THE BEAVER VALLEY AMATEUR RADIO ASSOCIATION
WWW.W3SGJ.ORG
BEAVER COUNTYS ONLY 75 YEAR ARRL AFFILIATED CLUB!

The eQRM Newsletter

Home of W3SGJ/R
145.310- 100 Hz PL

Volume 1, Issue 15
December 23, 2007

COMMENTARY: THE AMATEUR'S CODE

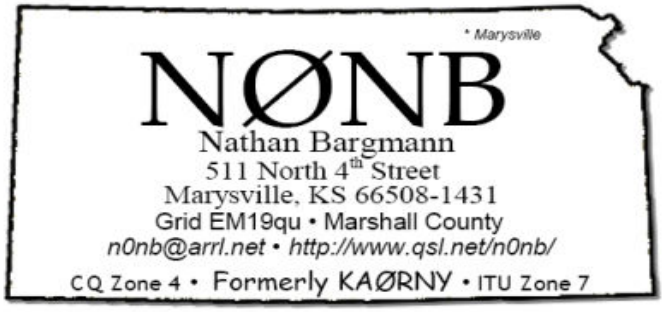
Editor's Note: The following article is a commentary and does not necessarily reflect the opinions of the ARRL or the Beaver Valley Amateur Radio Association

With Christmas soon upon us, you can't help but see a sign in front of almost every church you pass that says, "Keep Christ in Christmas."

In keeping with that spirit, I'd like to devote this weeks commentary to "Keeping the Amateur's Code in Ham Radio."

What follows is a commentary published by Nathan Bargmann, N0NB. You can find the original text at: http://www.qsl.net/nonb

The Amateur's Code was originally written by Paul M. Segal, W9EEA in 1928. Since then it has become, for many amateur radio operators, their goal for conduct both on and off the air. The code,



reproduced below, appears immediately prior to Chapter 1 of each issue of the ARRL Handbook published annually by the American Radio Relay League, the National Association for Amateur Radio in the United States.

1. "The Amateur is Considerate… He never knowingly uses the air in such a way as to lessen the pleasure of others."

Tuning up on nets for long periods, excessive mic gain or running power when not needed all tend to aggravate our neighbors on the air. Breaking into a net to "check in for the count" without listening long enough to the net to be able to utilize procedures specific to that net make the Net Control Station's job more difficult and leaves an unfavorable impression of your operating prowess in the minds of net participants. Not bothering to determine if that rare DX station is "working split" or listening "up 5" before transmitting on the DX's transmit frequency is an egregious violation of this principle. Obscenity or vulgar language, although perhaps protected speech, are inappropriate in a polite society

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Inside this issue:

Newsletter & Information Exchange

- Have your club's latest news and happenings printed here for FREE!
- Is your club having a VE session or classes? Let me know and I'll help spread the word!
- Planning a Hamfest? Drop me a line and get some FREE PR in the eQRM!
- Having an ARRL night, special speaker or program? The eQRM can help by spreading the news within our region!

DECEMBER 2007

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						DINNER 1
2	3	4	NETS 5	LUNCH 6	7	DINNER 8
9	10	11	NETS 12	LUNCH 13	PARTY 14	DINNER 15
16	17	18	NETS 19	LUNCH 20	21	DINNER22
23	24	 25	NETS 26	LUNCH 27	28	DINNER 29
30	31					

The Beaver Valley Amateur Radio Association meets at the Beaver County Emergency Operations Center located at 250 East End Avenue, Beaver, PA on the second Thursday of every month at 7:30 PM. Everyone is welcome.

Don't forget to listen to the BVARA club nets every Wednesday Night! 2 Meter Net on 145.31MHz 100Hz PL at 8:30PM and the 10 Meter Net 28.370 QSY +/- 10 at 9:00PM. Also, don't forget the Rip Vanwinkle Net on 2 meters at 7:00AM daily.

The BVARA 10 Meter Net Lunch group will be meeting this Thursday at Kings in Center Twp at 11:00 AM. PLEASE NOTE THAT THE THURSDAY MORNING LUNCH MAY BE MOVING! TUNE INTO THW WEDNESDAY 2 & 10 METER NETS FOR MORE DETAILS. The Saturday Dinner group will be meeting at Panera Bread in Monaca on Saturday, December 29 at 6:30 PM. All area amateurs are invited and encouraged to attend these outings. I noted in a recent Nittany ARA Newsletter that they encourage calls on their local repeater for anyone that needs a ride to their outings. This may be a practice we can adopt

FEBRUARY VE TEST SESSION: The BVARA sponsors ARRL VE examinations at the Community College of Beaver County's Aviation Science building, 125 Cessna Drive, (Chippewa Twp.) Beaver Falls , PA. For more info on the test session, dates and times, contact Tony, KE3ED @ 724-774-4173 or by e-mail at KE3ED@arrl.net.

2008 BVARA OFFICERS & DIRECTORS

President: Gary Hutchinson, KA3TYK
First Vice President: Robert DeMarco, WA3ZRM
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Acting Secretary: Phyliss Pander, N3KUG
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Chief Engineer: David Heim, KA3SMF

CLUB NOTES

HOW TO FIND A NET

ARRL NET SEARCH -- LOADED -- Click on Wide Coverage (266 Nets), Local Nets (Hundreds - By State), Section Nets (Hundreds - By State), State Nets (Hundreds)

ECARS is a acronym for **East Coast Amateur Radio Service**. The service meets all day every day on 7.255 MHz., starting at approximately 7:30 AM East Coast time (conditions permitting), and continuing until the frequency gets over-run by Foreign Broadcast Stations. ECARS offers service to mobiles, in the form of: weather, road conditions, emergencies, phone calls, and a myriad of other things. We are a great place to meet other amateur radio operators, get the weather conditions around the East Coast area, setup skeds, QRP support, or just sit back and enjoy.

7.272 Ragchew group -- 7.272 Mhz, Monday - Saturday, 9am to 1pm Eastern time.

COMMENTARY (CONTINUED FROM PAGE 1)

(whether society is currently polite is debatable, for our sake we'll consider ham radio to be polite).

The best action is to take a few moments to listen and note your surroundings before pressing the switch. Also, make sure the brain is engaged before the mouth is set in gear (that's a toughie for a lot of us!). You'll save yourself from needless embarrassment.

2. "**The Amateur is Loyal**...He offers his loyalty, encouragement and support to his fellow radio amateurs, his local club and the American Radio Relay League, through which Amateur Radio is represented."

Getting on the local repeater and complaining about how lousy its performance has been lately or denigrating those who volunteer to work on the machine is certainly not behavior consistent with Point Two. Griping that the repeater was in use for a parade, walk-a-thon, or other public service event for a few hours on a Saturday morning doesn't cut it either (I don't care how much yearly dues you pay!). Of course, not attending club meetings because the club officers are morons licensed within the past 10 years who didn't have to build their equipment doesn't qualify either. If you won't attend the local hamfests large or small, you're not promoting amateur radio on a local basis as you should be. Finally, refusing to join the ARRL because of Incentive Licensing, Novice Enhancement, the codeless Technician, or Restructuring is pointless and doesn't allow your dissenting voice to be heard nor does it help to protect the valuable spectrum we all share.

Join the local radio club. Sure, they may all be jerks until you get to know them and realize how much you have in common. Then you may find they could really use your expertise aligning that duplexer or getting the repeat audio just right. Don't be pushy, but volunteer where you can and before you know it you'll be qualified to write Web pages like this. ;->

Finally, join the ARRL. Is everything the ARRL does to my liking? Certainly not, but quitting the League will not give you the leverage you need to make your voice heard to your Section Manager, Vice-director, or Division Director. Where do you meet these folks? At your section and division hamfests and conventions and perhaps even your local hamfest if it gets enough support to warrant their attention. In short, a hamfest gives you the opportunity to bend the ear of these folks in person. They will listen to your concerns and passions regarding amateur radio.

3. "**The Amateur is Progressive**...He keeps his station abreast of science. It is well built and efficient. His operating practice is above reproach."

No, this doesn't mean that you own all of the latest gear to the exclusion of food and clothing. Rather, is your equipment in good repair? Is your transmitted audio clear and comfortable to listen to? Is your transmitted CW free of chirps and key-clicks? Also, is your power supply clean so that your transmitted signal is free of AC hum? If you have one or more radios in a vehicle, your connections are made to the battery to minimize the chance of alternator whine, right?

On the receiving side, are you familiar with your receiver's features such as variable bandwidth tuning and IF shift? Have you installed after- market filters? Do you know how best to use the noise blanker, RF attenuator, AGC, and RF gain controls to maximize signal to noise ratio? Are you familiar with the control that cuts out the RF pre-amp on later radios and do you know why this might be an important feature?

Station layout is also important here. No one really likes a rats nest of wires to be the focal point of your shack (although QST had a messy shack photo contest some years back and there were some dandies!). Your operating position should be laid out in such a way so that common equipment is close to each other to minimize cable length and contribute to a good grounding scheme. Grounds should be short and made of heavy wire or braid. The best way is to tie each piece of equipment to a ground bus bar and then have a single heavy wire running outside to your ground system. Coax and other cables from the tower should have lightning protection and be dressed neatly and labeled to aid in reassembly of your station should a component be removed. Don't forget good lighting overhead of your operating position as well.

Not only should the equipment be kept abreast of science, but the radio amateur needs to remain on the cutting edge of operating techniques and rules changes. Part 97 continues to evolve with changes in the technology used by amateurs and with changes in society at large.

Finally, one's conduct on the air should be above reproach. Essentially I think that means that we should conduct ourselves with courtesy and respect. In other words conduct yourself as a lady or a gentleman on the air and you'll have plenty of enjoyable contacts. Be a grouch and you'll probably wind up on 75m talking to the same old bunch of grouches and trying to run off the durnb QRMers who make the cardinal sin of getting within plus or minus 5 kHz of these types, but I digress.

4. "**The Amateur is Friendly**...Slow and patient sending when requested, friendly advice and counsel to the beginner, kindly assistance, cooperation and consideration for the interests of others; these are the marks of the amateur spirit."

Be an Elmer! It certainly is difficult to seemingly answer the same questions over and over again through the years, but it's something we must do

(Continued on Page 4)

THE HAM'S HOROSCOPE

BY MADAM ZELDA, ST1ARS

That's Gold	I'm Happy	Can't Complain	Not Happy	Turn down the heat

Sign	Romance	Home & Family	Finances	Career	General
Aries					
Taurus					
Gemini					
Cancer					
Leo					
Virgo					
Libra					
Scorpio					
Sagittarius					
Capricorn					
Aquarius					
Pisces					

COMMENTARY (Continued from Page 3)

to maintain a healthy and vibrant Amateur Radio Service. All of us were beginners at some point in ham radio. Sometimes we just need to step back and reflect on the patience of those that helped us. Remember, we only pay back our Elmers by being a good Elmer to others.

I can't add much more to this before I repeat myself (really!). I would like to point out that personal behavior on the air is found in half of the points of the Amateur's Code. Something to consider, no?

5. "**The Amateur is Balanced**...Radio is his hobby. He never allows it to interfere with any of the duties he owes to his home, his job, his school, or his community."

I've known people who have gotten into ham radio, wrapped themselves up completely into it and within a few years have sold all their equipment and were into something else. Like everything else amateur radio should be enjoyed in moderation. Enjoy it for a bit and then attend to your other responsibilities. Ham radio will be waiting when you return. Please don't turn your wife into a "ham radio widow" or your kids into "ham radio orphans." It's great to have passion for the hobby, but know your limits.

6. "**The Amateur is Patriotic**...His knowledge and his station are always ready for the service of his country and his community."

The history of amateur radio is rich with the accounts of amateurs who have performed admirably in times of disaster for their communities or when their country called in time of crisis. Even today amateur radio operators train themselves and are ready to track storms, assist in damage assessment, assist public safety personnel when their communications are disrupted, and provide a vital link for families trying to reach loved ones in the first hours after disaster has struck. From Kuwait to Oklahoma City to Kosovo to East Timor and other hotspots around the world and on September 11, 2001, hams have risked their lives, and even lost them, to get word out to the world of events as they happen. It is not unusual after a coup or uprising that the first words are from a ham telling of news or requesting assistance for various reasons. In fact, in late 1982 it was ham radio that proved to be a life line for a group of U.S. medical students on the island of Grenada during a Marxist coup and the ensuing rescue operation.

Of all the points in the Amateur's Code, Number Six is the most important. In fact it is for this reason alone that the Amateur Radio Service remains chartered and has access to spectrum that is likely worth well into the trillions of dollars. Enjoy it, have fun, but above all, remember that we are a service and if we should ever prove to no longer perform our function as a service to the public, amateur radio will cease to exist. Rather sobering, no?

Hams Step in to Fill Communication Void From the Seaside Signal

If there was ever an example of the importance of Ham radios, the ice storms last week were it.

When all other forms of two-way communication crashed for more than a day, Ham operators stepped in to fill a vital role in emergency response. Seaside and most parts of the county not only lost landline phone service, but also cell phone service. Even the 9-1-1 service was out for about a day, a service considered so important that a few minutes of its absence sends chills up the spines of emergency responders.

Dozens of Ham radio operators took to the airwaves to fill the communications void during the strongest part of the storm, helping to keep some order to an otherwise chaotic situation.

One local Ham has been preaching the Ham gospel for the past couple years. Jeff Holwege, one of the founders of a new local amateur radio club called WA7VE, credited the local Ham radio operators for their quick and critical response.

"The story of those few days were old Hams, new Hams and young Hams," Holwege said, mentioning that some of those who responded to the radio call were operators as young as 12 years old, "With their parents knowledge, of course," he added.

The Hams set up operations at the Seaside Police Department, Seaside Fire Department, Bob Chisholm Community Center and Providence Seaside Hospital, while some radio operators worked from home and various other locations. Holwege explained that the central operations stayed in contact with the Emergency Operations Center in Astoria during the peak period of the emergency, and everything on their end clicked along well despite the many challenges.

When the priority radio traffic slowed down, Holwege said the Hams were able to send "health and welfare" messages from residents to their families in other areas, as standard phone service was down for more than a day.

Holwege was especially proud of the newer operators, many of whom got their licenses within the past few months following a recent rash of classes. He said the radio club does regular weekly check-ins called ARS Nets, which probably helped the communications picture stay steady last week as not only a practice tool, but also getting to know fellow Hams better. "At first, some were unsure of themselves, but we weren't unsure of them," he said of the newer Ham operators. "They did fantastic. When you're put in the fire, you have to learn."

DX NEWS VIA THE ARRL

This week's bulletin was made possible with information provided by NC1L, the OPDX Bulletin, DXNL, 425 DX News, The Daily DX, Contest Corral from QST and the ARRL Contest Calendar and WA7BNM web sites.

Thanks to all.

BOUVET, 3Y. Petrus, ZS6GCM is QRV as 3Y0E probably until February 14, 2008. He is the medical officer with a five member research team on the island. He is a newly licensed operator, with capabilities to be QRV on 40, 20, 15 and 10 meters during his spare time only. QSL via LZ3HI.

SRI LANKA, 4S. Ivan is QRV as 4S7DXG and has been active on 20 meters SSB just before 1500z and then on 30 meters around 1630z. QSL via UR9IDX.

TANZANIA, 5H. Pat, W8FV is QRV as 5H9PD from Mwanza until around January 12. Activity is on 40 to 10 meters using mostly CW. He may try to be active on 80 meters. He will also be active using PSK31. QSL to home call.

MALTA, 9H. Horst, DJ6OV will be QRV as 9H3HW during his holiday here from December 23 to January 5. QSL to home call.

MADEIRA ISLANDS, CT3. Luis, CT3EE will be QRV using European PSK Club call CT9EPC from December 22 to 28. Activity will be mostly on 40 and 20 meters using digital modes. QSL direct to home call.

PALESTINE, E4. Operators Mike, OM2DX, Steve, OM3JW, Rudy, OM3PC and Miro, OM5RW are QRV as E4/OM2DX until December 22. Activity is on 160 to 10 meters using CW, SSB and RTTY with two stations. QSL via OM3JW.

ETHIOPIA, ET. Joe is QRV as ET3JA and has been active on 17 meters SSB just before 1500. He ha also been active on 20 meters SSB from around 1530 to 1800z. He is here for about one year. QSL via OK3AA.

SAINT BARTHELEMY, FJ. FJ/OH2AM is QRV from this new DXCC entity and has been active of late on 40, 20 and 17 meters using CW and SSB. QSL via OH2BN.

SOUTH ORKNEY ISLANDS. Paul is QRV as LU1ZA from the Orcadas base on Laurie Island, IOTA AN-008. He is often active on the Antarctic DX Net from 2300 to 0200z. QSL via LU4DXU.

NETHERLANDS, PA. Special event Christmas stations PA07XMAS, PC07XMAS, PD07SANTA, PD07XMAS, PD08HNY, PF07XMAS, PG07XMAS, PH07XMAS, are QRV until January 6. QSL via operators' instructions.

WESTERN SAHARA. S0. Fernando, EA1BT is QRV as S05A and has been active on 40 and 20 meters using SSB. His length of stay is unknown. QSL to home call.

PALAU, T8. Frank, I2DMI and his XYL Giovanna are on Koror Island, IOTA OC-009, until January 2. He is active as T88RY using mainly RTTY on 80 to 6 meters. QSL to home call.

NAMIBIA, V5. Frank, V51AS, will be QRV on 160 meters from December 22 to 23.

NEW DXCC ENTITY. The ARRL DXCC Desk is pleased to announce the addition of St Barthelemy (FJ) to the DXCC List, making the island entity number 338 with an effective date of 14 December, 2007. Cards with contacts dated December 14, 2007 or after will be accepted for DXCC credit. New card submissions for St Barthelemy will not be accepted until January 1, 2008 in order to allow time for administrative adjustments. French St Martin (FS), while also added to the List of Dependencies and Areas of Special Sovereignty, will remain on the DXCC List, but it is now considered a Point 1 Political Entity under the same classification as that of St Barthelemy. If St. Martin has already been worked, confirmed and credited to a DXCC award, it is unnecessary to rework it for DXCC credit.

THIS WEEKEND ON THE RADIO. The NCCC CW Sprint and RAEM CW Contest are up for this weekend. The DARC Christmas Contest and SKCC CW Sprint are scheduled for December 26. The Lighthouse Christmas Lights QSO Party runs until January 1. Please see December QST, page 78, and the ARRL and WA7BNM contest web sites for details.

Propagation de K7RA

Sunspot 978 faded this week, with Tuesday, December 18 its last day visible. The average daily sunspot number dropped nearly 13 points from last week to 24.1, and average daily solar flux was down over three points to 83.9. Geomagnetic indicators were up, with the average daily planetary A index up three points to 7.4, and the mid-latitude A index up two points to 5.4.

Sunspot 978 held no indication for the next sunspot cycle, because the magnetic polarity was the same as spots from Cycle 23, which is now ending. It was also at mid-latitude, and spots from a new cycle tend to be high latitude. But there was quite an interest this week in a high-latitude area of reverse magnetic polarity. So far this has not turned into an actual sunspot, so we wait. You can read about it at, http://sidc.oma.be/news/100/welcome.html.

On Wednesday, December 19, Proplab-Pro version 3 was finally released. It claims to be "the most advanced propagation ray-tracing system in the world," and works on personal computers running Windows Xp or Vista. The introduction to the manual says it "is a state-of-the-art software package not for the feint of heart." Since the word "feint" implies a daring move, I suspect the author intended to say "faint," implying timidity in this context. With only a short time to look it over, I can say that it is quite complex. You can find information at, http://www.spacew.com/proplab/.

Tomorrow, December 22, 2007, the Sun reaches its lowest point in the sky, marking Winter Solstice for the Northern Hemisphere, which begins at 0608 GMT. For much of North America, this happens late tonight, and this week we begin the long shift toward more daylight. Perhaps better propagation will appear this Spring. The equinox is on March 21, 2008 at 0548 GMT. See an article at, http://aa.usno.navy.mil/faq/docs/dark_days.php for an explanation from the U.S. Naval Observatory on why the earliest sunset in the mid-northern latitudes is around December 8, the latest sunrise is around January 5, with solstice in the middle.

We've seen no sunspots for a couple of days, and if this continues through the end of the year (10 days from now) the average sunspot number for the calendar year will be just 12.8. We will know for sure by the time the first propagation forecast bulletin of 2008 comes out, on January 4. The daily sunspot numbers averaged over each calendar year from January 1, 2001 through December 31, 2007 should be 170.3, 176.7, 109.2, 68.6, 48.9, 26.1 and 12.8. By comparison, the average daily sunspot numbers for each year, 1995-1997 (the previous solar minimum) were 28.7, 13.2 and 30.7. It seems 2007 must have been a solar minimum year, but of course dividing the data into calendar years is completely arbitrary.

We may not end the year with a blank Sun. The predicted solar flux from NOAA and the US Air Force for December 21-22 is 72, 71, and then 70 for December 23-28, then rising to 75 December 29 through January 1, then 80 for January 2-3, and 85 for January 4-11. Recently when solar flux was above 80 for ten days, sunspot numbers ranged from 24 to 43.

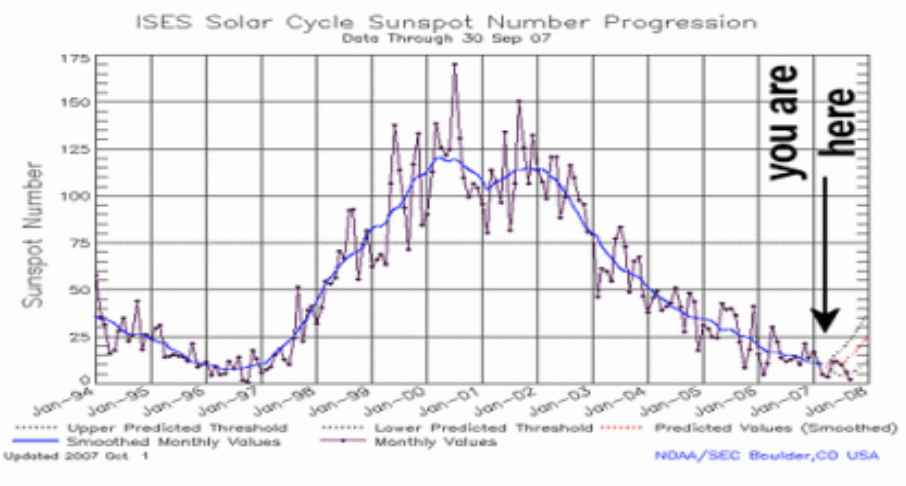
The predicted planetary A index for December 21-23 is 15, 10 and 8, then dropping to 5 for December 24 through January 5. Geophysical Institute Prague predicts unsettled conditions December 21-22, quiet to unsettled December 23, and quiet December 24-27.

If you would like to make a comment or have a tip for our readers, email the author at, k7ra@arrl.net.

For more information concerning radio propagation, see the ARRL Technical Information Service at, http://www.arrl.org/tis/info/propagation.html. For a detailed explanation of the numbers used in this bulletin see, http://www.arrl.org/tis/info/k9la-prop.html. An archive of past propagation bulletins is at http://www.arrl.org/w1aw/prop/. Monthly propagation charts between four USA regions and twelve overseas locations are at, http://www.arrl.org/qst/propcharts/.

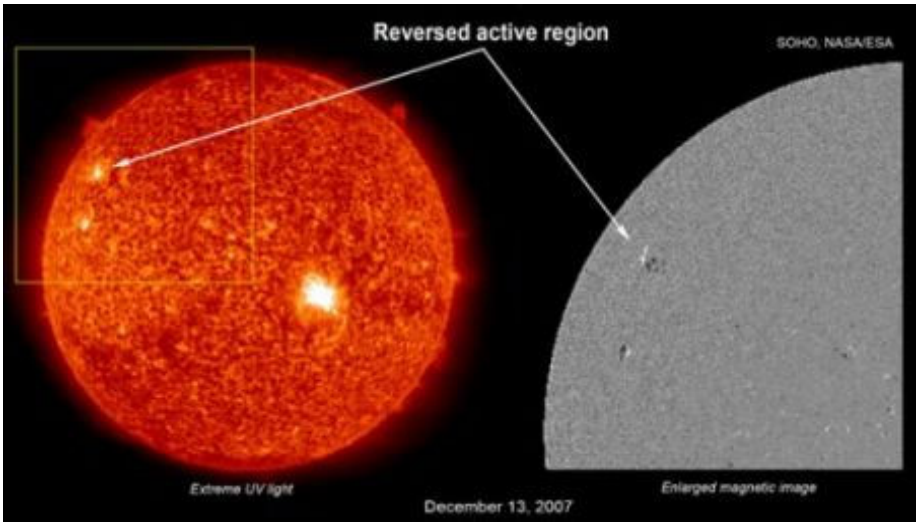
Sunspot numbers for December 13 through 19 were 39, 35, 39, 28, 14, 14 and 0 with a mean of 24.1. 10.7 cm flux was 93.8, 91.9, 88.9, 81.7, 79.5, 76.8, and 74.5 with a mean of 83.9. Estimated planetary A indices were 4, 2, 1, 2, 17, 18 and 8 with a mean of 7.4. Estimated mid-latitude A indices were 3, 2, 2, 1, 12, 11 and 7, with a mean of 5.4.

Continued on Page 8)



Propagation de www.freerepublic.com

The solar physics community is abuzz this week. No, there haven't been any great eruptions or solar storms. The source of the excitement is a modest knot of magnetism that popped over the sun's eastern limb on Dec. 11th, pictured below in a pair of images from the orbiting Solar and Heliospheric Observatory (SOHO).



From SOHO, a UV-wavelength image of the sun and a map showing positive (white) and negative (black) magnetic polarities. The new high-latitude active region is magnetically reversed, marking it as a harbinger of a new solar cycle.

It may not look like much, but "this patch of magnetism could be a sign of the next solar cycle," says solar physicist David Hathaway of the Marshall Space Flight Center.

For more than a year, the sun has been experiencing a lull in activity, marking the end of Solar Cycle 23, which peaked with many furious storms in 2000--2003. "Solar minimum is upon us," he says.

The big question now is, when will the next solar cycle begin? It could be starting now.

"New solar cycles always begin with a high-latitude, reversed polarity sunspot," explains Hathaway. "Reversed polarity " means a sunspot with opposite magnetic polarity compared to sunspots from the previous solar cycle. "High-latitude" refers to the sun's grid of latitude and longitude. Old cycle spots congregate near the sun's equator. New cycle spots appear higher, around 25 or 30 degrees latitude

The region that appeared on Dec. 11th fits both these criteria. It is high latitude (24 degrees N) and magnetically reversed. Just one problem: There is no sunspot. So far the region is just a bright knot of magnetic fields. If, however, these fields coalesce into a dark sunspot, scientists are ready to announce that Solar Cycle 24 has officially begun.

Many forecasters believe Solar Cycle 24 will be big and intense. Peaking in 2011 or 2012, the cycle to come could have significant impacts on telecommunications, air traffic, power grids and GPS systems. (And don't forget the Northern Lights!) In this age of satellites and cell phones, the next solar cycle could make itself felt as never before.

The furious storms won't start right away, however. Solar cycles usually take a few years to build to a frenzy and Cycle 24 will be no exception. "We still have some quiet times ahead," says Hathaway.

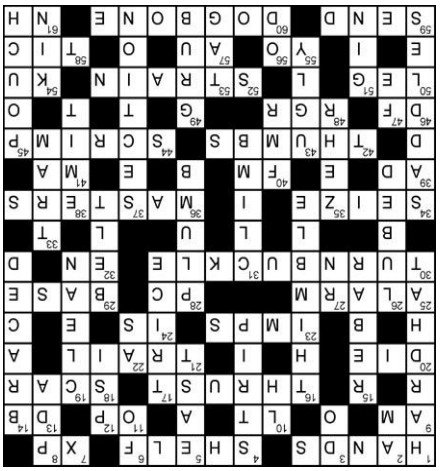
Meanwhile, all eyes are on a promising little active region. Will it become the first sunspot of a new solar cycle?

The Amateur Radio Crossword Puzzler

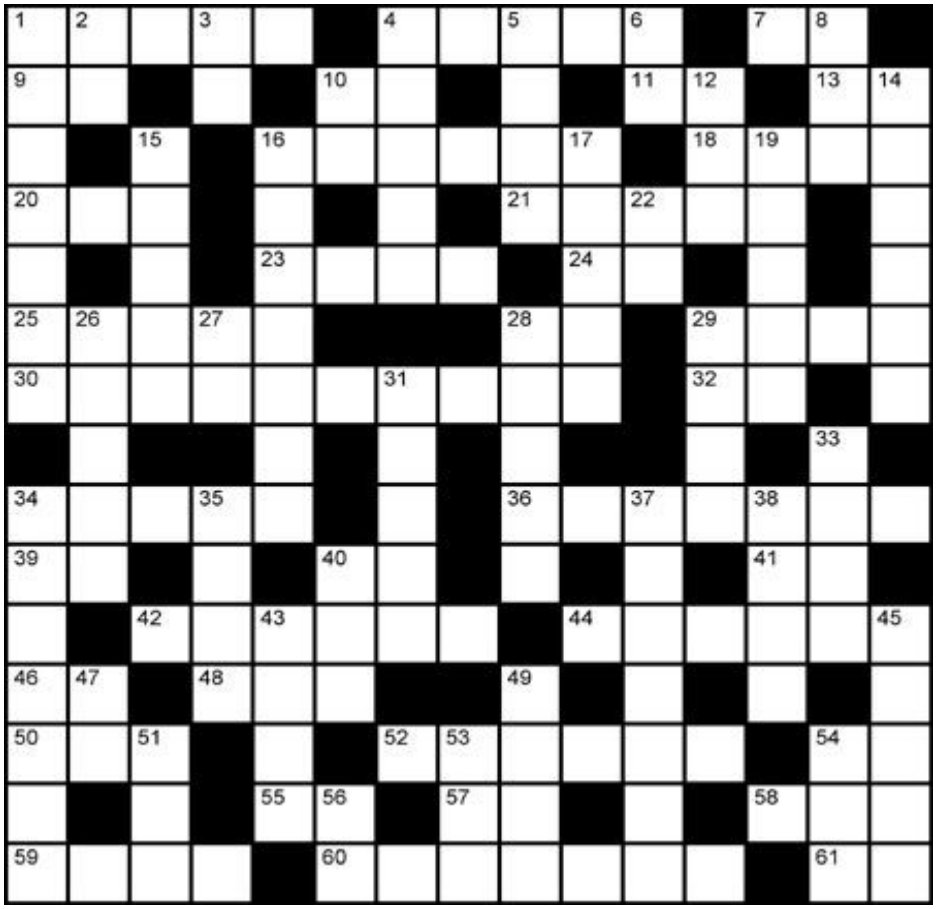
By H. Ward Silver, N0AX

Towering Intellect

Think you know a thing or three about getting aluminum and wire airborne? Use that knowledge to solve this puzzler. No matter if you're an acrophobic, there's no need to be afraid of these heights. You'll have to exercise your tower IQ to see if you're a regular "guy." This puzzle focuses mainly on the gadgets and terms you encounter when trying to get those antennas from where they are (not high enough) to where they should be (higher than the competition's). Have fun and Happy Holidays!
(See Page 9)



"Towering Intellect"



Across

1. You hold things with these
4. What the rotator sits on
7. Newest version of Windows(tm)
9. Morning hours (abbr.)
10. Light (abbr.)
11. Operator (abbr.)
13. Logarithmic ratio
16. Bearing that carries an axial load
18. To deform or deface
20. Companion to tap
21. Follow behind
23. Mythical creatures that cause trouble
24. Current condition (with 22 down, two words)
25. Trouble indicator
28. Home computer (abbr.)
29. Lowest part of tower
30. Used to adjust tension
32. Prefix meaning "make into"
34. Bind or freeze
36. The best performers
39. Solicitation to buy (abbr.)
40. Most popular VHF mode
41. Small unit of current (abbr.)
42. A clumsy person is all .....
44. Reduce expenses or save money
46. To determine directions (abbr.)
48. Roger (abbr.)
50. A tower's supporting elements
52. Type of insulator also known as an "egg"
54. Microwave band above Ka
55. Popular program for optimizing Yagi antenna designs
57. Most malleable metal (Chemical symbol)
58. Ringrotor model name
59. Better than to receive
60. Insulator used at feedpoints (two words)
61. The Granite State (abbr.)

Down

1. Worn for protection (two words)
2. Oldest form of modulation
3. To be is to ..
4. Remove covering
5. 90 degrees from True North
6. Fee Fi .. Fum
8. Palm, Clie, Handspring
10. Opposite thread of RH
12. Measure of pressure (abbr.)
14. Supported
15. Prevent concrete from cracking
16. Forms smooth loop in guy wires
17. A short period of time
19. Remove dirt or corrosion
22. Current condition (with 24 across, two words)
26. Greased or oiled
27. Assistant to physicians (abbr.)
28. Straight up and down
29. Personal safety accessory
31. How to get to where the antennas are
33. Sliding carriage or sling
34. Portions of clamps that hold the dead end of a guy wire
35. German for "very"
37. One module of a tower
38. Give off or radiate
40. Former (abbr.)
43. Not pretty
45. What tools are carried in
47. Chemical symbol for element used to form most towers
49. Slang for food
51. Type of pole used for lifting
53. Line that controls during lifting
54. Relatives
56. Maximum width of pipe or tube (abbr.)

Ham's Love to Eat

Marbled Pumpkin Cheesecake

Ingredients

1-1/2 cups/375 mL gingersnap cookie crumbs (about 32 cookies)
1/4 cup/60 mL unsalted butter, melted
2 packages (8 oz/227 g each) cream cheese, softened
3/4 cup/180 mL sugar, divided
1 tsp/5 mL **Watkins Original Double-Strength Vanilla**
3 eggs
1 cup/250 mL canned or cooked pumpkin
1-1/2 tsp/7.5 mL **Watkins Pumpkin Pie Spice**

Cooking Directions

Preheat oven to 400°F/200°C. Combine crumbs and butter. Press firmly over bottom and up sides of pie plate. Bake for 5 minutes; remove from oven and let cool. Reduce oven temperature to 325°F/170°C. In large mixer bowl, beat cream cheese, 1/2 cup/120 mL sugar and vanilla until blended. Beat in eggs one at a time. Reserve 1 cup/250 mL batter. Add remaining sugar, pumpkin and Pumpkin Pie Spice to remaining batter; mix well. Alternately layer pumpkin and cream cheese batters over crust. Cut through batters with knife several times for marbled effect. Bake for 45 to 50 minutes or until cheesecake springs back lightly when slightly touched. Loose cheesecake from rim of pan. Let cool to room temperature, then chill.

A Real Shot in the Arm!

from Brenda Koth, MS, RD
Watkins Health and Nutrition Advisor

The flu vaccine offers the best protection from the flu, and is highly recommended, especially for children, the elderly, and those with weak or compromised immune systems, but if you choose not to take a shot in the arm, there are some options. The flu mist or nasal vaccine may benefit some, but it is more costly than the shot and cannot be taken by everyone. There are also medications that may provide some relief if taken at the onset of symptoms. While these measures offer protection, none will treat or prevent all types of the flu virus, so it is still a good idea to take additional preventive measures. Watkins Rezist Plus with ImmunEnhancer contains ingredients that have been shown to boost the immune system and help to protect from these seasonal discomforts. Taken daily, it may keep you from getting Saturday Night Fever, or a fever on any other night, for that matter.

For Sale

MFJ -949C Deluxe Versa Tuner II

It is designed to match virtually any transmitter to almost any antenna, including dipoles, inverted vees, verticals, mobiles antennas, beams, random wires, and others fed by coax lines, balanced lines, or a single wire. It has a 4:1 balun built in for connection to balanced lines. A built in dummy load for easy transmitter tuning or checking. It will handle up to 300 watts of RF power from a transmitter from 160 through 10 meters. It has a cross needle meter so forward power, reflected power, and SWR may be read simultaneously.

Jack, WB1BSU will donate the proceeds from the sale of his old antenna tuner to the BVARA. It works fine. He just replaced it with an LDG auto tuner. For more information on the tuner, contact Jack on the .31 repeater or by e-mail at:

ajs322@comcast.net