

# Feedline



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The Voice of The Cary Amateur Radio Club N4NC

January 2002

## Pheedline Phun Phacts

By Kaz, W4KAZ

Greetings for the New Year!. After the beautiful weather of November and December, winter finally re-discovered the Triangle area. Only days before it snowed, I had noted how much more pleasant the weather in the mid-atlantic area is compared to the central gulf coast. (Fewer mosquitoes too!) I hope that everyone enjoyed the holiday period, and had fun building snowmen. Don't forget to dress in layers!

For those in the market for such, Icom has a new HF rig available, the IC-746PRO, which I have seen advertised for under \$1900.00 USD. The new Kenwood rig, the TS-2000 is currently being advertised for under \$1700.00 USD. Also, the popular Yaesu VX-5R is now available for less than \$275.00 USD and several 5 watt 2 meter HT's can now be had for under \$150 USD.

Several of you may remember my recent tirade on the subject of "mice". Well, Santa this year delivered to my home an early present of the latest-and-greatest from Dell. (Dude, I got a Dell, so quit saying "Dude"! ) It is a completely wonderful piece of hardware. As a test on the longevity of mechanical mice, I left the optical mouse temporarily tethered to the old box. The new Dell mouse worked for approximately 17 days before becoming afflicted with the dread "fuzzy ball" syndrome. "Get that optical mouse back over here!" This however is not the point of the current tirade.

Herein I will discuss my first impressions/opinions of Windows XP. You see, we unfortunately chose the "Windows XP" operating system option. I generally know better than to adopt the first version of any program, especially an operating system. Having spent quite a bit of professional time writing programs to get around "features" of new software, I was not surprised to find the XP product itself has several undocumented "features" (a.k.a. "bugs"). It's only to be expected.

I would recommend waiting for the first serious service pack to be available before making the jump from WIN98 to the new Windows XP, or determine that XP will solve some particular problem before adopting it. The biggest "problem" I have is that it appears my scanner is not yet supported. Actually, it appears that very few scanners ARE supported. I'm sure this will change as the year progresses, but check for compatible drivers. Also, with Win XP, "big brother" is now on your desktop in full force. If you swap hard drives, or re-install the system, you will now likely need to contact the piracy police for permission (and a software key code) to enable your software again. It seems that Microsoft doesn't trust you anymore. Also, XP wants your computer to have at least 128 meg of memory, which is currently available at bargain prices.

On the positive side, those with high speed internet connections will be able to obtain the operating system upgrades quickly. In fact, perhaps too quickly. The default options on my manufacturer installed operating system were for the system to perform upgrades on itself automatically. It's easy to change these defaults, but I think this could be a problem for folks with lower speed internet connections. Some of the downloads are larger than 5 megabytes, and I'd hate to have that going on automatically. But the method for installing the upgrades seemed quite simple. Between Dec 1<sup>st</sup> and Dec 21<sup>st</sup> there were several "critical" upgrades available. While I am not yet ready to chuck Windows in favor of Linux as my primary OS, somehow, I'm not surprised.

As always, Caveat Emptor.

## January Meeting Program

By Cary ARC VP, Clare N2RJB

I heard from Reed this week that he has not been able to arrange the transmitter site tour, so I will be the speaker at this month's meeting. The subject will be emergency preparedness, with an emphasis on amateur radio operations. I want this to be partly a presentation and also a discussion session, similar to the one we had last year when I showed my GPS tracker. I'll be bringing some examples of what I have on hand for emergencies.

Also I want to bring up for discussion the idea of having one or more hands-on projects for the club. There are many possible subject areas and I'd like to find out whether the active members would like to do something along this line and if so what areas would interest the most people. And then there's also the possibility of enticing more members to attend our monthly meetings or even to convince more people to become members. You never know...

I realize there is a wide spectrum both of subject area and complexity. We could choose from emergency preparedness projects (Has a familiar ring, eh?) or from projects that would just be handy to have around the shack, etc. We also could consider projects that would benefit others either in the amateur community or in the general community. And then we could choose from simple things that would be very inexpensive and could be accomplished on a meeting night to much more complex and possibly expensive projects that would require one or more sessions scheduled on weekend days. Please give this some thought and be prepared to join in the discussion.

See you all on the 24th!

## Elkin Winter Hamfest

73 de KG4FLA

The Briarpatch ARC and the Foothills ARC are pleased to announce the Elkin, NC Winter Hamfest. The hamfest will be held at the National Guard Armory in Elkin, NC. Sunday February 24, 2002. Elkin is off I-77 at Exit 82. Plenty of inside tables are still available, as well as limited "tailgate" spaces outside. Pat Hill, AE4HK is handling table reservations at (276)236-6747. E-mail Table reservation requests or general info to KG4FLA@HOTAIL.COM.

This is an ARRL sanctioned event, and VE testing will be available on site. Testing will begin at 9:00 A.M. (Please have two forms of ID, with photocopy's as well as any current license or CSCE's)

## Charlotte 2002 Hamfest and Computerfair

This year the Charlotte hamfest presents "The 20<sup>th</sup> Anniversary Celebration of Heil Sound". This years fest will be held March 9<sup>th</sup> & 10<sup>th</sup>, 2002. Buy your tickets early! For complete details see [www.w4bfb.org](http://www.w4bfb.org) or call (704) 948-7373. This year's pre registration prize is an Icom IC-R75 Receiver.

*And speaking of the Charlotte hamfest.....*

## Charlotte Hamfest Tickets!

From Herb, W3HL

Bring your check, made to: Charlotte HAMFEST, for \$6 times the number of pre-registration tickets you want to the January CARC meeting. We will package them together, saving you the cost of postages BOTH ways and envelopes. We will have the tickets ready for distribution at the February CARC meeting. Parking tickets are \$3, if you plan to have your own car there.

We will do the same type of group purchase at the February CARC meeting for the RARSfest.

Save money and join the crowd!!!!!!!!!!!!!!

## Irlp Kids Net

From the "Triangle.radio" newsgroup, posted by Jim, WW4M  
There is a Kids Net held every Friday evening at 8pm EST on IRLP Reflector 2, which is normally the active connection on the Raleigh 146.775- (88.5 PL) NC4SU repeater. Last week's net had check-ins from all over the U.S., Canada and Australia.

I believe they take check-ins up to age 20. Kids who are not licensed can check in with the assistance of a licensed adult.

FYI IRLP enables repeater linking using Voice over IP on the internet. More info on IRLP is available at <http://www.irlp.net>, and global maps of all of the IRLP nodes are at <http://maps.irlp.net>.

For those interested, there is an IRLP4Kids group at <http://groups.yahoo.com/group/irlp4kids/>

73, Jim WW4M

## Coming Contests

### January, 2002

North American QSO Party, SSB	1800Z, Jan 19	- 0600Z, Jan 20
ARRL January VHF Sweepstakes	1900Z, Jan 19	- 0400Z, Jan 21
CQ 160-Meter Contest, CW	2200Z, Jan 25	- 1600Z, Jan 27

### February, 2002

Vermont QSO Party	0000Z, Feb 2	- 2400Z, Feb 3
New Hampshire QSO Party	0000Z, Feb 2	- 2400Z, Feb 3
10-10 Inter. Winter Contest, SSB	0001Z, Feb 2	- 2400Z, Feb 3
Minnesota QSO Party	1400Z	- 2400Z, Feb 2
Delaware QSO Party	1700Z, Feb 2	- 0500Z, Feb 3 and
	1300Z, Feb 3	- 0100Z, Feb 4
North American Sprint, Phone	0000Z	- 0400Z, Feb 3
Utah QSO Party	0000Z, Feb 9	- 2400Z, Feb 10
YL-OM Contest, CW	1400Z, Feb 9	- 0200Z, Feb 11
FISTS Winter Sprint	1700Z	- 2100Z, Feb 9
North American Sprint, CW	0000Z	- 0400Z, Feb 10
ARRL School Club Roundup	1300Z, Feb 11	- 0100Z, Feb 16
ARRL Inter. DX Contest, CW	0000Z, Feb 16	- 2400Z, Feb 17
YL-OM Contest, SSB	1400Z, Feb 16	- 0200Z, Feb 18
CQ 160-Meter Contest, SSB	2200Z, Feb 22	- 1600Z, Feb 24
North Carolina QSO Party	1700Z, Feb 24	- 0300Z, Feb 25

## NC QSO Party

For detailed information on the NC QSO Party, see their web page at <http://www.w4nc.org/ncqsoparty.html>

## **ARRL Study Panel Recommends Eliminating Novice Bands**

The ARRL Letter, Vol. 20, No. 50, December 21, 2001

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

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

The committee, chaired by ARRL International Affairs Vice President Rod Stafford, W6ROD, has been studying the status and usage of the Novice/Technician Plus HF bands with an eye toward determining what changes to usage of that spectrum might be needed now that the FCC no longer issues new Novice licenses.

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

The committee recommended expanding the phone bands in accordance with the most popular of the survey choices offered--three for 80, 40 and 15 meters and two for 10 meters. Here's a summary: \* On 80 meters, nearly 40% of those responding opted for a plan that would extend the US phone allocation to 3700 kHz, with Extras permitted on the entire subband, and with Advanced and General class subbands starting at 3725 and 3800 kHz respectively.

\* On 40 meters, nearly half of the respondents picked the plan to extend the primary US phone allocation to 7125 kHz, with Extra and Advanced licensees allowed on the entire segment and Generals from 7175 kHz and up. (The committee's report suggested no changes to the special allocations for amateurs on certain Pacific or Caribbean islands and in Alaska.)

\* On 15 meters, again, nearly half of those responding wanted the US phone allocation extended to 21,175 kHz, with Extras permitted on the entire allocation, and Advanced and General subbands beginning at 21,200 and 21,250 kHz respectively.

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

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

## **FCC Denial Leaves League Eyeing Congressional Action On CC&Rs**

ARRL Bulletin 56 >From ARRL Headquarters, Newington CT December 28, 2001

The FCC has affirmed a November 2000 staff-level decision that declined to include privately imposed deed covenants, conditions and restrictions--CC&Rs--under the limited federal preemption known as PRB-1. That policy requires municipalities to "reasonably accommodate" amateur communication in antenna-related zoning and regulation.

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

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

The FCC said it recognizes the importance of preserving the integrity of contractual relations that CC&Rs represent. But it asserted that the ARRL had "submitted no specific evidence that would persuade us to abandon our long-standing policy of excluding CC&Rs in private covenants from our ruling in PRB-1."

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

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

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

A copy of the FCC's Memorandum Opinion and Order in RM-8763 is available on the FCC Web site, [http://hraunfoss.fcc.gov/edocs\\_public/attachmatch/FCC-01-372A1.doc](http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-01-372A1.doc) .

## **New Hampshire Antenna Decision Upholds PRB-1**

The ARRL Letter, Vol. 21, No. 01, January 4, 2002

A New Hampshire ham appears to have won a battle to erect an antenna support structure on his property. It remains to be seen, however, whether Jerry Muller, K0TV, of Hudson will be allowed to erect the extensive system of towers that he'd originally planned. In a 4-0 vote, with one justice abstaining, the Supreme Court of New Hampshire reversed a lower court ruling that ordered Muller, an ARRL Life Member, to dismantle the three towers he had erected on part of his six-acre residential tract.

Writing for the court in *Marchand v. Town of Hudson*, New Hampshire Chief Justice David A. Brock concluded that the lower court's order requiring Muller to dismantle his towers violated the limited federal preemption known as PRB-1 as well as New Hampshire's statutory codification of PRB-1. "In light of the FCC's clear directive, we agree that the superior court erred when it ordered the towers removed," Brock stated in a ruling issued December 31, 2001. The Supreme Court ruling vacates the dismantling order and sends the matter back to the town's zoning board of adjustment for consideration in light of PRB-1.

ARRL New England Division Vice Director and Volunteer Counsel Mike Raisbeck, K1TWF, represented Muller in written and oral arguments before the New Hampshire Supreme Court. ARRL General Counsel Chris Imlay, W3KD, also filed an amicus brief on ARRL's behalf.

Unlike many amateur antenna battles, this case did not pit Muller against the town. In December 1998, Muller applied for a permit to erect three 100-foot antenna structures on his property, and the Town of Hudson granted the permit. Three of Muller's neighbors appealed the grant of the permit, but the Hudson ZBA affirmed the grant. The neighbors then sued the town and won, resulting in the order for Muller to dismantle that's now been vacated.

While Muller has won the right to get on the air in some capacity, he will still have to make a case for his proposed three-tower installation. Brock agreed with the lower court that Muller's three-tower installation did not qualify as a "customary, incidental and subordinate" accessory use permitted by Hudson's ordinance. Another amateur in Hudson has a tower at the same height, but there are no instances of three such towers on the same property. Raisbeck explained that New Hampshire's accessory use statute relies on the prevailing local, not statewide, standard.

Nevertheless, Brock said that Muller's installation may be permitted within the framework of PRB-1, if Muller can demonstrate that his three towers are necessary to "reasonably accommodate" his communications needs.

Thirteen states have incorporated PRB-1 into their statutes. The full text of the New Hampshire Supreme Court decision is available on the Court's Web site  
<<http://www.state.nh.us/courts/supreme/opinions/0112/march221.htm>>.

## **AO-40 "Officially In The 'Dead Zone'"**

The ARRL Letter, Vol. 21, No. 01, January 4, 2002

AO-40 satellite ground controllers have begun adjusting the spacecraft's attitude as it enters a period of unfavorable sun angles. AO-40 command station team member Stacey Mills, W4SM, says that AO-40's operating schedule has been modified slightly to reflect the decreasing attitude longitude (ALON).

"As expected, the satellite has lost sun sensor lock, so we are now officially in the 'dead zone'," Mills reported. The satellite is currently in a long period during which Earth eclipses the sun near perigee--its point closest to Earth. These periods will continue well into next June.

The satellite relies on solar panels for its power. In late November, Mills said that necessary adjustments to AO-40's attitude to compensate for unfavorable sun angles over the next several months would lead to some down time for the spacecraft's transponders. The attitude shifting necessary to compensate for the unfavorable sun angle will leave AO-40's antennas pointing away from Earth for several weeks.

To save power, the transponder passbands were being turned off at various times, and the RUDAK digital transponder was scheduled to be off for up to five days.

Mills has said there will be periods of no transponder activity and a much longer period of limited--but progressively increasing--transponder activity. "AO-40 command stations will make every effort to activate AO-40's transponders, even if for only a short time each orbit, when conditions are appropriate," he said. Mills said he anticipated being able to keep the transponders active through the eclipse period for an hour or so right after perigee.

Yoshi Takeyasu, JA6XKQ, of the JAMSAT SCOPE team, recently announced the release of several new photos taken by the SCOPE cameras aboard AO-40. The photos are available on the JAMSAT Web site  
<<http://www.jamsat.or.jp/scope/011215/>>.

For more information on AO-40, visit the AMSAT-NA Web site  
<<http://www.amsat.org/>>.

## **Spark Gap Signal Heard For Hundreds Of Miles**

“In Brief”, The ARRL Letter, Vol. 21, No. 01, January 4, 2002

David Wilson, VE3BBN, reports his commemorative spark gap transmissions December 12 to celebrate the 100th anniversary of Marconi's 1901 transatlantic experiments were heard hundreds of miles away. Wilson, who lives near Niagara Falls, Ontario, built a low-power rotary spark transmitter and secured permission from Industry Canada (that country's FCC equivalent) to use it briefly on 80 meters. He transmitted "MARCONI S" twice a minute and said he got more than 450 reports but estimated that only about 60 of them were valid. "The best distance was Kansas City," he said--some 850 miles away. He noted that the majority of the reports were in the 200 to 400-mile range. Additional information, photos and audio of what his transmitter sounds like are available on the "Spark Gap Transmitter Signals for Marconi Centennial" Web site <<http://www.qsl.net/g4rfr/marconi.htm>>.

## **New Mexico Ham-Balloonist Tracked Via APRS On Record-Setting Flight:**

www.arrl.org “In Brief”, January 9<sup>th</sup> 2002

An Albuquerque, New Mexico, TV station reports that balloonist Troy Bradley, KC5ORZ, landed safely January 5 near Youngstown, Ohio, after setting a new Class AA-3 balloon world distance record. According to KRQE, Channel 13, Bradley took off January 3 from Amarillo, Texas, in his balloon "Comet Startrail." With assistance from Peter Naumburg, K5HAB ("Hot Air Balloon"), Steve Dimse, K4HG, and Keith Sproul, WU2Z, Bradley's balloon was equipped with APRS (Automatic Position Reporting System) equipment, so he could easily be tracked via the Internet. By reaching Youngstown in his helium-filled balloon, Bradley broke a world distance record of nearly 500 miles that had stood since 1922. Dimse is the developer of the [www.findu.com](http://www.findu.com) Web site, while Sproul, along with his brother Mark, KB2ICI, developed the *MacAPRS* and *WinAPRS* programs.

## **FCC Acts On October 15, 2001 Vanity Applications**

from: The ARRL Letter, Vol. 21, No. 02, January 11, 2002

The vanity call sign logjam has begun to break up. The FCC granted 27 vanity call signs January 9, based on applications received last October 15. Prior to this week, the FCC had not issued any new vanity call signs since October 30. FCC policy gives paper and electronically filed vanity applications equal priority. Mail problems due to the recent anthrax scare delayed some applications filed on paper and sent to Washington, DC, for decontamination. As a result, vanity processing has been on hold since last fall.

FCC Licensing Branch personnel recently have been attempting to obtain new paperwork from applicants, however. All vanity fee payments have been recorded and deposited or charged to credit card holders' accounts. The FCC has been using vanity fee payment data from the FCC's fiscal agent, Mellon Bank in Pittsburgh to contact applicants directly to have them resubmit their applications. The FCC has a record of when it receives all vanity applications. Once the Commission has all paper and electronic applications for a given date, all submittals will be processed in chronological order.

In mid-November, the Gettysburg office began diverting mail addressed to its 1270 Fairfield Road location to another site in town for special handling, and decontamination now is being handled locally. Since October 19, the FCC has been urging all of its customers to avoid using the mails to conduct business with the agency and to use electronic means to file comments or applications. The FCC has been acting on amateur renewals and administrative updates filed on-line via the Wireless Telecommunications Bureau's Universal Licensing System. As of December 3, all applicants must include an FCC Registration Number (FRN) when filing.

## **New ISS Amateur Radio Antenna To Be Installed During Spacewalk**

from: The ARRL Letter, Vol. 21, No. 02, January 11, 2002

Amateur Radio on the International Space Station Board Chairman Frank Bauer, KA3HDO, has announced that one of the four new ARISS antennas will be installed during a scheduled January 14 spacewalk--or EVA. Two crew members will attach the "WA3" model VHF-UHF flexible tape antenna on one end of the ISS Service Module.

"The Russian team is able to deploy this particular antenna sooner than the others because it is located very close to where the four RF connections go into the Service Module," Bauer said.

Expedition Four Commander Yuri Onufrienko, RK3DUO, and flight engineers Carl Walz, KC5TIE, and Dan Bursch, KD5PNU, are beginning their second month in orbit aboard the ISS. They have not yet been active on Amateur Radio, although several ARISS school contacts are pending. Onufrienko and Walz will carry out the EVA. NASA says the two will move a Russian cargo crane to the Russian Functional Cargo Block--or Zarya--for future assembly work. According to NASA, Bursch will operate the Canadarm2 robotic arm from inside the space station "and act as spacewalk choreographer."

Installation of the new antenna on the Service Module paves the way for two separate ham stations aboard Space Station Alpha. Plans call for one station to remain in the Functional Cargo Block using the Russian antennas that had been used to dock the FGB but are now used for ARISS. A second station will be set up in the Service Module--or Zvezda--using the new antenna. "The installation of this first antenna on the outside of Zvezda will allow the crew to set up ham radio equipment in their living quarters," said Bauer, who's also chief of the Guidance, Navigation and Control Center at NASA's Goddard Space Flight Center Maryland. The initial station ham gear was installed aboard the Zarya module because that module went into space first.

"The Zarya location worked well," Bauer said, "but this new setup is much more comfortable and convenient and should allow for more contact between the crew and Amateur Radio operators and schools on Earth." The other three antennas will be installed later this year.--ARISS; NASA

## **DARA Announces 2002 Scholarships**

from: The ARRL Letter "In Brief", Vol. 21, No. 02, January 11, 2002

The Dayton Amateur Radio Association <<http://www.dara-w8bi.com>> has announced the availability of scholarships for the 2002-2003 academic year. Applicants must be graduating high school seniors in 2002 and hold an FCC Amateur Radio license of any class. DARA grants scholarship awards of up to \$2000, as determined by the scholarship committee, toward tuition at an institution of higher education--as outlined in the application. To obtain an application, send a self-addressed, stamped envelope to DARA Scholarships, ATTN: DARA Scholarship Committee Chairman Gary Des Combes, N8EMO, 9873 Lower Valley Pike, Medway, OH 45341, or via e-mail to Gary Des Combes, [n8emo1@msn.com](mailto:n8emo1@msn.com). Completed applications must be postmarked by June 1, 2002.