--Jim Hartmeyer, AI4WL

ARES Emergency Coordinator--Mike Marsh, K4NLC Web Master--Paul Jodoin, K4MMB

MEETING NOTES

These notes taken at monthly meetings are extracted from the Pamlico Amateur Radio Society weekly newsletter, the PARSgram. Although they are not formal minutes, they constitute a record of those meetings.

PAMLICO AMATEUR RADIO SOCIETY (PARS) Jan 29, 2020 2022 MEETING NOTES

- * Eleven intrepid PARS members braved the cold blustery wind and snow showers to attend the 9 am breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * Dick, K4JJW, announced his station will be a bonus station during the NC QSO Party coming up Sunday, Feb 27th. His call will appropriately be "N4E". [You might remember, Dick did a two-county swing in Pamlico and Craven by himself last year placing second in the DXpedition category.]
- * Mike presented Wally's treasurer's report. Dues are slowly coming in; the club is solvent. There is a big expenditure coming up this month for two new batteries, solar panels, controller and other items needed to replace the old solar power equipment at the Kershaw repeater site.
- * Jim, AI4WL, on behalf of under-the-weather-with-a-continuing-cough Webmaster Paul, K4MMB, reported that the PARS Website has been running "about average". Paul says that this month there were about 160 visits and 200 or so pages looked at. Paul also advised to be wary of squirrels: one or more chewed through his LMR-400 feedline and Paul ended up "transmitting to the worms." The feedline has been fixed.
- * Propagation Report: Solar activity was reported by NOAA to be low even though there are 5 sunspot regions and a chance for M class flares. The solar flux was 115 Friday bringing the 90 day average up to 97. The geomagnetic field was reported to be unsettled. Conditions on the bands, 40M and above are good. The early morning gray line continues to offer good DX on 40 into Asia.
- * Mike, our PCN controller, reported 4 training sessions during the month. Three non-exercise weather nets were called during the Jan 21-22 ice storm. The recent simplex tests on 2M and 70 cm. proved helpful in sorting out individual equipment issues and the range of participating stations. More of these tests are anticipated. Mike also advised that a state-wide COMMEX, similar to that run in December for Eastern NC, will be conducted on May 24th. Sign up to participate on NC TERMS.
- * Bruce, K4ONC, our county AUXcomm lead, ran the the ice storm nets and monitored the primary reporting repeater channel from early Friday through Saturday noon. For each net, 12 to 15 operators checked in and rendered situation/weather condition reports. These would be ready for the Pamlico EC if conditions became severe and resulted in power or communication service failures. Although dangerous icing developed and bridges were closed, all utilities stayed up.
- * Lor, W3QA updated the group on the replacement 2M repeater that has both DMR and FM Analog capabilities. Fabrication was delayed for parts and updated software. Once complete, operational tests will begin at the Kershaw site. It will operate in both modes on the same frequency as the current

repeater. Additional CTCSS/DCS codes will be implemented to prevent conflict.

* After covering PARS business, Mike then yielded the floor to Bill Michne, W3MX for a discussion of the results of his statistical analysis of [ARRL Field Day] participation and scores over the past five years. He opened by posing the question: What do we want to do this year?

Bill had gathered data on the number of entries by class, number of participants, level and type of activity by mode and more. He showed how the pandemic and pandemic related rule changes in 2020 upped the active operators 10 fold, reduced the number of "participants"--many non-operating attendees--by almost half, and doubled the number of SSB and at least tripled the number of digital contacts. He then outlined what he saw as the several purposes of our field day events. An active discussion followed. It appeared that the group agreed that PARS:

- -Knows how to set up and operate under adverse conditions but does not like doing it "in the rough". Heat and humidity here is tough.
- -That our field day as a "show-case" for the general public has mostly been a failure, choice of venue/lack of visibility being a major factor.
- -GOTA operation has been hit and miss. Few outside visitors means few GOTA operators.
- -The number of "participants" does not indicate the number of operating seats filled. More come to socialize than to operate. -We do not do well in getting youth and other groups--those that might have an interest--to attend.

Given these conclusions, suggestions offered included:

- -Look for opportunities for exposure other than at field day--go to the public, not have the public come to us. Possibilities include Pamlico Heritage Days, Croaker Fest.
- -During the ARRL Field Day Weekend "focus on ourselves": operate from homes as single operators, as pairs or more; combine scores for the club total; have our own contest between our stations.
- -Search out ways to involve youth or other groups, Scouts, JROTC, members of emergency services, etc.

Bill's question was not answered. This discussion will continue.

* There being no further business, the meeting adjourned at 10:40 am. The wind was still cold but the Sun bright.

(PARSgram 2022-01-31)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Feb 26, 2022 MEETING NOTES

- * Eighteen PARS members, visitors and guests attended the 9 am breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported but we should see some new hams by our next meeting. Bill's (WM3X) license class students will take their exams on March 10th. Bill is expecting 6 to take their Tech, 3 for General, and one going for Extra.
- * Mike presented Wally's treasurer's report. Dues are slowly coming in; the club is solvent.
- * Bill Olah, KR4LO, has monitored the new batteries powering the Kershaw repeaters and all is well.
- * Activity on the N4PRS Website has been about average according to Webman Paul, K4MMB: 135 visitors with each seeing 3 pages. He sees more locals using the site. The repeater page remains the most visited.
- * Propagation Report: Solar activity was reported by NOAA to be very low. The solar flux was 96 Friday, well below the current 90 day average of 105. The geomagnetic field was reported to be quiet. Conditions on the bands 40M and above are reportedly good except for 10 meters. Even so, reports by our active Dx'ers indicate good activity on 12 and 10 during the past week.
- * Mike, our PCN controller, reported 4 training sessions during the month amounting to 25.2 manhours. Some PCT members installed the VARA FM application and are trying it on 6 Meters. As part of this effort, Gary, NC3Z, has obtained approval to operate his station as a WinLink RMS.
- * Bruce, K4ONC, our county AUX comm lead, announced a second major exercise, this one state-wide

for AUXcomm and emergency services will be conducted on May 11 & 12. The later May 24 exercise will offer opportunity for both AUXcomm and stay-at-home ARES play. Both will be addressed at the next PCT Meeting on Saturday, Mar 5, at the Florence Station 25 Fire Dept.

- * The "replacement" K4ONC repeater that has DMR capability is under test. It has different access (CTCSS) codes than the current analog only repeater currently installed at Kershaw. Look for a short test period within the month. Obtaining necessary internet connectivity may slow full implementation.
- * Mike asked the group to consider club swap meets at future meetings. Expect a presentation on remote station operation at the March meeting.
- * With interest in solar-battery-emergency power growing, Jack, KO4RSD, generated lots of discussion with a "show & tell" of his Jackery Solar Generator 1500 combined with 4 SolarSaga 100W solar panels. This portable system can provide 1800 watts (3600W surge) indefinitely.
- * There being no further business, the meeting adjourned at 10:03 am. (PARSgram 2022-02-28)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Mar 26, 2022 MEETING NOTES

- * Thirty-one PARS members, visitors and guests attended the 9 am breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported.
- * Mike presented Wally's treasurer's report. The club is solvent. Reimbursement for repeater expenses was made. Dues are still slowly coming in.
- * Paul, K4MMB, reported the N4PRS Website is down this morning. Cause is unknown but he hopes the problem to be cleared quickly. There have been about 145 visitors with each seeing 3 pages this month. With the repeater change, most visits have been to the change instructions and repeater page.
- * Propagation Report: Conditions on the bands 40M and above are good and activity on 10 meters is up. Lots of TEP and even F2 activity on six meters reported. Look for Comoros, Tajikistan, and Viet Nam this week.
- * Mike, our PCN controller, reported 5 training sessions during the month amounting to 31.4 manhours.
- * Bruce, K4ONC, our county AUXcomm lead, announced the next PCT Meeting will be on Saturday, April 9th, at the Florence Station 25 Fire Dept. The station will not be available on the regular first Saturday meeting day.
- * Mike and Bill, KR4LO, reported that even with the increased load from the new repeater and the UHF KR4LO repeater operating at the Kershaw tower site combined with recent overcast days, the upgraded solar power system is performing well.
- * This year, the Oriental Croakerfest will be on July 2nd. Paul expects to drive the "N4PRS" tractor in the parade. Mike indicated a booth should be considered.
- * Bill, WM3X, briefed the group on the new FCC \$35 licensing fee to be imposed for most applications including vanity requests beginning April 19th. An initial license or upgrade request will cost the applicant \$50 when combined with the ARRL VE fee. Applicants will have only 10 days from the date the FCC receives the application to pay the FCC fee or the application is voided. Details are still being worked out. The ARRL plans to assist those aged 18 or younger by covering the FCC fee and only imposing a \$5 VE fee. [Watch the ARRL WEB site, www.arrl.org, for the details as they are announced.--ed]
- * Bill also reported a very successful VE session on March 10th for eleven candidates: 7 new licensees (5 technician, 2 general), two upgrades to general, one to extra, and reinstatement of an expired general class license. [See PARSgram 2022-03-14 for the list.--ed]
- * Lor, W3QA, reported the new Kenwood repeater was cut-over on Wednesday (Mar 23rd) for operational testing. It required users to change their PL tone frequency and CTCSS squelch settings. The flurry of user activity raised a number of minor issues, most were resolved by Friday when DMR

capability was also activated. To improve repeater receive sensitivity, it will be swapped with the old one for a couple of weeks so it can be fine-tuned using special equipment. The new PL tone and squelch setting remain. Users do not have to change them back to the old.

- * Digital Voice Modes--DMR, DSTAR, C4FM and more. Wayne Beasley, KO4OJC, led a lively group discussion on these digital modes, the ENC DMR NC4ES Network, Hotspots, and codeplugs. The new Oriental DMR repeater will initially serve only the Pamlico area.
- * There being no further business, the meeting adjourned at 10:07 am. Following the meeting members helped each other program their radios for the new repeater. (PARSgram 2022-03-28)

PAMLICO AMATEUR RADIO SOCIETY (PARS) APR 30, 2022 MEETING NOTES

- * Twenty PARS members, visitors and guests attended the 9 am breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported.
- * Mike presented Wally's treasurer's report. The club is solvent. There was no financial activity this month.
- * Paul, K4MMB, reported there were 137 visitors so far this month to our website, www.n4prs.org, with 271 pages visited. The repeater page continues to be the most visited. A new page, the "Pamlico Communications Team" has been added. The PCT leader was surprised. On it you can find Lor's, W3QA, report on the recent Dual Mode repeater test.
- * Propagation Report: Active conditions with M & X Class flares, blackouts, solar storms this past week, 2 M-Class flares this morn. Storm magnetic field disruptions noticed here several times in the past week. Conditions on the bands 40M and above are good and activity on 10 meters is up. Dick, K4JJW reported 6M TEP contacts. Expect 6M activity to improve. [Watch DXmaps.com for openingsed.]
- * Bruce, K4ONC, our county AUXcomm lead, announced the next PCT Meeting will be on Saturday, May 7th, at the Florence Station 25 Fire Dept. On tap will be a discussion of PACE plans with a focus on the plan for Pamlico County AUXcomm and ARES.
- * Field Day. Bill Michne, WM3X, did a detailed study of PARS' past field days and presented his report at the January 2022 meeting. In a re-look at how PARS might participate in this year's ARRL Field Day, Mike summarized Bill Michne's, WM3X, findings and his conclusions reported in the January 31 PARSgram [http://www.n4prs.org/parsgram-2022-01-31/]. As Field Day nears, the recommendations remain the same:
- On Field Day, operate from our homes and combine our scores for the club total,
- Continue to search for other opportunities to gain public visibility and to involve youth or other groups.
- And, added to those, have a PARS meeting in June. It would not conflict with the contest.
- In the discussion that followed, Mike provided the example of how an announcement of a Technician prep course and some talk about ham radio at his church resulted more than a handful of new hams. Other new suggestions included participation in "Radio Wednesdays" with TV Channel 12 programming weather radios, circulating a brochure on how we can deliver health and welfare messages after hurricanes. Danny Lupton has offered space and logistical support for a roadside station at his Stonewall corner store, Lupton Electronics. Pamlico Heritage Days and Croakerfest remain as good ways to go to the public.
- * Lor, W3QA, advised there is nothing new regarding the Dual Mode repeater since his report [see PARSgram 2022-04-19]. The repeater is being tested to see if the receiver is up to specification.
- * From the floor--
- Bruce has again met with PCC staff on the remodeling of the Johnson Building that houses the Pamlico Evacuation Center. Progress has been slow. The VHF antenna pole has been moved but not to

a place intended. For this year, evacuees will be bused to facilities elsewhere.

- John Keating, KB1KW, talked about the singular support provided to ARES by Carteret County.
- And Bruce Arnold, KS8L, announced that he and his wife Bonnie, KA4BBA, after many years residing in New Bern, are moving to Ohio. Bruce was recognized for his over 25 years of dedicated support to the annual charity "Bike MS" race. The group bid them best wishes and farewell.
- * There being no further business, the meeting adjourned at 10:00 am. Following the meeting Bruce Perkins and Lor replaced the air conditioner at the N4ONC repeater site with one donated by Charlie Overcash, WA4GSI.

(PARSgram 2022-05-02)

PAMLICO AMATEUR RADIO SOCIETY (PARS) May 28, 2022 MEETING NOTES

- * Eighteen PARS members, visitors and guests attended the 9 am breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported. Charlie, WA4GSI, reported working a Special Event Station deep in the Shenandoah Caverns. Lor, W3QA, described a newly upgraded 5W QRP 4 band digital transceiver kit from QRP Labs.
- * Mike presented Wally's treasurer's report. The club is solvent. Two members paid their 2022 dues.
- * A drawing will be held every meeting. Today it was for a \$20 bill. Next month it may be a free breakfast.
- * Paul, K4MMB, reported there were 166 visitors so far this month to our website, <u>www.n4prs.org</u>, with 700 pages visited. The repeater page continues to be the most visited. The archive of PARSgrams, updated every Monday, is number 4 on the hit list.
- * Propagation Report: Jim, AI4WL, ran through the numbers: Low solar activity, some C-class flares. The solar flux 90 day average is slowly climbing. It is now 128. It was 124 last meeting. The geomagnetic field was at minor storm levels (Kp 5 at 0500 hours) this morning so conditions are currently poor. When conditions improve, the bands 40M and above should be good. Only a few members reported working the HF bands this past week but several are chasing down all the workable repeaters in the area. Of interest is finding those that are dual or multimode--not only FM analog but also C4FM, DMR, and D-STAR. Most being UHF, Oriental is on the coverage fringe. Bill, WM3X, has tried but not worked, the Greenville C4FM repeater with a yagi but has opened up the closer Englehard repeater. The NC4ES DMR Columbia repeater was activated this week. With the antenna at around 1200 ft., it should be workable out to 65 miles or so.
- * Bruce, K4ONC, our county AUX comm lead, announced the June Pamlico Communications Team Meeting has been canceled. To be closer to more members, arrangements are being made to use the Station 19 Fire Department for the team's meetings. This group focuses on emergency communications planning and training for Pamlico County AUX comm and ARES.
- * Mike advised that the Pamlico Communications Net had 4 practices during the month for 29.7 manhours. The next nets will focus on Hurricane preparedness.
- * Field Day. For this year PARS members will operate from home and combine our scores for the club total. Bill, WM3X, will open his shack to all, especially our newer Hams, and use the club call N4PRS. We WILL HAVE a June PARS MEETING on June 25th
- * Bruce is coordinating with Eric Hayden at the Newport Weather Service for a Hurricane Preparedness presentation at the Oriental Town Hall, date to be determined. Separately, a Skywarn training session is being considered. Refresher training is needed every two years.
- * Lor, W3QA, advised the dual mode VHF repeater is awaiting repair. A stage of the receiver front end was found to have failed.
- * Bill, WM3X, won the twenty-buck door prize.
- * There being no further business, the meeting adjourned at 09:45 am. (PARSgram 2022-05-30)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Jun 25, 2022 MEETING NOTES

- * Fifteen PARS members, visitors and guests attended the 9 am Saturday Field Day breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported. Rick Simpson, NN2S, having recently retired to Oriental was recognized as our newest member.
- * Mike presented Wally's treasurer's report. The club is solvent.
- * The club has juiced up the monthly meeting door prize. Bruce, K4ONC, announced starting in July attendees will have chance for a \$20 Brantley's Restaurant gift certificate. This month there will be 3 winners, each getting an ARRL Field Day mug.
- * Paul, K4MMB, reported hits on the website slowed in June. There have been 119 visitors so far with about 200 pages visited. Most visitors were from the US.
- * Propagation Report: Jim, AI4WL, ran through the numbers in preparation for this Field Day Weekend. Unfortunately, activity has slowed during the past week with fewer sunspots, lower solar flux numbers. Expect poor daytime and fair nighttime on 40, good conditions night and day on 20, fair on 15, but poor conditions on 10. There is a chance for activity on 6 Meters, Europe was active this morning.
- * Bruce, K4ONC, our county AUXcomm lead, announced the next PCT meeting will be on August 5th at the Oriental VFD Station 19 on Straight Road. At their June meeting, the group reviewed the May 24th EHPC Communications Functional Exercise. This group focuses on emergency communications planning and training.
- * Field Day. This year PARS members will operate from home and combine their scores for the club total. Bill, WM3X, will not be able to open his shack as planned, but hopes to do so for coming contests. Jim, AI4WL, ran over some of the important rules and the various ways to earn bonus points. A short Q&A session followed.
- * Charlie, WA4GSI; Bill, KR4LO; and Jim, AI4WL won the drawing for the Field Day hot/cold insulated mugs.
- * There being no further business, the meeting adjourned at 09:50 am.
- * The meeting was followed by a most fascinating presentation by Dick Goodwin, K4JJW, on Morse Code Keys, specifically his "Pandemic Project" first to restore, then learn the provenance of, a 1921 Vibroplex "Bug". This particular key for most of its life belonged to a Beth Rosenberg (and her husband Ray) who shared the Ohio call W8NCJ for many years. Beth was a keen high speed 35 WPM CW operator who led the way for women amateurs in the the late 1930's and early '40's. Interestingly, she was not licensed but operated as a "guest" until her husband Ray passed in the early 1990's. Only then did she get her own call... The 100 year old key passed through several more hands before Dick's beautiful restoration.

(PARSgram 2022-06-27)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Jul 30, 2022 MEETING NOTES

- * Twenty-six PARS members, visitors and guests attended the 9 am Saturday Field Day breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant. Visitors included boaters Steve and Hannah Clayton, KK4NNH and KK4SJF respectively, of a ham family out of Tennessee.
- * Lor, W3QA, reminded the group that he was assembling several highly regarded feature packed pocket-size GDX QRP digital mode multi-band transceivers. He has 3 available for purchase w/case at \$90 each. [See https://grp-labs.com/qdx -ed].
- * No awards or upgrades were reported although Dick, K4JJW, was recognized for his outstanding effort during the 2022 Thirteen Colonies event. He worked them all (and all the special stations) on all modes and all bands!

- * Paul, K4MMB, reported hits on the website jumped in July. There have been 177 visitors so far with about 350 pages visited. He noted there were 44 visits on the day of Croakerfest, the day of the N4PRS Parade Tractor and the "Ham in the Can" that made lots of HF noise along-side the Neuse.
- * Propagation Report: Jim, AI4WL, advised that we are experiencing a "quiet sun" with a big dip in solar activity. However, as reported by ARRL's Tad Cook, "This cycle is progressing nicely". Our spotless days have dropped from 208 in 2020, to 64 in 2021, and so far in 2022, only one day without sunspots.
- * Bruce, K4ONC, our county AUXcomm lead, announced the next PCT meeting will be on August 5th at the Oriental VFD Station 19 on Straight Road. Mike reported the Pamlico Communications Net met 4 times in July for 14 manhours
- * An opportunity for a another repeater in the county was reported by Bill Michne, WM3X. Access on the Arlington Place tower may become available. At the same time interest in digital modes such as C4FM and DStar, a mode provided in newer transceivers, is increasing. The closest C4FM repeaters now are in Greenville and Englehard. Only the Greenville repeater offers Fusion. DMR access to the Brandmeister, TGIF, DMR+, and other popular networks is also limited, with access through hotspots for these modes the best current option. Lor is contacting the current Arapahoe tower owner for more information. As he noted, these opportunities don't come often.
- * The Hurricane Forum sponsored by PARS, hosted by the town of Oriental and presented by the Newport office of the National Weather Service was a well attended success. With all seats full at town hall and 40 participants watching via the internet, the well advertised presentation by Eric Hayden was an eye-opener for the many newcomers who attended.
- * The organizers of the Bike MS Cycling on Sep 10th and 11th will need help from the amateur community. They requested and were granted use of the Oriental repeater as backup for the New Bern (Grantsboro) repeater that weekend. They also need communications at rest stops and as SAGs--ham followers of the racers in pickups for safety, reporting, and assistance.
- * On the Oriental N4ONC repeater--The Motorola VHF dual mode (FM and DMR) repeater Lor put in place last Saturday for test and evaluation, is receiving high marks according to Mike. The test will continue for an indefinite period.
- * Buck won the monthly drawing. He received a Brantley's Restaurant \$20 gift certificate.
- * Mike suggested that we turn the back table into a monthly mini-hamfest. Members offering equipment, parts, and other ham related items for sale or trade are encouraged to bring them to the monthly meeting.
- * There being no further business, the meeting adjourned at 09:45 am.
- * The meeting was followed by a presentation on remote computing by Wayne Beasley, KO4OJC. Wayne explained how remote operation has been made much easier with newer state-of-the-art transceivers and improved software--much of it free. (PARSgram 2022-08-01)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Aug 27, 2022 MEETING NOTES

- * Twenty-five PARS members, visitors and guests attended the 9 am Saturday Field Day breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant. Mike thanked all who brought equipment and other ham related items to the meeting for sale or trade. He--as were others--was pleasantly surprised at the number and quality of the items that covered the tables. They included relatively new transceivers, power supplies, tuners and accessories. Buyers and sellers were happy.
- * No awards or upgrades were reported. Charlie, WA4GSI, showed the certificate he received from working a SE station 90 feet down in Shenandoah Caverns. Bruce brought in his Clean Sweep Certificate from the 2022 Thirteen Colonies event. He worked all 13 and all the special stations.
- * Paul, K4MMB, reported 136 PARS Website visitors so this month, 3075 for the year so far.

Somewhat disconcerting was the large number of attempts to access the restricted pages. All probably probing bots.

- * Propagation Report: Although NOAA reported a "quiet sun" yesterday, it awoke early with an M7 flare causing a short HF blackout over sun-facing Europe and Africa. More flares and blackouts are expected this weekend. The solar flux 90 day average is 118 indicating fair to good conditions continuing on 40 through 15 Meters and openings on the 10 meter band. Current DX opportunities include Macquarie Island (VK0) and Myanmar (XZ).
- * As part of our monthly show and tell, Jim showed the little pocket size QDX SDR digital QRP transceiver in his "Miles Per Watt" reports. [See this week's report below.] Not only is it an inexpensive extremely compact radio for making contacts using FT8/4 and other digital modes, it is an excellent device when used with PSKreporter that indicates real time signal propagation. Lor, W3QA, assembled and has available for purchase several of these innovative kits from "QRP Labs".
- * Bruce, K4ONC, our county AUXcomm lead, announced the next Pamlico Communications Team meeting will be on September 3rd at the Oriental VFD Station 19 on Straight Road. Mike reported the Pamlico Communications Net will have met 5 Wednesday nights in August for about 20 manhours.
- * The organizers of the Ol' Front Porch Music Festival have asked PARS's help to control vehicle access into the Festival zone on Friday, September 30th. Bruce's plea for help added several members to his volunteer list but more would help reduce the shift at the six sites to 4 hours or so. Thousands are expected to attend. The Pamlico JROTC will take over the barriers on Saturday. [See more in this PARSgram below.]
- * Adding to the show and tell, Mike passed around his little Nano VNA, a low cost yet high performance (at its price point of under a 100 bucks) vector network analyzer (VNA)/Antenna Analyzer. It has a LCD display and is powered from a 3.7V Li-ion battery. Bringing low cost and exceptional functionality in a small package, one of these is likely to make its way into many ham stations.
- * The last Fox Hunt sponsored by PARS and hosted by Bill Olah, KR4LO, was eight years ago. Bill proposed having another. Bill displayed and described his "fox", a remote controllable HT plus smarts, then talked about the last hunt and the challenge of finding a fox in hiding. Fox hunting requires a little knowledge of navigation and radio direction finding, a radio with directional antenna, and lots of common sense. An ability to read a map is a big plus. So on a date to be determined and with details worked out, PARS will most likely host a Fox Hunt. It probably will be followed by a lite picnic of hot dogs, sodas and such. A prize or two may be in play. Since some hunters may not have an appropriate antenna, a build your own session will be a first step. Bill will host a "tape measure yagi" build at his shop. The components will be provided. The session may also include some helpful how-to-do-it hints.
- * Guest, Jim Jenkins won the monthly drawing. He received a Brantley's Restaurant \$20 gift certificate. New technician, Ed Caraballo, and Eddie Lyon, K4NGR, took home PARS License Plates.
- * There being no further business, the meeting adjourned at 10:00 am. (PARSgram 2022-08-29)

PAMLICO AMATEUR RADIO SOCIETY (PARS) September MEETING NOTES Oct 1, 2022

- * Twenty PARS members, visitors and guests attended the 9 am Saturday Field Day breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported. Bill, WM3X, briefly described his plan to put up a simplex C4FM WiresX access node, the major components being a FT-200DR VHF/UHF dual band transceiver and a WIRES-X HRI-200. These two components will provide Internet to RF C4FM digital communications for local C4FM capable users. It is not a local repeater. Bill is awaiting delivery of equipment and registration. Expect a trial in several weeks. Dick, K4JJW, reported the demise of his Yaesu FT-7700 transceiver and its replacement with a new FT-7610 dual receive SDR transceiver.
- * Mike delivered the Treasurer's report on behalf of Wally.

- * Paul, K4MMB, again reported the large number bot probes to access the restricted pages. All but one have been stopped by the web application. The "repeater page" remains the most visited, followed by "What's Happening".
- * Propagation Report: NOAA and spaceweather.com reported a fairly active Sun generating M-class flares, sporadic short HF blackouts and 6 sunspot regions. A large very active sunspot group is rotating into view. The solar flux 90 day average is 127 (118 last month) indicating good conditions continuing on 40 through 15 Meters and openings on the 10 meter band. Good propagation is evident from QRP FT8 operation using a "QDX" SDR digital transceiver this week obtaining 2,896 miles per watt (10,426 miles, 3.6w) in a contact with VK5PO in Australia on 20 meters. Current DX opportunities include South Cook Islands (E5) and Antarctica.
- * The 2022 Maysville Hamfest is coming up on Sunday, Oct 9th, 8a-3p, at the William Frost Park.
- * ARES/Pamlico Communications Net: Mike reported 4 nets in September generating 26 manhours. Bruce, K4ONC, our county AUXcomm lead, activated a Special Weather Net for Hurricane/Tropical Storm IAN on Friday, Sep 30. Although operating at a low activation level, the State EOC through the Eastern Branch Office, had requested ground-truth weather and damage reports. The Pamlico net opened at 9 am (10 operators), 12 (9),3 (16), and 6 pm (10). Our operators provided the information which was summarized and submitted.
- * The "Code Red" system, reportedly provides the most timely tornado warning, "My Radar" provides a good visual display of a tornado track. During the storm, a tornado was reported near Whortonsville at about 1445 hours moving north-west. No damage was reported.
- * Bruce, announced the next Pamlico Communications Team meeting will be on October 8th at the Oriental VFD Station 19 on Straight Road.
- * The Fox Hunt was briefly discussed. Some members have antennas, at least 6 want to assemble them. Bill, KR4LO, will host an antenna building session at a time to be announced. Mike from the New Bern club demonstrated his TV antenna direction finder.
- * On Towers and Repeaters...
- In late July the Oriental Repeater Group (ORG) became aware that Dr. Ron Benfield was selling the Arlington Place Tower but would consider reserving space for amateur radio as part of the sales agreement. He was immediately contacted. The group had to work quickly, the sale was to close September 30.
- Much paperwork was done to formalize both the ORG and its relationship with Dr. Benfield. Frequencies of the repeater needed to be coordinated with SARA. A 15 year lease at \$1.00 for tower space was negotiated with Dr. Benfield. That the repeater would be used as needed to support emergency services was included to justify its presence. Dr.Benfield agreed to become a 6th member of the ORG to further empower the group in its relationship with the new tower owner.
- A initial look at the tower revealed unused but untested hardline already in place. Hardline was found in NY and purchased. Bill, KR4LO, retrieved it. Other components were obtained.
- On Wednesday, Sep 28th, the ORG's hired climber along with Lor Kutchins, W3QA, Perkins, Marsh and Olah, tested the existing unused hardlines. One was exceptionally good and reached the 320 ft height desired. One of Bill's VHF antennas was connected and tested. A small microwave dish facing Kershaw was installed and connected. A remaining cable was also tested. All were tagged as belonging to the ORG. The purchased hardline was not required and likely will be sold.
- Space in an equipment building was identified. Power will be available until replaced by the ORG with solar.
 - The group should have their grand-fathered lease confirmed by mid-October.
- The current plan is to relocate the Motorolla dual mode repeater from Kershaw to Arlington and operate it initially only as a DMR repeater. It will be connected to the Kershaw site by microwave thence into the NC4ES network by internet. At Kershaw, the dual mode Kenwood repeater with options to multi-mode, now being repaired, will be re-installed or the original 20 plus year old FM repeater will

be put back into service.

- The Kershaw site needs work. The old 220 MHz control hardline needs repair or replacement. It will be for the microwave connection. American Tower requires replacement of the aging clamps on the hardline to the VHF antenna.
- Although the relationship with American Tower is good, the members were reminded that use of the Kershaw tower is by gentleman's agreement.
- * Past President Bill Michne, WM3X, as nominating committee determined that existing officers have agreed to serve for another year. Charlie Overcash, WA4GSI, seconded by Bill Olah, moved that the election be held at this election. It was unanimously approved. After determining there were no nominations from the floor, Dick Goodwin, seconded by Olah, moved to accept the slate as presented. It was approved by acclamation.

Elected Officers for the 2022-23 Year are:

Mike Marsh, K4NLC, President

Bruce Perkins, K4ONC, Vice President

Jim Hartmeyer, AI4WL, Secretary

Gail (Wally) Wallace, KK4ASP, Treasurer

- * Bruce thanked the volunteers who signed up to help at the Ol' Front Porch Music Festival. Due to TS IAN, the events were moved inside and their service was not required.
- * Paul Manganaro, KO4MHM won the monthly drawing. He received a Brantley's Restaurant \$20 gift certificate. Mike, K4NLC, won a PARS License Plate.
- * There being no further business, the meeting adjourned at 10:24 am. (PARSgram 2022-10-03)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Oct 29, 2022 MEETING NOTES

- * Twenty-one PARS members, visitors and guests attended the 9 am Saturday breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * Marjorie Dufeck stopped by to thank the club for volunteering to help with crowd management at the Ol' Front Porch Music Festival. She asked that we consider volunteering again next year. Due to TS IAN, the events were moved inside and our volunteers were not required.
- * No awards or upgrades were reported. It was noted that Charlie, WA4GSI, was one of the few to work the special event station deep in the Shenandoah Caverns. Dick, K4JJW, found helpful hints for his new IC-7610 in a "Radio Today" manual. There are manuals for other transceivers.
- * Mike delivered the Treasurer's report on behalf of Wally.
- * Propagation Report: "Sunspot activity seems listless" according to Tad Cook, ARRL's propagation reporter. That said, VK6AS was worked this week on 20M FT8 using the QDX SDR, a simple wire antenna and at 3.9 watts--that's 3,012 miles per watt so propagation can't be that "listless". With 6 sunspot regions (72 sunspots) the solar flux 90 day average is holding at 128. Near term forecast is for good conditions on 15-40 Meters, fair on 12 and 10.
- * Reminder-The annual JARSFEST is coming up on Sunday, November 20th, at the American Legion Building in Benson, NC. Think car pool...
- * ARES/Pamlico Communications Net: Mike reported 4 nets in October for 14.9 manhours. Only 5 to 6 folks are regularly checking-in via WinLink.
- * Bruce, announced the next Pamlico Communications Team meeting will be on November 5th at the Oriental VFD Station 19 on Straight Road. Wayne, KO4OJC will continue the training on the new NANO-VNA. Look at the April, 2022 QST for a review of the small inexpensive and impressive device.
- * ARRL has made available a new Technician Manual and question pool.
- * Bill Michne has started another small General level license class. Recognizing that many new technicians never get active, this course is geared to keeping interest up with a hands-on operational

focus. He has two very interested students for the course.

- * Work on the new Arapahoe/Arlington Place repeater moved along quickly this month. Lor, W3QA and other Oriental Repeater Group members will be connecting and testing the relocated Motorola dual mode DMR/FM repeater this afternoon. The coverage should be good with the antenna at 330 ft. The biggest challenge is filtering out the 50Kw and 10Kw Commercial FM stations that have antennas just above on the tower.
- * Bill Michne, WM3X is putting together the components needed for his C4FM Wires-X node. Available to all within range of his low power Yaesu transceiver, his node will offer connectivity via the internet to meeting rooms worldwide, some providing multi-protocol interconnectivity. It should be operational for testing and limited use within days.
- * Lor continued the discussion on digital protocols. He has a mini-node/hotspot running at his home on Fork Point. It too is open to all within range of his 250 Mw UHF signal. It offers access to users of various protocols, not only DMR. With more than a few protocols--C4FM, DStar, DMR, P25 and more--competing for users, it's become the digital "wild west".
- * With a considerable interest in the "sport", Dick Goodwin, K4JJW, has taken the lead as Fox Hunt Coordinator. Wishing to do a PARS Fox Hunt this fall, an antenna building session will be soon scheduled at Bill KR4LO Olah's shop and at least 6 members want to assemble them. Other Fox Hunters already have antennas. Attenuators (needed to avoid receiver overload when nearing the fox) were discussed. Apparently hard to find at reasonable cost, they might also be built at the antenna build.
- * Ed Caraballo, KC4JCW, entertained us with his lively "I Love Lucy" show-and-tell on GMRS, the General Mobile Radio Service. This personal two-way radio service offers repeater connectable communications with no knowledge test required. A \$35 FCC license is required however and a call sign is issued. This fee and license covers the licensee and his/her immediate family. It is a power limited channelized system. Ed sees GMRS as an economical way to keep in touch with friends and family. He demonstrated its effectiveness with a quick call through the Newport GMRS repeater to his wife at home on Dawson Creek. In discussion, Lor offered that PARS might promote GMRS as a Community Emergency Service for Oriental and the surrounding area.
- * Jim, AI4WL won the monthly drawing. He received a Brantley's Restaurant \$20 gift certificate. Bill, WM3X, won a PARS License Plate.
- * There being no further business, the meeting adjourned at 10:30 am. (PARSgram 2022-11-07)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Nov 26, 2022 MEETING NOTES

- * Nineteen PARS members, visitors and guests attended the 9 am Saturday breakfast meeting chaired by President Mike Marsh, K4NLC, at Brantley's Village Restaurant.
- * No awards or upgrades were reported, however, Steve, KO4EDA, was happy to let us know we will be seeing more of him in Pamlico County. He is leaving the Craven School system to become the new LAN Engineer/Manager for our Pamlico County Schools. Congratulations Steve!
- * Mike delivered the Treasurer's report on behalf of Wally. Even after reimbursing Dick, K4JJW, for FOX Hunt prizes we are still solvent.
- * Propagation Report: Quiet sun. Activity has been very low for the past few days, mostly low for the past month. That said, our little QRP 4W FT8 signal was heard by VK7OO this morning at 0720R on 20M. He's 10,047 miles distant so that's about 2571 miles per watt. The solar flux 90 day average is 133 vs 128 last month. Near term forecast is for good conditions on 15-40 Meters, fair on 12 and 10.
- * ARES/Pamlico Communications Net: Mike reported 5 nets in November for 27.1 manhours. The net and our practice for emergencies will continue, reporting manhours will not.
- * Bruce, announced the next Pamlico Communications Team meeting has been cancelled to avoid impacting the Fox Hunt gathering. Look for a meeting in January.
- * Mike reported that more effort on the new Arapahoe repeater took place this month. Bill, KR4LO;

Lor, W3QA, and other Oriental Repeater Group members installed solar panels, batteries, and controller/protective equipment and then moved it off the grid. [See photos at www.n4prs.org/pamlico-communications-team/--ed.]

- * Paul was away but left some stats on N4PRS Web page usage: In the last 30 days there were 189 visitors who made 329 visits. Possibly most were double checking their HT settings for the new Arapahoe repeater.
- * Bruce, K4ONC, early recipient of the December QST, ran through the PARS member results in the 2022 ARRL Field Day "contest". Mike, K4HPS, topped the list for our folks in the most popular 1D (Home commercial power) category with 255 QSO's, 1070 points. Jim, AI4WL, made 207 contacts for 984 points in the 1E (Home Emergency Power) category. PARS aggregated score from our seven players was 3403 points. [For the scores go to https://contests.arrl.org/ContestResults/2022/Field-Day-2022-FinalQSTResults.pdf].
- * Mike thanked Bill Olah, KR4LO for hosting a most rewarding fox hunt antenna building/attenuator assembling activity last Saturday [Nov 19th] at his shop. Dick, K4JJW, had all the components ready to go and with helpers supervised the effort. The actual fox hunt will be on Saturday, December 3d.
- * Mike reported that Bill Michne's C4FM Wires-X node is operational. There have been several local users. Lots to be learned. This led to a discussion on repeater operation if connected via the internet to "rooms/reflectors/talk groups"--they are all basically the same thing. Expect more on multi-protocol repeater operation in the coming meetings.
- * Our next meeting will be on New Years Eve morning, December 31st. It will be brief in favor of the annual PARS Christmas ham radio related gift exchange. [Be creative, keep it inexpensive, look for usable stuff in your junk box.]
- * Steve, KO4EDA won the monthly drawing. He received a Brantley's Restaurant \$20 gift certificate. Bill, KR4LO, won a PARS License Plate.
- * There being no further business, the meeting adjourned at 9:46 am. (PARSgram 2022-11-28)

PAMLICO AMATEUR RADIO SOCIETY (PARS) Dec 31, 2022 MEETING NOTES

- * Twenty PARS members, visitors and guests attended the 9 am Saturday breakfast meeting chaired by President Mike Marsh, K4NLC, and the annual holiday gift exchange at Brantley's Village Restaurant.
- * No awards or upgrades were reported. Mike welcomed Robbie Pegram, KO4KQC, our newest member
- * Mike delivered the Treasurer's report on behalf of Wally.
- * Propagation Report: Moderate sun. Friday's M3 class flare caused a short HF blackout over the Pacific. There are 8 sunspot groups today vs 4 last month yielding a SSN of 121. Expect good HF operating conditions to continue. Dick, K4JJW, reported working Crozet Island, number 3 on the most wanted list, recently on 30 Meters. The operator's using a special protocol on FT8. [See FT8WW's QRZ page for instructions.-ed]
- * ARES/Pamlico Communications Net: Mike reported 4 nets in December.
- * Bruce,K4ONC, advised the date and topic of the next Pamlico Communications Team meeting is TBD.
- * Paul reported that there have been 222 visitors already this month, perhaps the highest number he's seen.
- * Mike reminded all that the Arapahoe (Arlington Place) repeater is operational for both Analog and DMR modes. The coverage area extends well into Craven, Carteret, and Beaufort Counties. [147.285 MHz, standard offset, 88.5 Hz CTCSS]
- * Bill, WM3X, commented that his C4FM/WiresX node [Node 90588, Room 00588] is up 24/7. Equipment is dedicated on 145.53 MHz. He welcomes users and reports.
- * Bruce has not yet found a replacement to print "PARSware" shirts and caps. Locally available

"rubber patch" printing is not acceptable.

- * Paul offered he's just read a disturbing book on the world's reliance on the all-connected digital world: "This Is How They Tell Me The World Ends". He opined that no ham would be able to put it down.
- * After the gifts are exchanged, at least four members will rotate their antennas during Dick's practice Fox Hunt .
- * There being no further business, the meeting adjourned at 9:35 am. It was followed by the PARS annual amateur radio related holiday gift exchange. (PARSgram 2023-01-02)