



The Monitor

December 2001



From the Prez:

It hardly feels like December with all this warm weather, but please remember, it is still fall and winter doesn't start for another 3 weeks...there is still plenty of time left to finish preparing for winter. With weather like we have had in the 70's, it is not hard to stay outside even though the days are getting shorter and shorter...

The Hartford planning commission seems steadfast in their push to regulate towers and other structures, please come to the December meeting to join in the discussion about what we as an organization can do about it.

The club's tower trailer is in desperate need of repair, let's all pitch in to see how we can help get this extremely important piece of equipment back in service. We will need at least one new cable, and the whole trailer needs to be sandblasted and repainted. Please do whatever you can to help maintain this and all club owned and operated equipment, it is there for your use, and we can never tell when or where it might be needed next.

We will try to get a proposed budget together for the December meeting, but with everyone so busy and the holiday's approaching it may take some extra time. We will need to vote this budget in place, so please do what you can to attend the meetings.

Speaking of money, it is time to renew your dues! Everyone's membership runs from January to January, so please be prepared for this expense. We do not anticipate increasing our dues, so please enjoy this reprise from the increase for the time being. If we don't move to increase our membership or resort to other means to raise funds, we may be forced to increase our dues in the near future...

I don't want to sit here and preach doom and gloom, but another thing we need to look out for is the loss of radio spectrum. Especially in the 440-450 MHz range. One interesting project a few of us have going is the connection of a 440 repeater system to the Internet. Using Voice-Over-IP, (VOIP) we will be able to communicate with other repeater systems across the Internet using nothing more than a low-powered HT. Imagine, flying to Seattle for a week, and being able to talk to your friends back home with your HT. All it will take on the user's end is knowing the code of the remote repeater system you would like to bring online.

Dave KA1UAG has spearheaded this project, and has linked into his current 440 system with a remote repeater,

and Mike N1MS has setup and configured the computer that will interface with the remote link. I have been assisting wherever I can and will be providing the broadband Internet access as well as the computer hardware and the location for the remote. Together the three of us have spent a bit of time setting this up, and if all goes well we may have the system up and running within the next week or so. It will certainly provide interesting conversation on the local 440 repeater...

Which brings me to my original point - If we don't start using the resources we have available to us we will start losing them. Don't get me wrong here, there is no need to go out and buy new radios and antennas for every band we have available just to stem off the inevitable attack of other spectrum users. But if we all become a little more active on the bands we currently have access to, it will help tremendously when we go to show how widely used the spectrum we have available is. Use it or lose it, as Bill WB1BRE says...

We as a club have a tremendous amount of resources available to us, whether it be equipment or expertise, and I have to admit a lot of it is certainly underused. I recently installed a mobile HF rig so that I might start using the WARC bands, and I feel that while this was a large expense for me, it is only a small contribution to what needs to happen in order to show that we actually deserve to hold exclusive rights to an extremely valuable piece of spectrum real estate. Please do what you can to get on the air and use what we all may be taking for granted...

Micky K1XH

Upcoming Events

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| TSRC Meeting | Dec.8, 9:00am
Gillam's Restaurant, WRJ, VT |
| TSRC Meeting | Jan. 12, 2002, 9:00am
Gillam's Restaurant, WRJ, VT |

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December Propagation Outlook

by AD5Q, edited by K1IB

Winter approaches. A large area over the north pole now is in darkness, making certain Asian paths difficult on higher bands, especially 10 meters. Ten and 15 meters will otherwise be excellent. The morning gray line extends northeast to Europe and enhances propagation along the path with the heaviest DX activity. This path opens on 40 around sunrise for a brief opening to Scandinavia and Russia. The morning gray line also extends SSW around Antarctica and back up the Indian Ocean to the Middle East, Russia and Europe. This is the most popular 20-meter long path circuit, and it peaks in the winter.

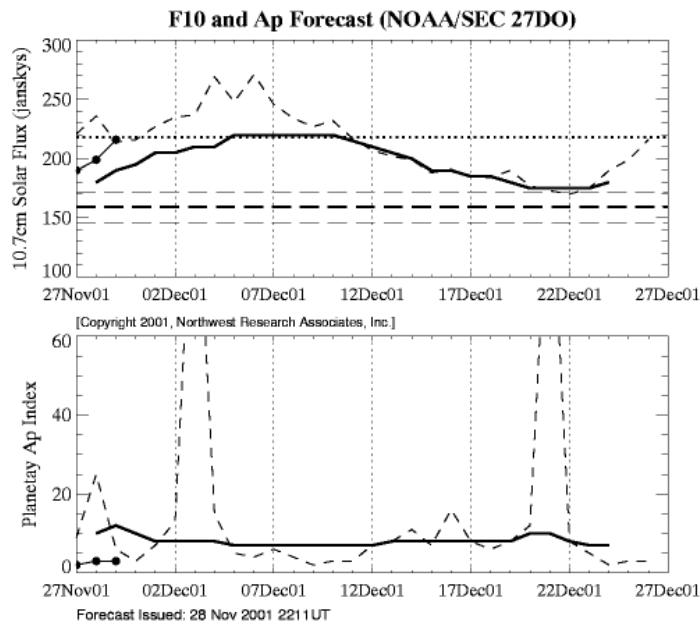
LOW BANDS: Conditions on 80 are improving. European stations generate evening pileups from the east coast, but this is not the EU propagation peak since sunrise doesn't sweep across the continent until after 0600Z. On both 40 and 80, the DX can then be worked with much less competition because so many on the east coast are asleep. The best nighttime band will be 40 CW. Exotic African stations tend to show during the evening (their morning).

20 Meters: MUFs may not be high enough to keep 20 open at night. The evening path to the sunrise areas to the northeast may be closed, and this is the path with the most DX activity. The southern hemisphere is not affected by this problem, so the band will usually remain open to points south and east after it closes to Europe. Trans-Antarctic long path openings will occur at their regular times.

DAYTIME BANDS: Lower MUFs will affect 10 meters, which shuts down shortly after dark (also in Europe). Openings are now shorter, especially into Russia where the band closes shortly after our sunrise. A greater portion of Asia will be inaccessible this winter on 10. There will be plenty of activity anyway, since 10 is a very popular band. Fifteen meters will actually be in better condition, with longer openings to more of the world.

Solar & Geomagnetic Conditions Forecast

Last weekend the earth was blasted by energy from two coronal mass ejections. The mid-latitude A index on Saturday was 76, and the planetary A index was 108, indicating a severe geomagnetic storm. This caused dramatic aurora displays visible as far south as Arkansas and Texas in the United States. Take a look at http://spaceweather.com/aurora/gallery_24nov01.html for a dramatic gallery of aurora images.



These plots show forecasts for the 10.7cm solar radio flux (F10) and the planetary geomagnetic activity index (Ap) for the next 27 days (heavy solid lines). The light solid lines and filled circles at the start of each plot are the observed F10 and Ap for the past few days, and the light dashed lines show the observed F10 and Ap from the previous solar rotation. The three horizontal long-dash lines on the F10 plot indicate the mean (heavy line) and expected range (light lines below and above the heavy line) of F10 from the NOAA SEC long-range prediction for Solar Cycle 23. The single horizontal dotted line is the 90-day mean F10 flux for the preceding 90-day period.

W1AW schedules Transatlantic, OSCAR celebrations in December

Maxim Memorial Station W1AW has scheduled two Special Event operations during December.

W1AW will be on the air December 3-7 to honor the 80th anniversary of the 1921 Transatlantic tests. Listen for W1AW/80 on many HF and VHF bands (including satellites).

W1AW also will celebrate the 40th anniversary of the first Amateur Radio satellite—OSCAR I—launched into orbit on December 12, 1961. W1AW will be on the air as W1AW/40 December 10-14 on as many of the active satellites as possible.

A special QSL card will be available for contacts or listener reports on both events. QSL requests for W1AW/80 and W1AW/40 go to W1AW, 225 Main St, Newington, CT 06111. Include a self-addressed, stamped envelope or the appropriate number of IRCs with each request.

British Scientist Solves Ham Antenna Problem in Vermont!

The author of this article, Alan Cake, a renowned British RF scientist and antenna designer, offers this novel solution to the antenna zoning problem in Vermont. If you wish to read more about Alan's amazing antenna solutions and scientific discoveries, please visit his website at <<http://members.netscapeonline.co.uk/alancake/index.htm>><http://members.netscapeonline.co.uk/alancake/index.htm>. I particularly recommend the 40 Metre Beer Can Special. Dave #2

The Tinkler

How to get on the air without upsetting the neighbors

Alan Cake G3MOJ

This antenna is ideal for those hams who are unable to erect normal antennas because of restrictions on their properties or who have neighbours who have threatened physical harm at the first sight of any wires. It is not an easy antenna to install but once set up will provide endless hours of fun and DX.

It is perhaps best to consider the installation in two stages—firstly the provision of the water supply and secondly the electrical installation.

THE WATER SUPPLY

Install a new water pipe from the main house cold water system and run the pipe through the shack. Next to the operating position install a tap (faucet). From the faucet the new pipe runs from the shack to the centre of the garden or yard.

ELECTRICAL INSTALLATION

Run a length of 50 Ohm coaxial cable from the shack to the garden end of the water pipe.

Once this is done you can get on with the interesting job of finding a water fountain. These can be found in the centre of many large towns but quite a few of them would be missed if taken. If you are doubtful if you could remove a local fountain without being caught it would be better to purchase it at a local garden centre or drive-thru fountain outlet. The only thing to remember is to obtain the biggest fountain you can afford or get away with.

On returning home, connect the fountain up to the water pipe in the yard. It is important at this point to make the water nozzle on the fountain very small in order to increase the jet of water. Connect the inner of the coaxial cable to the nozzle and the outer of the cable to a good earth.

OPERATING THE NEW ANTENNA

When you are sure that the connections are secure, turn on the water at the mains. You will notice that by turning the

faucet in the shack the stream of water will get higher or lower depending on the direction of turn. In this way the antenna can be tuned to any frequency in the radio spectrum. Once the correct position of the faucet is found for each band a tuning dial can be made up and fixed to the wall behind. This will enable the antenna to be tuned quickly. One small problem that has been found with this antenna is that in windy weather it may operate a little intermittently on 160 metres. Maintaining a solid jet of water 40 metres (approximately 140 feet) high is rather difficult in bad storms but is a small price to pay when the neighbours admire your new fountain without realizing you have been up all night working the DX. Good Hunting.

Mail disruptions lead to vanity processing suspension

Recently announced changes in mail handling procedures at the FCC's Gettysburg, Pennsylvania, office have effectively halted processing of Amateur Radio vanity call sign applications. The FCC has processed vanity applications received through October 14. Vanity applications received after that remain on hold for now.

"We understand that mail directed to the FCC Gettysburg office beginning October 15 was being held pending the start of special handling precautions to address any biohazard contamination concerns," said ARRL VEC Manager Bart Jahnke, W9JJ. He said the FCC is tracking the receipt date for each piece of mail.

Because the FCC gives equal priority to paper and electronic vanity applications, all vanity processing was being suspended until the mail situation is resolved. Citing a need for heightened security measures, the FCC announced November 14 that it had moved the Gettysburg office's mailroom offsite, to the rear entrance of 35 York St, Gettysburg, PA 17325.

The FCC did not announce, however, that mail received at Gettysburg starting October 15 had not yet been opened, pending arrangements to handle it without the possibility of endangering personnel. Jahnke said vanity processing should resume once the FCC begins to open its mail backlog. Just when that might happen is not yet known. Vanity processing typically takes 18 days.

Jahnke said the mailroom situation also could affect some Amateur Radio renewals. He said amateurs who filed for renewal in a timely fashion may continue to operate beyond the expiration, if the mail delays cause the license to lapse before the renewal occurs. He said applications from those filing for renewal near the end of their two-year grace period will be accepted for processing if they get to the FCC before the grace period expires.

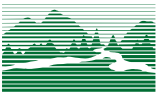
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Don't forget to check the TSRC Home Page!
Make it your default start page!
<http://www.w1fn.org>



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