



# SARA NEWS

Schenectady Amateur Radio Association Inc.  
"Service Through Amateur Radio"

Founded 1930

January, 2002

K2AE Repeaters

Meeting Monday, January 7 2002 at 7:30 PM, Olin Hall, Union College

## Public Service

People who were in Christmas parade were: AA2CW, N2SQO, KG2AC, W2DHT, KG2AO, KB2SWR, KC2IBE, KC2IBF, W2BEJ, KB2RMW, N2YBT, N2ZQF, AB2IU, KB2TSA, KB2MOB and KA2TJZ.

de Ken AA2CW

## Happy New Year to All!

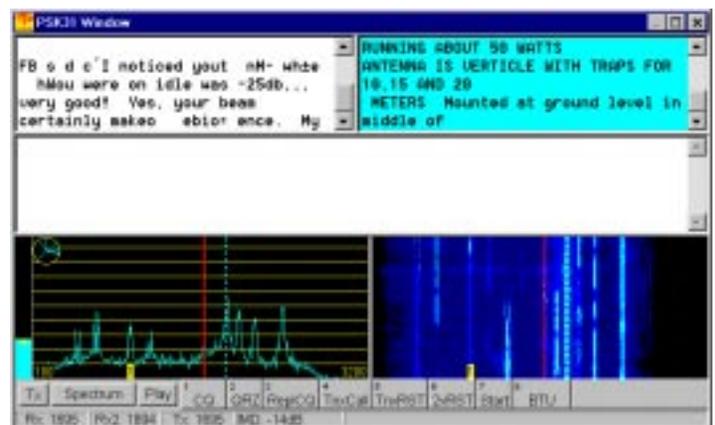


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## Computer Sound Cards and Ham Radio (in particular PSK31)

Got a computer with a sound card? With a simple interface you can use your computer to work a bunch of interesting modes. We'll talk about and demonstrate one of the most popular new modes, PSK31 and how to get started. Weather permitting, we will even do live demonstrations. Disks with software and schematics for interfaces will be available at the meeting. This is a beginners introduction to using a soundcard equipped computer with your rig so there won't be any deep technical theory. We'll give you enough information to get started and some pointers where to look for more information. This will be a joint presentation by Brian Macherone AB2IU, George Williams W2CSN and perhaps more.



What it looks like from the operating position

## From the Board

Meetings - Thursday preceding the SARA meeting.  
All members are welcome!

SARA BOARD MEETING MINUTES-6 DECEMBER  
2001

Those present at the meeting were Paul Siemers (WY2F), Brian Macherone(AB2IU), Bob Raffaele (W2XM) and Tim Long (W2UI). The meeting was called to order at 7:00PM.

The Plans for the December Holiday Party were discussed at length. The SARA website is in use for posting the party goods that are being brought to the party by the various hams and guests, XYL's and YL's. This is a very fine way of using modern technology for something as fun as posting what party goods have been obtained and what goods are still needed. The party is expected to be a hit with each of the board members having called club members on the telephone tree lists that were created by George Williams and Brian Macherone. In addition the Sunday RACES/ARES nets will be used again on the last net before the party is held on 12-10-01 at the Price Chopper Community room on Eastern Parkway.

Bob Raffaele let us know that the class will soon come to a close, that he wants to invite his class to the SARA holiday party, and that the membership committee will take an even greater part in boosting the number of members.

Tim Long explained how the winter storage plans for the SARA equipment trailer have been formalized.  
Meeting adjourned at 8:07PM.

Minutes by Jay Freud K2QNU SARA Secretary and Tim Long AB2UI SARA Director.

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### License Class Results

Here is an outline of the results of the VE session that was the conclusion to our course. Ten from the course took the test; two who attended only the review class took the test; there was one walk-in.

Twelve of the thirteen earned their techs or something more.

Our teachers deserve to be congratulated, but most of the credit should go to the students. Their intelligence, dedication, enthusiasm, and good study habits paid off. Thank you.

de Bob, W2XM

## The Trading Post



FOR SALE  
OR TRADE

For Sale or trade: QST Magazine (& other ARRL periodicals) on CD-Rom for the year 1998.  
w2zp@arrl.net or 861-6269.

Wanted: QST Magazine for 1st half of year 2000. That is, January through June, 2000.  
w2zp@arrl.net or 861-6269.

Wanted: Cheap! 75 meter mobile antenna or two.  
Phil, KB2HQ, 377-8938

Free: Pole mount repeater cabinet including a Prog Line repeater for parts or rebuild. Phil, KB2HQ, 377-8938

To post an ad write: [sara@e-groups.com](mailto:sara@e-groups.com), or call Phil, KB2HQ, 377-8938 -- *before 9:30 PM, please*. You can also send direct to [kb2hq@nycap.RR.com](mailto:kb2hq@nycap.RR.com).

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## Metals

### Most ductile element - Gold

One gram of the metallic element gold can be drawn to 2.4 k.m., or 1 oz. to 43 miles. The metallic element gold has the chemical symbol "Au," from "aurum", the latin word for gold. It is a soft, gold-colored metal and an excellent conductor of heat and electricity. This element does not easily react chemically with other substances, and hence it does not tarnish with age. The fact that it retains its luster is one of the reasons that it has been so highly valued and sought after in history. It occurs naturally in the Earth's crust as a metal in veins of quartz and in alluvial deposits. It is the 75th most abundant element in the Earth's crust.

### Least dense solid - Aerogel (0.005 g/cm<sup>3</sup>)

The solid substance with the lowest density is aerogel, in which tiny spheres of bonded silicon and oxygen atoms are joined into strands separated by pockets of air. The lightest of these aerogels will be used in space to collect micrometeoroids.

Aerogel is a silicon-based solid, which is 99% air and 1,000 times less dense than glass. Its appearance resembles solid smoke. It is produced from a silica gel, which is dried whilst retaining the shape. Aerogel is also a very effective insulator, able to withstand temperatures up to 1,400 deg. C. (2,552 deg. F.). Aerogel is currently being flown on the Stardust planetary mission. Its unusual properties will allow tiny particles ejected from comet Wild 2 to be captured during the Stardust mission. The particles will strike aerogel collectors at high velocities, to be slowed down by the frothy aerogel structure and trapped intact inside the substance.

De Dennis/4F1MIR Philippines

## ARRL/FCC/NYS

### ARRL ARLB053 - New Amateur Extra class question pool

The National Conference of Volunteer Examiner Coordinators' Question Pool Committee has released a revised and expanded Amateur Extra class (Element 4) question pool into the public domain. The new question pool becomes effective July 1, 2002, and must be used to generate all Extra class written examinations administered on or after that date. It replaces the Extra class question pool released April 15, 2000—the day Amateur Radio "restructuring" became effective.

The new Element 4 pool expands the number of questions by more than 20 percent—806 questions—as opposed to 665 in the current Extra class pool, and it contains more technical material. More than half of the questions cover electrical principles, circuits, signals and emissions.

The 50 questions in an Extra class examination are drawn from the question pool consistent with FCC rules and according to a formula that specifies the number of questions to be asked from each of nine topic areas. Applicants must correctly answer at least 37 questions to pass.

The new Element 4 question pool is available on the ARRL Web site, <http://www.arrl.org/arrlvec/pools.html>. The just-released Extra class question pool will remain valid through June 30, 2005.

### ARRLB055 ARRL Study Panel Recommends Eliminating Novice Bands

The ARRL Novice Spectrum Study Committee has recommended that the ARRL petition the FCC to eliminate the CW novice 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 recognizing 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 appropriate changes in usage of that spectrum now that the FCC no longer issues new Novice licenses. 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, nearly half of those responding wanted the US phone allocation extended to 21175 kHz, with Extras permitted on the entire allocation, and Advanced and General subbands beginning at 21200 and 21250 kHz respectively.

- \* On 10 meters—where Novice and Tech Plus licensees already may operate CW, RTTY and data from 28100 to 28300 kHz, nearly 55% of the respondents favored a plan to retain the US phone allocation from 28300 to 29700 kHz and to extend CW access to Novice/Tech Plus operators to 28000 kHz—an additional 100 kHz. The current Tech Plus 28300 to 28500 kHz phone segment would be retained.

### SARATOGA SPRINGS Tower Case

For the first time in a long time, a Federal Court (the U.S. District Court for the Northern District of New York) decision has been released in an Amateur Radio antenna case. While it is not clear at present whether this decision will be published in the Federal Supplement reporter (and thus citable authority in other cases) it is in some respects a very fine decision. It is also unclear at this juncture whether or not the case will be appealed, though the decision appears sound and unlikely of reversal.

Randy Palmer was represented throughout by hard-working Volunteer Counsel, Al Millus, WB2EQR, of Binghamton, NY.

The Judge held that there were three obligations of a municipality in order to make "reasonable accommodation" under PRB-1: (1) it must consider the application; (2) it must make factual findings; and (3) it must attempt to negotiate a satisfactory compromise with the applicant. While the judge held that the City satisfied the first two prongs, it did not attempt to negotiate a satisfactory compromise with Palmer. "Give and take" occurred, but the Planning board engaged in a "one-sided negotiation consisting of inflexible demands and the construction of loop after hoop for Palmer to jump through." He said that normally, he would remand the case to the Planning Board to comply with his order, but in this case, because the Planning Board was already cognizant of its PRB-1 obligations, "such action would likely be futile". The Court therefore ordered the Planning Board to grant the application with the conditions already agreed to by Palmer. No damages were awarded, however. de N2FF

## SK

Raymond E. Falconer, W2ZCV, died December 11 at age 88.

Ray used to be active on K2AE repeater years ago. He also gave a fascinating talk with slides on weather, the effects on radio propagation, and his days on 6-meters from the weather station on Mount Washington. He was assigned at one time to be on Mount Washington doing weather studies year round. During that time they recorded the highest wind speed ever recorded on earth. The sight of monopole antennas a foot or so in diameter with rime ice is not to be forgotten. Truly, the subject of the talk, "The Worst Weather in the World, Mt. Washington," was appropriate! Ray was first licensed in 1948 when he was a hut master in the White Mtns.

Ray's work with Vincent Schaeffer and Irving Langmuir got several others at GE CRD interested in weather and some of these guys ended up as early members of the Capital District WX Net - that includes W2TJ (Bob Johnson) at Bolton, and W2JVF (Rudy Dehn), locally.

In his younger years Ray would have made an excellent ROVER for contesting. He once did a slide show at SUNY showing him carrying a pot-bellied stove on a pack board all the way from Pinkham Notch to the summit of Mt. Washington !

Of course, he will be remembered by most people for the interesting and accurate wx reports he did for so many years on radio. Ray will be missed. Our sympathy to the family.

### Paying Attention?

Are you keeping your mind on the road? Driver distractions or inattentive driving play a part in one out of every four motor vehicle crashes. That's more than one-and-a-half million collisions a year - more than 4,300 crashes every day! From Shell Oil Co.

New York has a cell phone law which doesn't apply to us, but amateur radio conversations can be just as distracting. Drive carefully! Ed.



## From the Editor's Shack

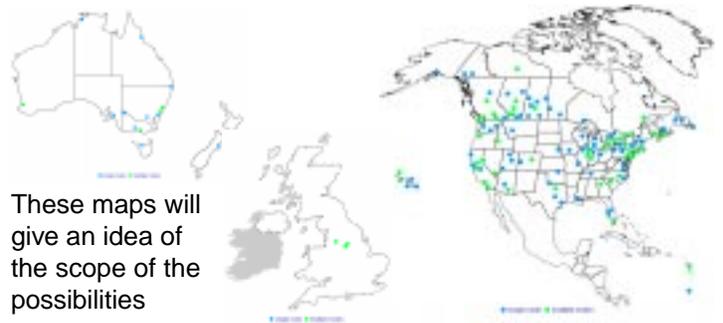
### Innovation—YES!

There's been a lot of talk recently, about hams not being in the forefront of technological innovation. Well, there probably has been a lowering of the average level of expertise due to the increasingly large percentage of Tech licenses. There are some bright spots, though.

Brian Justin, WA1ZMS, has recently completed a 1.1 kilometer QSO on 241GHz and .5 kilometers on 322 GHz. Both are apparently North American records.



Another innovation is related to repeaters. The welding of computers and ham radio has reached a new high. Repeaters are being linked together internationally through a process known as voice over IP. And it WORKS! I recently had a long QSO with G1RPN in southern UK over a FM repeater. Just like HF.



These maps will give an idea of the scope of the possibilities

There are many other examples of innovation, of course. This month's program touches on one, the exciting digital aspect of the hobby. Innovation and experimentation is alive and well in ham radio.

I have a few suggestions for the future! How about a reliable LID filter? Perhaps one could be designed to work with both call signs and transmitter finger prints. Another might be an automatic license lifter.

At any rate, I wish you and yours a very Happy New Year. 2002 is bound to be a winner.

de KB2HQ, Editor

## Kinderhook Tower Case

Al Millus, the attorney in the Saratoga case, is also involved in the Kinderhook ZBA hearing for Fred Fitte, WA2MMX, which went into a third hearing before the Kinderhook ZBA on December 6th. Hudson Division Director, Frank Fallon, N2FF was in attendance along with Ed Hare, W1RFI, Head of the ARRL Lab, and Dr. George Wilner, W2ONP, President of the Albany ARA New York. Troy resident Dr. Wilner, a Hematologist, was there to answer medical concerns raised by the opposition at a previous session. Fred Fitte continues to jump through the hoops set by the ZBA. They have now asked for a feasibility study concerning the possibility of running a remote station at another site in the town so neighbors will not have to look at the antenna. A fourth hearing has been set for January 3rd. Please be aware that Fitte for almost twelve years had a sixty foot tower only three hundred feet from where he wants to place the proposed tower. His old home is only a few hundred feet away and he is asking for a tower that is ten feet shorter. No, it doesn't figure! de N2FF



You may be surprised to learn that one of the most read items in each issue of QST is the advertising. Members flip through pages, eager to see what's new. Revenue derived from advertising is used to promote Amateur Radio, recruit individuals

into the hobby, and to protect our existing frequency allocations. The ARRL Advertising Department is the gatekeeper that assures our members that only quality products are offered.



## Who to Contact in SARA

There are a number of ways to get in touch with the leaders of your club: contact on the air, E-mail (either direct or through sara@egroups.com) or by phone. The important thing is to let them know you want your club to be!

### Officers:

- Pres.: Rob Leiden, KR2L (bleiden1@nycap.RR.com) 399-9343
- VPres.: Brian Macherone, AB2IU (ab2iu@arrl.net) 374-4199
- Sec.: Jay Freud, K2QNU (SFreud7777@aol.com)
- Treas.: George Williams, W2CSN (williamg@tardis.union.edu) 377-6188
- Dirs: Manny Shulman, AA2TT (eshulman@nycap.RR.com)
- Tim Long, W2UI (WB2SPN) (longt@empireone.net) 399-7454
- Paul Siemers, WY2F (siemers@crd.ge.com) 371-0215
- Bob Raffaele, W2XM (w2xm@arrl.net) 459-8435

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- PIO: Manny Shulman, AA2TT (eshulman@nycap.RR.com)
- Rept./K2AE: Howard Lester W2ODC (hlester@nycap.RR.com)
- RFI: Rudy Dehn W2JVF (w2jvf@juno.com)
- Membership: Bob Raffaele, W2XM (w2xm@arrl.net)
- Pub. Ser.: Ken Clikeman AA2CW (kclikema@nycap.RR.com) 861-6825
- VE team: Bill Mischler, KG2AC
- VE registration: (518)370-1350**

### Schenectady Amateur Radio Association Inc Membership Application-Renewal Form

Regular Dues	\$20.00	\$ _____
Spouse	\$ 5.00	\$ _____
Student	\$ 5.00	\$ _____
Repeater Fund Donation		\$ _____
Initiation Fee	\$ 5.00*	\$ _____

\*New Members Only

Name \_\_\_\_\_ Call \_\_\_\_\_

Nickname \_\_\_\_\_ Class \_\_\_\_\_

Street \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_ Zip \_\_\_\_\_

e-mail \_\_\_\_\_

Phone \_\_\_\_\_ Signature \_\_\_\_\_

ARRL \_\_\_\_\_ RACES \_\_\_\_\_ ARES \_\_\_\_\_ MARS \_\_\_\_\_

Send to SARA, P.O. Box 207, Alplaus, N.Y. 12008-0207

June, 2002



*Alcohol and gasoline  
don't mix!  
Actually, they do mix.  
They just  
taste bad.*

**SARA web site**

<http://www.rpi.edu/~brandp/sara/index.html>

Get the latest on SARA activities



Make a donation. Help save our frequencies and get a gift. See <arrl.org> for details.

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January, 2002

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Schenectady, N.Y.

SARA News  
Schenectady Amateur Radio Association Inc.  
P.O. Box 207  
Albans, N.Y. 12008