



PORTAGE AMATEUR RADIO CLUB



"Public Service Through Amateur Radio"

September – October 1998

SUMMER IS FADING!

Editor - KB8UUZ

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Dave DeSiomio – WA8GCF

P.A.R.C. Nets & Repeaters

ARES Net – Sunday – 8:30pm
145.390 MHz

Simplex Net – Monday – 9pm
145.680 MHz

Simplex Net – Friday – 9pm
29.400 MHz

Club Repeaters

145.390 MHz

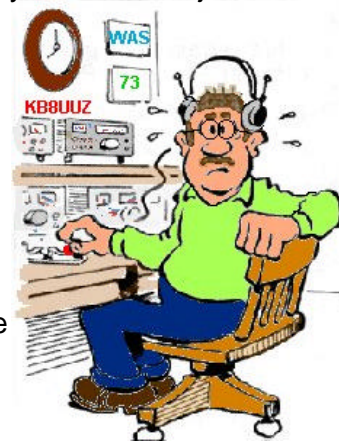
442.875 MHz

Located in Ravenna, Ohio

Looks as if Summer is on the way out. But, on the bright side there are more hamfests popping up to visit before the leaves are falling and snow starts in. With the passing of summer, so goes the tornado season. We were pretty lucky this year with no major damage storms. Maybe el-ninio helped us there. On the other hand we have been getting some VERY impressive thunder and lightning storms! A few weeks back I knew some storms were approaching rapidly and so off to the radio room to unplug and ground the antennas. With that done, I went back to bed with one eye open watching the lightning show. Well, wouldn't you know it, some where near me there must have been a pretty good lightning strike. The next day I went to use the internet, but the modem was shot. So was the phone that was connected to it! After a week of waiting for warranty service, I was back on line again with a new modem and phone. Thank goodness it did not fry the computer. You can bet the next time, I'll unplug the phone line to the computer!!!! Since then, we have had our share of thunder-boomers roll through the county. And some of the lightning that came with the storms was real intense. Inside this issue of the PARC news, you'll find some interesting lightning facts to ponder and I hope you enjoy them. Also inside just a few notes on the proposed changes to the amateur license structure and band changes. The PARC Hamfair 98 is in the history books. We had a real good turn out of both vendors and visitors. Everyone was concerned since some of the recent local hamfests have not been doing well at all this year. But, I guess people just know that PARC puts on a quality hamfair that just can't be beat! Plans have already started for the 1999

version! Set August 1, 1999 on your calendar for the next PARC Hamfair. Since this newsletter only comes out every two months, there are things that get missed. I need help in getting information on upcoming events of interest to our members. So, if you have some information, or would like to contribute an article of two, drop me a line. The newsletter is only as good as the information presented. I need some articles on what you like about ham radio, or just a good story or two. I'll be checking the mail

box and e-mail, just waiting to hear from you..... Until next time – Take Care
– 73 – and hope you have good DX de Tom - KB8UUZ



SECRETARY'S CORNER

Can we really have more BEAUTIFUL weather here in Northeastern Ohio???.AND can we really be more "BUSY" than we have been?? Just some of the questions we hear around club members. Truly we have had a most beautiful summer and truly we all have been very busy this year doing so many things..with the Field Day event over..our Portage Hamfair 98 over..our Channels 45/49 event over..GEE! I could go on and on..BUT we all know there is more to come ..such as..the Balloon-A-Fair on the 19th..the Club picnic the afternoon of the 19th (To be held at **Mike Ryan's (KB8TUY)** QTH on Brady Lake Road which it happens to be in the right location for us to observe the Balloons "taking-off" that afternoon. I will report more on the picnic in the next issue of our Newsletter.

Our Get Well wishes go out to members..**Roger Steiner, KB8JHS..Bill Clevinger, WB8CXP..Bill Jones N8GGV and his wife..Fran Koby (N8SGS wife)..Tom Simmons, N8QXG and his wife Pat..and Ed Deighton K8WJH.**

ARRL Educational Activities Manager, Rosalie White, WA1STO, has made it known that NASA has scratched plans to include the SAREX part of the STS-95 this Fall. This is the flight that takes US Senator and astronaut John Glenn into space. This means that five schools that had been on the list for students to "talk" with the shuttle crew during this highly publicized October mission..had to be scratched!

The ARRL nationwide SET will be held October 3rd and 4th..This should be a neaningful "test" of our ARES members..see our **Emergency Coordinator, Dave, N8IIQ**, for further details on this most important event.

Please plan on attending our next Club Meeting..it is September 23rd. Since the resignation of Andy Miller, KC8CER, EMA Director, also one of our Club Trustees..we must get another Trustee in his place as soon as possible..we need your input!

Well, thats' it for this time..CU at the next club meeting until then

Best 73.... Joanne, KJ3O
Secy-Treas

160 METERS – HERE I COME

The With fall approaching, the lower ham bands (80-160 meters) will be picking up again. Armed with that, and having the materials for over a year now, I finally got busy and put up a new 160 dipole. One week end I measured out the yard and selected a tree for the center of the dipole. Using my trusty sling shot, fishing line, and rope, I managed to get up to a hefty branch about 65 feet up. After I secured the line, I figured the rest would be easy – HA! Then the



opportunity came up when I had to stay home waiting for the Sears Serviceman one day (remember that modem I spoke about earlier on page 1?), well since I was up and could not go anywhere, I started measuring out two lengths of copper wire about 135 feet each. Then I did the soldering to the center of the dipole, then to the end insulators. Carefully I dragged all this into the back yard – very slowly and carefully. All that wire is a job to keep from tangling or twisting. Once in the yard, I spread the dipole ends out in preparation for hoisting the center up into the tree. I got the ropes and coax all ready, and slowly I pulled on the center rope getting the dipole's center all the way up, ever watchful of the coax, and the rest of the dipole so nothing would get tangled. Once the center was up, I got the ends secured. Sound easy?, well just those few steps from starting to measure the wire to this point was six hours! Told you I was worried about kinking and tangling the wires!!! My other wire antenna, the G5RV dipole is only 102 feet long (great for 80-10Meters), and was real easy compared to this 270 foot monster! I knew the ends were about 8 feet longer than I needed, but I figured it was much easier to cut wire off then to have to add it on when tuning it. I called up **Alan – KB8VJL**, since he has a nifty SWR analyzer, and we got together over the next weekend to tune the antenna. Hooking up the analyzer made the job pretty easy. It took three trips from the shack to the antenna to get it trimmed down to the center frequency I was shooting for. Thank You Alan! The SWR is about 1:1.5 at 1.89MHz with no tuner. With the tuner I can cover the entire 160 meter band. So after 3 years of thinking, two years of pondering, and about 8 hours of actual work, I can now get on 160 Meters. Only time will tell how good the dipole works – I'll keep you posted.

Tom – KB8UUZ

Note from Roger KB8JHS

Sharon and I would like to THANK-YOU all for your prayers, cards, phone calls, and concerns. As you know I have Cancer. The doctors removed all of my stomach and 1/3 of my esophagus. I am healing slow, but I am improving each week and feel fine. I use a feeding tube to eat, it is a liquid nutrient like ensure shakes. I start chemotherapy and radiation for six weeks starting August 24th. Sharon and my two sons are taking real good care of me. Hope to see everyone at a meeting after the treatments are over. Thanks again,

Roger KB8JHS & Sharon KB8JHR

From our Foreign Correspondent

Don Bristow – G0EOH

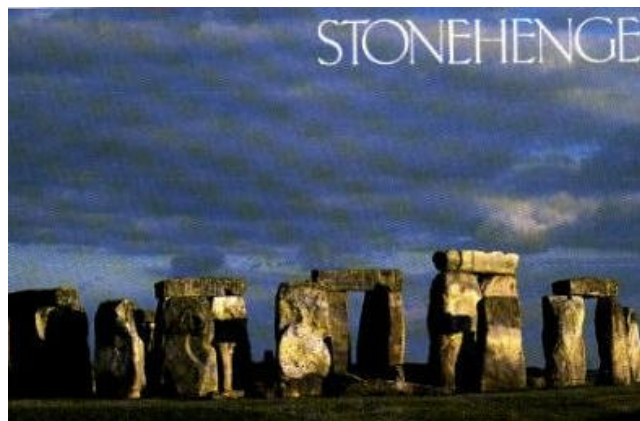
It seems that with all the spare time that I have on my hands, I always seem to get into difficulty when writing my article for our club magazine, please do not ask me why. If I knew the answer I would not have a problem. Computers it seems always have their own way of working things out to suit themselves, it is all very well for the boffins to tell us that you the user are in control of a computer, I seem to wonder at times. I have in the past been quite able to write the article, then when its time to sit and write again, bang, I have forgotten what I did before. I guess it must be the old age beginning to creep up on me - hi hi. I enjoy writing the articles, and certainly hope that at least some of you, or possibly all of you enjoy my contributions, it is always a bit of a strain to write things from here which members like to read so please bear with me on this. I have been reading on a loaned copy of the R.S.G.B. monthly magazine "Radcom" that despite a census among its members a year or two ago, the R.S.G.B. are contemplating doing away with the morse requirement already in operation. The last census showed overwhelming support among British radio hams, to keep the requirement, after all a thing worth getting is well worth working for, and it seems there are a lot of people these days want something for nothing, especially it seems among our younger generation. I read recently of a old gentleman of 87 years of age who had struggled to get the morse test requirement and had successfully passed. This should be a pointer to others that you are never to



old to learn, it may take that little bit longer when you are older, but it can be done. It seems the R.S.G.B. are under the impression that people are not coming into our hobby as they would like to see. You note I previously said I had a loaned copy of Radcom, that is because I felt that I could no longer become a member of the Society as I was dissatisfied with the changes the Society were implementing so I did not renew my membership. There is talk among a fair number of hams around this area say that if the R.S.G.B implements their change in the Morse test, I feel they are going to lose more members than they think, which would be a pity. It has been rumoured that the lower edges of the HF freq would be opened for SSB operation as the CW dies away. I operate as my license allows, CW on the high edge of the band so as my weak signals battling against all the high power amplifiers on the Continental Europe when I try to get through to my friends in area 8, and the abuse I receive would make my xyl shiver should she pass through the shack, is this what would happen if the lower edges become a free for all? I for one would certainly like the test to be kept as the RAE exams are the hardest test to get your ticket. I suppose I was lucky I started listening to Morse code sessions way back before WW2, and also trying to get the scout badge for receiving and sending code, when I was drafted into the army I again had the opportunity to get my Morse speed up to a grand total of 6wpm. I am as you may guess a avid CW user and always enjoy my sessions even though my wrists are pained with arthritis a legacy from the many years I spent as a bricklayer in all winds and weather in the construction industry. To a different subject - I was talking to a friend in Warren Ohio last week, and he told me that he had paid his first visit to The Portage ARC hamfest, he went on to tell me he thought that the club had really put on a excellent show as he enjoyed it immensely, so that bit of praise I feel goes to each and every one of you there for all your efforts, my only regret was that I could not have been there to enjoy it myself, but as I have had to take several trips across to Germany already this year it was not possible, maybe one day I will make it I certainly hope so. Well I will still be listening for anyone of you who feels that you would like to give me a call on 18.158, or on E mail. Until the next time may I wish each and everyone of you the very best of 73 and good luck in all your dx work.

G0EOH.....Don....Falmouth U.K.

[Picture Don Sent that you may find nice]



SEASONED WITH LOVE

BAKED STUFFED PEARS

2 firm pears - 1 Tbsp. Sugar - 1 tsp. lemon juice - 2 Tbsp. Raisins - 1/2 cup apple juice - 1/4 cup fat-free, vanilla yogurt, artificially sweetened - dash freshly ground nutmeg.

Preheat oven to 350 degrees. Cut pears in half and remove core; place in shallow baking dish. In small bowl, combine sugar, lemon juice and raisins; stuff the hollow in the pears with this mixture. Pour apple juice in pan, cover and bake in 350 degree oven for about 30 minutes or until tender. Allow to cook before serving. When ready to serve, transfer 2 pear halves onto each individual serving dish, spoon yogurt over this and dust lightly with nutmeg. Makes 2 servings.

Vivian L. DeSimio, KB8CLH

HEAVENLY CHOCOLATE

For Depression or just for fun.

Ingredients: 1 King Size Hershey Chocolate Bar.

Directions: Open, Kick back and enjoy!

Keith Beck – N8VVE

HELP – I need inputs for the newsletters. Send by e-mail to: tompeg@apk.net, or regular mail – KB8UUZ

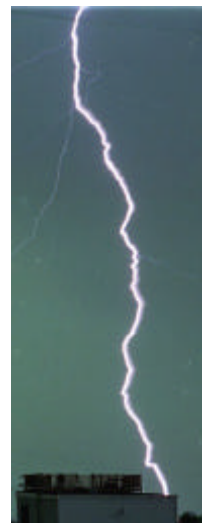
The E-Mail version of this newsletter has COLOR Pictures!!!! Want your newsletter by e-mail? Drop me a line and I'll put you on the list – no charge!

LIGHTNING

What Causes Lightning? Lightning originates around 15,000 to 25,000 feet above sea level when raindrops are carried upward until some of them convert to ice. For reasons that are not widely agreed upon, a cloud-to-ground lightning flash originates in this mixed water and ice region. The charge then moves downward in 50-yard sections called step leaders. It keeps moving toward the ground in these steps and produces a channel along which charge is deposited. Eventually, it encounters something on the ground that is a good connection. The circuit is complete at that time, and the charge is lowered from cloud to ground. The flow of charge (current) produces a luminosity that is very much brighter than the part that came down. This entire event usually takes less than half a second.

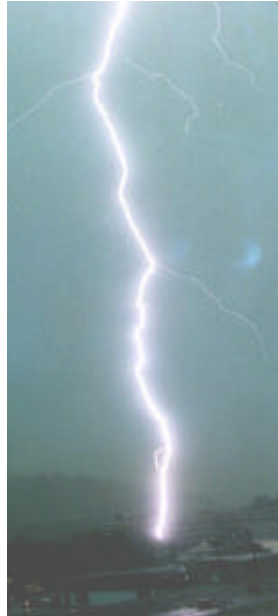


What Does Lightning Usually Strike? Lightning comes from a parent cumulonimbus cloud. These thunderstorm clouds are formed wherever there is enough upward motion, instability in the vertical, and moisture to produce a deep cloud that reaches up to levels somewhat colder than freezing. These conditions are most often met in summer. In general, the U.S. mainland has a decreasing amount of lightning toward the northwest. Over the entire year, the highest frequency of cloud-to-ground lightning is in Florida between Tampa and Orlando. This is due to the presence, on many days during the year, of a large moisture content in the atmosphere at low levels (below 5,000 feet), as well as high surface temperatures that produce strong sea breezes along the Florida coasts. The western mountains of the United States also produce strong upward motions and contribute to frequent cloud-to-ground lightning. There are also high frequencies along the Gulf of Mexico coast westward to Texas, the Atlantic coast in the southeast United States, and inland from the Gulf. Regions along the Pacific west coast have the least cloud-to-ground lightning. Flashes that do not strike the surface are called cloud flashes. They may



be inside a cloud, travel from one part of a cloud to another, or from cloud to air.

Can Lightning Be Detected? Since the 1980s, cloud-to-ground lightning flashes have been detected and mapped in real time across the entire United States by several networks. In 1994, the networks were combined into one national network consisting of antennas that detect the angle from ground strike points to an antenna (direction-finder antenna), that detect the time it took for them to arrive at an antenna (time-of-arrival method), or a combination of both detection methods. The network is operated by Global Atmospheric, Inc. You can also get lightning data for our neighbors to the north in Alberta, Canada. Flashes have also been detected from space during the past few years by an optical sensor. This experimental satellite covers the earth twice a day in tropical regions. The satellite also detects flashes that do not strike the ground, but cannot tell the difference between ground strikes and cloud flashes.



How Many Flashes Are There? Over the continental 48 states, an average of 20 million cloud-to-ground flashes have been detected every year since the lightning detection network covered all of the continental United States in 1989. In addition, about half of all flashes have more than one ground strike point, so at least 30 million points on the ground are struck on the average each year in the United States. Besides cloud-to-ground flashes, there are roughly 5 to 10 times as many cloud flashes as there are to ground.

What Types of Damage Can Lightning Cause? Cloud-to-ground lightning can kill or injure people by direct or indirect means. The lightning current can branch off to a person from a tree, fence, pole, or other tall object. It is not known if all people are killed who are directly struck by the flash itself. In addition, flashes may conduct their current through the ground to a person after the flash strikes a nearby tree, antenna, or other tall object. The current also may travel through power or telephone lines, or plumbing pipes to a person who is in contact with an electric

appliance, telephone, or plumbing fixture. Similarly, objects can be directly struck and this impact may result in an explosion, burn, or total destruction. Or, the damage may be indirect when the current passes through or near it. Sometimes, current may enter a building and transfer through wires or plumbing and damage everything in its path. Similarly, in urban areas, it may strike a pole or tree and the current then travels to several nearby houses and other structures and enter them through wiring or plumbing.

What Is Thunder? Thunder is caused by the extreme heat associated with the lightning flash. In less than a second, the air is heated to 15,000 to 60,000 F. When the air is heated to such a high temperature, it rapidly expands ("explodes") and then contracts. It's this rapid expansion/contraction of the air molecules which causes sound waves which we "hear" at thunder. When lightning strikes very close by, the sound will be a loud bang, crack or snap. The duration of the thunder associated with a nearby lightning strike will be very short. Lightning which strikes farther away will rumble for a longer period of time as the sound arrives at different times due to the length of the lightning flash (typically many miles long). Thunder can typically be heard up to 10 miles away. During heavy rain and wind this distance will be less but on quiet nights when the storm is many miles away thunder can be heard beyond 10 miles.

Other Tidbits

Florida averages 70 to 100 thunderstorm days a year. Orlando has 80 to 90 days.

Your chances of being struck by lightning in the United States are 1 in 600,000. But your chances of being struck in Florida are higher simply due to the state being the lightning capital of the United States. Tropical Africa is the lightning capital of the world as more than 280 thunderstorm days occur at this location.

Number of thunderstorms occurring at any given moment: 2,000

Number of lightning strikes every second: 100

Number of lightning strikes a day: 8 million

Number of thunderstorms occurring in the United States a year: 100,000

Number of lightning strikes in the USA per year: 20 million

How many volts and amps in a typical lightning flash? A typical lightning bolt contains 1 billion volts and contains between 10,000 to 200,000 amperes of current.

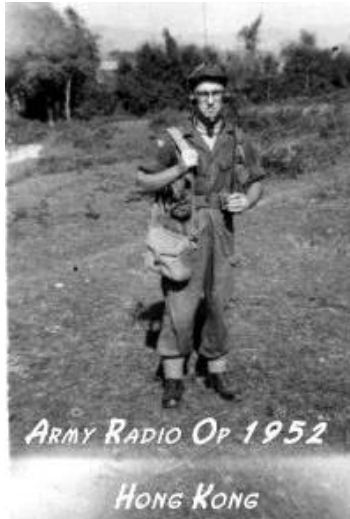
The average flash would light a 100 watt lightbulb for 3 months.

GUESS WHO?

The black and white picture was submitted by e-mail.

Can you guess who it is?

(It's the person that wrote an article earlier in the issue. Hint – his initials are **DB**).

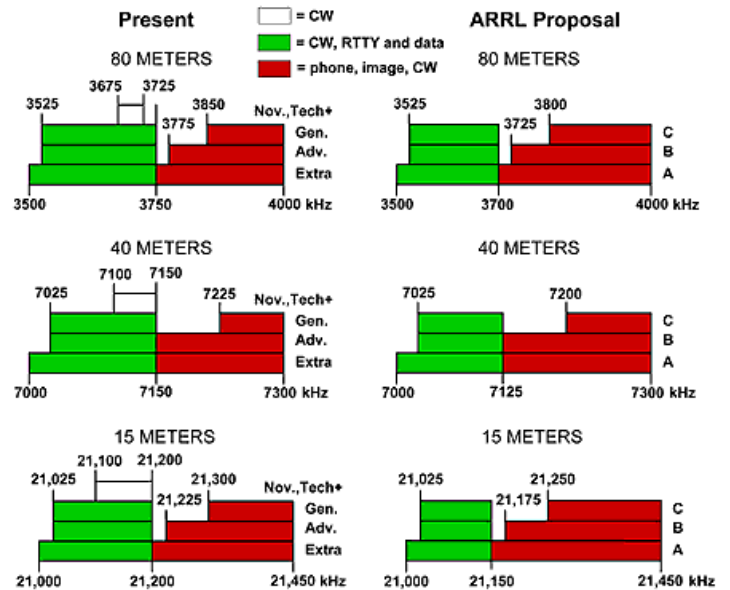


Proposed changes to Amateur Radio Licensing and Ham bands.

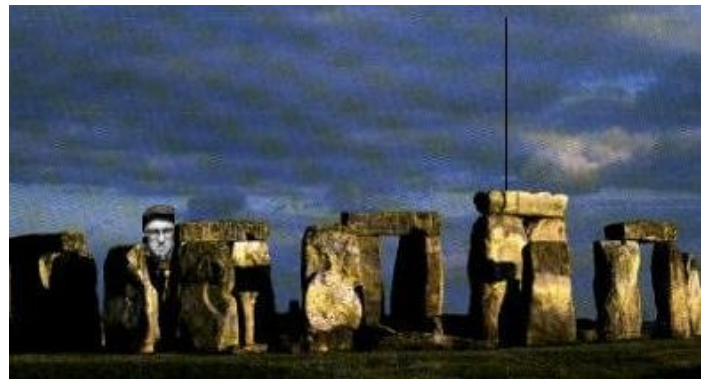
By now you must have heard about the proposed restructuring of the Amateur Licensing. Eliminating the current levels of Novice, Technician, Technician Plus, General, Advanced, and Extra. The new ones would be Class D, C, B, and A. For those of us that have not been in the hobby for too many years, I hear that the really old timers had a structure similar to this new one. The code speed requirements would be lowered and 5 words per minute will get you a Class C license and give you the same HF privileges that the current General Class has. Also, they are going to expand the bands by shifting some of the SSB areas around (see the chart). Is this change good? Depends on who you talk to. Some of the old timers say no-way. "But, back in the old days we had to build our own rigs – with vacuum tubes and solder guns, and bailing wire, by golly...." These are the same type of people that would say you should take your driver's license driving a stick shift car, even though you only own an automatic transmission. Times have changed, even if we don't all like it. I've used computers since 1968. Even built some of my earlier versions and wrote software too, cause that was the only way to do it then. But you won't catch me doing it now-a-days.... times change, I'm a user or operator. Build my own radio? Why? I didn't build by car.... times change. (Must say I do build my own dipoles though...) Having more people eligible to be on HF may just help save our bands from the FCC auction blocks. If we don't use them, we just may lose them. Look what's happening to the VHF/UHF areas around the world. HF is not a sacred area just for amateur radio use. Don't forget, this is a hobby. Morse Code – CW – personally, I like it. I'm a long way from being good at it, but I still like it. There are a lot of amateurs out there that continue to use it, and will keep on using it. Then there are some out there that don't ever use it, and only learned it to get through their tests as Generals or Extras. So be it. Some

people also say that if it's too easy to get a license, the ham bands will become like the old 11 meter CB bands. H-E-L-L-O – where have you been? Scan around 20, and 80 meters some time and you will hear just what they are talking about and the people doing this are NOT newer hams either. We need a better method of enforcing proper use of the bands – but that's another subject. Let's hope that the new testing and question pools have more questions on proper operation, courtesy, and proper use of bands along with newer technical information. Things are going to change.
Tom – KB8UJZ

Here is a chart showing the bands as they are now – and as they are proposed. Don't forget – this has NOT changed yet.



Parting Shot



Another Picture - - - - This one was sent in by an anonymous reader that noticed Don in the vicinity. If you look real close you can see Don peeking out and also a vertical antenna..... cq dx cq cq dx

Portage Amateur Radio Club, Inc.

Membership Form

Name _____ Call Sign _____ Class _____

No. and Street _____ City _____ State _____

Zip Code _____ Home Phone _____ Age _____

Packet Address _____ E-mail Address _____

ARRL Member (Y/N) _____ ARRL Membership Expiration Date _____

Additional family members living at home who are or want to be club members

	Name:	Call:	License Class:	ARRL Member (Y/N)
1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____

Employer: _____ Location: _____

Occupation: _____ Work Phone: _____

Married: _____ No. Children _____ Year First Licensed _____

List your interests in Amateur Radio. _____

Are you a member of Amateur Radio Emergency Services (ARES) (Y/N) _____

If not a member of ARES, would you like to join? (Y/N) _____

Please check the Bands and Modes you can operate:

Band	160	80	40	30	20	18	15	12	10	6	2	220	440	1276
Phone														
CW														
Mobile														

Do you operate: RTTY _____ Packet _____ ATV _____ Other _____

What do you like about PARC? _____

What changes or improvements would you like to see made? _____

Single Membership \$12.00 Family membership \$15.00

Dues are due: January 1, 1998

Signed _____ Date _____

Mail to: Portage Amateur Radio Club, Inc.
c/o Joanne Solak - KJ30/8
9971 Diagonal Rd.
Mantua, OH 44255

If you have any questions call Joanne at: 330-274-8240

The Portage Amateur Radio Club meets the 4th Wednesday of each month at 7:00 PM
PORTAGE COUNTY JUSTICE CENTER, 8240 Infirmary Road, Shalersville, Oh.

Guests are always welcome!

For more information contact Joanne or Larry Solak at: 330-274-8240.

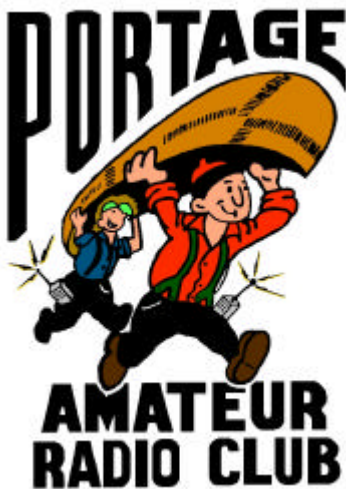
P.A.R.C. Repeaters: 145.39MHz. 442.875MHz. Located in Ravenna, Ohio



HAMFAIR® '99 -- August 1, 1999

It's never too early to plan ahead!

Portage Amateur Radio Club, Inc.
Joanne Solak - KJ3O/8 - Secretary
9971 Diagonal Road
Mantua, OH 44255



This is the Electronic E-Mail version
of the P.A.R.C. newsletter.
September – October 1998
This version is different from the mailed version
And includes color pictures.
Please pass this on to all Amateur
Radio Operators or other people
Interested in the hobby of
Amateur Radio.

**"Public Service"
Through Amateur Radio**