



the **RARRA RAG**

Published by
ROCHESTER AMATEUR RADIO ASSOCIATION, INC.

VOL. 48

March 1996

NO. 7

MARCH MEETING TO FEATURE TALK ON TRAFFIC HANDLING AND THE NTS

The March meeting of the RaRa will feature a presentation of the NTS, and how it is done at the higher levels of traffic handling. We will have some handouts with the "Q" signals used and their meanings. A tape of one of the sessions of EAN, and an explanation of what is going on for those who are interested in upgrading their skills, or just learning what traffic handling is all about at the higher levels. We may have Bill Thompson as a co-conspirator to help with the presentation, and give some of his views on the subject. Hopefully we will have an explanation of some of the "do's and don'ts", and why they work, or not, and why some things are redundant. This may be the nudge that is needed to start you on a bit of public service which is what amateur radio is really all about. There are still a lot of friendships to be made in a regular traffic handling net, and things to be learned, which will serve you in many ways during your amateur career.

CHANGES AT THE TOP FOR ARRL ATLANTIC DIVISION

by Ed Gable K2MP

At the just completed ARRL Board Meeting our own long term Atlantic Division Director, Hugh Turnball, W3ABC, was elected Third Vice President of the ARRL. Congratulations, Hugh, from your many friends at RaRa. Moving up to fill the Directors spot was Kay Craigie, WT3P. Kay is a good friend to RaRa and has been a wonderful and active supporter of our area's needs and to the Rochester Hamfest and ARRL Convention. Welcome, Kay, and congratulations on this well deserved appointment. Kay's move, of course, then left an opening for Vice Director. ARRL President

RaRa MEETING

March 1, 1996

8:00 P.M.

Henrietta Fire Hall

3129 East Henrietta Road

Traffic Handling and the NTS

Stafford appointed Bernie Fuller, N3EFN, from Saegertown, PA, to complete Kay's unexpired term. Are we done ? No. Bernie Fuller was SCM for the WPA Section and had to vacate that to move into the Vice Director chair. Taking Bernie's place as SCM for our neighboring WPA is Bill Edgar, N3LLR, of Bradford, PA. RaRa welcomes and congratulates all of the new top office holders and wish you all success.

FCC SETS VE TEST FEES FOR REIMBURSEMENTS

Effective January 1, 1996, the maximum allowable reimbursement fee for an amateur operator license examination will be \$6.07. The FCC set this amount based on the Consumer Price Index between September 1994 and September 1995 and it will be an increase from the current \$5.90.

Volunteer examiners and volunteer examiner coordinators may charge examinees for out of pocket expenses incurred in preparing, processing, administering, or coordinating reexaminations for amateur operator licenses. The amount of any such reimbursement fee from any one examinee for any one examination session, regardless of the number of elements administered, must not exceed the maximum allowable fee.

Beginning January 1 the ARRL/ VEC will charge \$6.05 to each applicant (other than candidates taking Novice Class elements 1A or 2).

trx ARRL Letter

the **RARA RAG**

PUBLISHED BY
ROCHESTER AMATEUR RADIO ASSOCIATION, INC.
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VOL. 48 MARCH 1996 NO. 7

SUMMARY OF THE MINUTES OF THE BOARD OF DIRECTORS MEETING OF FEBRUARY 7, 1996

In attendance: WB2DYJ, K2SQI, N2BEL, WB2KGD, W2NVZ, WB2EFU, N2EH, WB2EKP and N2UIO.

- Call to order. WB2DYJ called the meeting to order at 7:33 PM.

- Visitors. There were two visitors. Robert Erskine W2NVZ and John Helfer WB2KGD.

- WB2DYJ then introduced John Helfer WB2KGD who has offered to help with teaching the classes. WB2KGD asked when the classes begin. February 19th is registration.

- Treasurers Report. Club Treasurer Richard Goslee was not present, however George Lloyd N2UIO handed out copies of the Treasurers Report to all board members present.

- License Class Director. Art DeBruycker W2YGW was not present to give a report. However as previously mentioned, John Helfer WB2KGD has offered to help teach classes and act as the License Class Director. Dave Hassett K2SQI has also offered to teach the General theory class.

- Public Service events. Ed Holdsworth N2EH announced the Ginna Drill and Pre-Drill dates. Pre-drill is to be on September 11 and the Drill is to be October 16th. Other event dates are, Stuart Horse Trials in July, Lilac Run date is not confirmed yet. The October Walk is slated for October 5. The Bike Tour is set for June 1, however this will conflict with the Rochester Hamfest.

- Club Station Report. Ed Holdsworth N2EH stated that he will need at least 3 volunteers to help out with a demonstration of the club station on March 17, around 2 to 3:00 PM..

- VHF Contest and better plan our efforts. N2EH also pointed out that we should put forth an effort to participate in Field Day as well. We have the means and we should do this.

- Other New Business. Ed Holdsworth stated that N2CZL had really helped out the club and thought it would be a nice gesture to offer him a membership for the balance of the year. Keith Freeberg made the motion and it was seconded by Dave Hassett K2SQI. All in favor, the motion passed. Also Neal, WB2EKP submitted a letter from AMSAT thanking us for our donation for the Phase 3-D satellite project. The letter was given to

OFFICERS.

President: Chris Reich, WB2DYJ.....254-2906
Internet: cnr@rfc.comm.harris.com

Vice President: Art De Bruycker, W2YGW.....223-4353

Secretary: George Lloyd, N2UIO.....637-9499

Internet: n2uio@frontiernet.net

Treasurer: Richard Goslee, K2VCZ.....334-1762

BOARD OF DIRECTORS:

Lloyd Caves, WB2EFU.....671-7079

Neal Eckhardt, WB2EKP.....359-2672

Internet: eckhardt@servtech.com

Keith Freeberg, N2BEL.....458-8246

David Hassett, K2SQI.....621-1846

Edwin Holdsworth, N2EH.....624-1929

Joseph Hood, K2YA.....865-9092

George Muller, WA2IEO.....381-6151

Club Historian: Bruce Kelley, W2ICE

Public Service Coordinator: Edwin Holdsworth, N2EH

License Testing Directors: George Platteter, AA2FO

Membership Chairman: Alex Piccirilli, NV2Y

Licensing Course Director: John Helfer WB2KGD

Hamfest General Chairman: Harold Smith, K2HC

K2JD Engraving: Edwin Holdsworth, N2EH

The RaRa RAG (USPS 605-440) is published monthly except July and August by the Rochester Amateur Radio Association, Inc., 24 Elaine Drive, Rochester, New York 14623. Subscription is \$5.00 per year (included in the \$10.00 annual membership dues). Second class postage paid in Rochester, NY.

POSTMASTER - Send address changes to The RaRa Rag, P.O. Box 93333, Rochester, New York 14692-8333. Full permission is granted for reprinting articles provided a credit line is given to the RaRa Rag. The Rag exchanges, with other organizations publications.



Amateur Radio News Service

club Secretary George Lloyd N2UIO to be added to the records.

• Club President Chris Reich WB2DYJ asked if there is anything more. There wasn't anything more so Keith Freeberg N2BEL made the motion to adjourn. The motion was seconded by Dave Hassett K2SQI. The meeting was adjourned at 9:17 PM.

NF2G SCANNIST PAGES ON THE WORLD WIDE WEB EXPANDED

The same scanner features information is still available. The frequency information is now accessible via clickable image maps of the geographical area covered. Details are online for 7 upstate New York counties and more are under development.

The site is enhanced for Netscape Navigator 1.2 (tables, graphics) and 2.0 beta (frames), and for Microsoft Internet Explorer (tables, graphics, background sound - scanner audio samples!). If you don't already have one of these browsers, I have provided direct links to Netscape and Microsoft as authorized by the respective companies for sites showcasing their special features. The URL is:

<http://www.frontiernet.net/~dstark>

Please stop by! Radio and public safety related sites are welcome to provide a link to my page provided the URL is listed in the format given above. Direct links to lower level pages are discouraged as this can cause some extended HTML features to fail.

73 de Dave, NF2G, dstark@frontiernet.net

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March Calendar

1 - RaRa Meeting - 8:00PM - Henrietta Fire Hall
3129 East Henrietta Road

16- RaRa VE Testing - 111 Westfall Rd. 8:30 AM

The Prez Sez --

by Christopher Reich, WB2DYJ
RaRa President

How's that, Don and Irv?

A few of us, including Alex NV2Y and George AA2FO, logged some operating time at RaRa club station K2JD during the recent VHF contest. KB2WBS accompanied me as well, who took the opportunity to modulate 6M SSB for the first time. You should have seen the look on his face as he thought he was getting a response to his "CQ contest." Do you remember your heart pounding as you had your first QSO? Only a few moments in life are as memorable as a first QSO; it was a thrill to have shared this one with him. I wish everyone would go find a kid and offer him or her the same excitement. There is just no comparing of this to typing a few keyboard commands to download the latest television schedule from the Internet.

Did you ever know something without realizing it? It was pointed out to me recently that K2JD is the only open club station in the area. I knew that, of course, but didn't really understand how valuable that made it until then. (The stations at U of R and RIT are for students, faculty and staff only.) K2JD has some of the finest amateur radio equipment available, thanks to its' trustee and the association with RACES. This tremendous asset is available to all RaRa members after a short orientation. Have you little room for an antenna at your home? The RaRa club station offers a first class alternative to mounting a mobile whip to a railing. Considering the fun we had at the VHF contest, I am making a personal commitment to see to it that K2JD will be found in more logs for the contests this coming year. Won't you join the fun?

As one who is involved with a number of other organizations, at times I have found it necessary to remind myself that this ham radio stuff is "just a hobby." After having had some time now to make comparisons, let me tell you, my friends, that no other activity in which I am involved offers the same level of excitement as sharing ham radio. Ham radio is just a hobby as a diamond is just a lump of carbon. How else can you merely flip a switch and make a friend? Have you ever really taken stock of all the various aspects this hobby has to offer? Have you seen the latest copy of the ARRL Handbook or the Operators Guide? Those things are the size of telephone books and they just

cover highlights of the material. I don't know that I'll ever try all operating modes or techniques, or ever build all the neat stuff I *need* but can't buy anywhere at any price. Being a ham is like being a kid in a candy store -- so many projects, so little time.

I was kidding with my son Alex a while ago about the "old days" of ham radio; how "old timers" like me remember when there was no such thing as a hand-held VHF radio, no digital frequency readout, and no WARC bands. He got quite a kick out my referring to myself as old; he said, "I think of you as just another kid." Of course, he couldn't have paid me a higher compliment, and I attribute it to my re-kindled interest in this thing that's "just a hobby."

The Newark Hamfest, put on by the Drumlins ARC, is due to kick off the approaching hamfest season on Saturday, March 30th. I'll be seeing you there.

The next important hamfest after Newark begins on May 31. The Rochester Hamfest and Atlantic Division Convention begins that Friday and lasts through the weekend. The RaRa Hamfest committee always puts on a first class act. How many of you enjoy all the activities available at the Rochester Hamfest? Besides the flea market, try sitting in on one or more of the lectures. They only last about an hour each, and I have never left one without having learned something worthwhile or making a new friend. Meet your ARRL officials. Enjoy a tremendous banquet and the jibes between Bruce Kelly, Hugh Turnbull, and Harry Dannals. We expect even more vendors under the dome than last year. If you are in the market for some new piece of gear or accessory, perhaps you could wait to buy it from one of our Hamfest vendors as a reward for them coming here. All this is to happen right in our own back yard. Who needs to trek out to that little get-together they have in that small town in Ohio?

The warm weather also brings with it Public Service Event season. The calendar of events is filling up again. Try something new this year; sign up for some public service events and be a VIP at the same time. We usually get the best seats available for the Lilac 10K, the Stuart Horse Trials, the Tour de Cure, and others too numerous to list here. See Ed Holdsworth N2EH to sign up at any regular RaRa meeting.

Special thanks again go to Jack N2SNL and Warren AA2LQ for helping with the chairs after the February meeting. They seem to be bucking for a promotion to archangels...

The Ham of the Month Award for March 1996 goes to John Helfer WB2KGD for stepping

forward as our new License Class Director. John tells me he was involved in training on a professional level for some time. We all look forward to working with John; join me in thanking him for his service.

The RaRa family picnic will be at the Ellison Park on June 29. We liked the location so much last year that we decided to book it for our return engagement. The turnout last year was great; folks seem to appreciate the central location. You're all invited, and bring the family and the water guns.

The spell checker I just ran on this article informs me that I have written, up to this paragraph, exactly 999 words. I remember when writing 1000 words was a punishment....

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SOLAR CYCLE NEAR BOTTOM

Despite some earlier reports that the current sunspot cycle had bottomed out, it could be another year before things start looking up, depending on which data you use. Solar prognosticator Tad Cook, KT7H, reports that solar activity is still very low, and "we are very close to the solar minimum." The latest projections show 10.7-cm solar flux--actually a radio measurement of the amount of energy at that wavelength--reaching minimum around a year from now, during January and February 1997. Solar flux seems to correlate with density of ionization in the ionosphere and consequent HF propagation.

But other projections, based on direct telescopic observations of sunspots, show the sunspot number reaching minimum during April through June of this year, and a big increase starting late in 1997. The sunspot number is derived by counting visible dark spots on the sun and factoring in their area. Last summer, astronomers observed what they believe to be the first spots of the new cycle on the sun's polar regions. Spots shift in magnetic polarity from one cycle to another, Cook says, making it possible to differentiate the "new" spots from the current ones. In any case, just when Cycle 23 begins often is not "officially" determined until well after the event transpires. "There's some overlap" between cycles, he explains.

From Cook's point of view, the solar flux is a more reliable indicator of how solar activity will affect HF propagation on Earth. As most hams know already, solar disturbances, primarily solar flares, can disrupt radio (and other) communication. "These throw out huge amounts of protons," Cook explains about the flares. "If they're aimed right at the earth, they can be very disruptive." Among the most disturbed days in recent weeks was January 29, when the A index reached 18, and the K index was as high as five. Otherwise geomagnetic conditions were quiet over this period, Cook says. Solar flux should head down toward 70 by February 12 and then back above the mid-70s late in the month. Sunspot numbers in late January had a mean of 13.7.

tnx ARRL LETTER

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THE RaRa Rag YEARS AGO.,

by Ed Gable, K2MP

20 YEARS AGO - MARCH 1976: March brought a joint meeting of RaRa and the various Kodak ARC's with Joe Hood, K2YAH and Jim Schueckler, WN2YZK, speaking on the introduction of microprocessors. Rick Booth, WA2GCX, of the ARRL VHF Repeater Advisory Committee, wrote a thought provoking article on ARRL's Repeater Frequency Coordination Plan, sub-titled "An Inevitable Necessity or a Dangerous Precedent." Joe Hood, K2YAH, announced that he was a candidate for the WNY SCM post. President Bill March, WA2CER, announced that the membership fund drive to purchase a SB-104 Transceiver for K2JD stood at over \$270. Bill also said that the annual Valentines Day Dinner Dance had 70 happy folks enjoying the festivities which included Eddie Dunn, W2ECH, as Master of Ceremonies. Jerry Vogt, AA2GCF, in a half page Ad announced that he was now a Dealer for the Standard line of VHF/UHF FM Transceivers.

40 YEARS AGO - MARCH 1956: March was Ladies Night at RaRa. And what did Program Chairman Fred Halik, W2PFI, offer the ladies on Valentines Day eve? A movie on the peaceful uses of Atomic Energy. Fred was a real romantic type guy ! The Radio Amateurs of Greater Syracuse invited RaRa to join them at a special meeting to be held at GE's Electronics Park. A tour was included and many took advantage of what must have been a memorable event. At this time on the Board of Directors were still active Art DeBbruycker, W2YGW, Mac KcCowan, K2CEH, John Remsoen, W2ZHB and Chuck Brelsford, W2CTA.

Next Rag Deadline

March 11, 1996

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ROCHESTER HAMFEST PROGRAMS - PART II

by Lloyd R. Caves, WB2EFU

Here I am trying to type this article for you with frozen fingers. It has been a cold winter this year hasn't it? That is OK though as it gives everyone time for getting on the air and making their plans for this summer. When making those advance plans don't just include where you will take your vacation this year or the antenna work you want to do and the remodeling jobs you want done at the house, etc. Keep in mind the hamfests that you want to attend and what weekends they will be held. The Rochester Hamfest, the largest in the area has new dates this year. Mark down the weekend of May 31 and June 1 and 2 so you keep it open to attend. Remember that the Rochester Hamfest is brought to you by RaRa, your club.

Now lets plan even a little further this year. Last month an article was in the Rag that told you about a few of the programs to be held at the Rochester Hamfest on Saturday. This month we have part II that will describe some other programs that will be held. I hope that this will help you select the ones that you want to attend. Mark them down and in a later month you will be given the schedule and location of each program so that you can be sure not to miss the ones that you want to attend.

For you repeater buffs there will be a program on repeater coordination. Jay Mabey, NU0X, Senior Assistant Manager of Field Service, ARRL will be with us to talk a little about how Frequency Coordination takes place. You will also learn how the repeater directory is Produced and edited every year.

If you are a VHF enthusiast you will definitely want to attend the VHF Forum. This will be the sixth year of this highly regarded mini seminar. This year Dave Hallidy, KD5RO the Rochester VHF Group Chairman will host this seminar. Be sure to attend and come early as this is one of the best attended programs held each year.

In the last few years it seems that digital communications has grown in leaps and bounds. Steve Ford, WB8IMY, QST Assistant Managing Editor will be with us to present Packet and The New Ham. What can you do with packet? What kind of equipment do you need to get on the air! Get the answers to these questions and much more by coming and learning what Steve has to say. A great opportunity for the newly licensed ham to learn about one of the fastest growing digital modes.

However, there is more to know about than just packet when it comes to digital modes. Phil Anderson, President of Kantronics will put on a program called "Digital Modes". An interesting presentation on all the digital modes in use today and how they work. For those of you that have been on packet or RTTY for a while may find that there is a whole new mode that you may want to play around with. There is a lot to learn in this area no matter how long you have been working the digital modes. Don't let that scare you away though if you are just a beginner as you will find this program just as interesting to you.

Working DX has for years been one of the largest activities for hams since radio began. For this reason the DX Forum is also highly regarded and attended. This is the fifth annual panel for DX-ers from the Atlantic Division and New York State. This year it is moderated by Robert Nadolny, WB2YQH, Secretary, Western New York DX Association.

Well that is it for this month, however it is not any where near the end of list of programs that will be available for you to attend. Be sure to look for part III of this series of articles next month and learn more of what lays ahead.

FCC AFFIRMS SECONDARY ALLOCATION FOR HAMS AT 219-220 MHZ

The FCC has affirmed the secondary allocation of 219-220 MHz for Amateur Radio. The action, for the most part, denied a Petition for Reconsideration filed by Orion Telecom, an Automated Maritime Telecommunications System licensee. Orion had argued to rescind the decision to allocate the 219-220 MHz to ham radio because the 50-mile exclusion distance between AMTS and amateur operations was insufficient to protect primary AMTS operations from harmful interference. Orion asserted 575-mile exclusion distance was necessary, which would have precluded Amateur Radio operation in many areas.

The FCC did agree with Orion's concern that the amateur rules do not adequately specify the frequency range of AMTS operations. The FCC amended its rules to indicate that AMTS operations specifically use the 217-218 MHz and 219-220 MHz bands. AMTS coast stations use 219-220 MHz for receiving, and 217-218 MHz for transmitting.

ARRL Executive Vice President David Sumner, K1ZZ, says the League is pleased that the FCC has

reaffirmed its commitment to provide some relief to the Amateur Service at 219-220 MHz "to offset our loss of access to 220-222 MHz." He says the ARRL has an effective procedure in place to ensure that amateurs planning to use the band "are well aware of their obligations to avoid harmful interference to other services." Sumner said the small change that the FCC has made--calling attention to the fact that one must look at 217-218 MHz assignments to know what AMTS coast stations are operating in a given area--is something that ARRL already takes into account in its procedures.

Tnx ARRL Letter

ASTRONAUT HAMS MARRY

In what appears to be a "first" for ham radio and for the space program, astronauts Steve Nagel, N5RAW, and Linda Godwin, N5RAX, were married December 29. Steve and Linda flew together on STS-37 in April 1991. Both have appeared as speakers for ARRL at conventions. Steve conducted a SAREX forum at the 1994 Dayton Hamvention, and Linda helped ARRL Educational Activities Department head Rosalie White, WA1STO, with youth forums in Dallas in 1992 and Tulsa in 1994. Linda also has done public service announcements about ham radio for ARRL, and she appears in the ARRL videotape, Ham Radio in Space.

Nagel was the commander aboard space shuttle mission STS-55 in April 1993, operating the SAREX radios and thrilling hundreds of hams listening from Earth. Godwin, a NASA Mission Specialist, operated the SAREX radios during mission STS-59 in April 1994, and especially enjoyed the school QSOs. She flies next on STS-76 in March 1996.

"These two folks are super wonderful people!" White said, expressing her best wishes for the newlyweds.

By Matt Bordelon, KC5BTL via The ARRL Letter

RF LIGHT BULBS GET FCC APPROVAL; GENERAL ELECTRIC PLANS TO MARKET

The Federal Communications Commission has waived its rules to permit the General Electric Company to begin marketing an "RF lightbulb." The Commission waived, at GE's request, FCC Rules Part 18 limits on the amount of RF energy that may be conducted into the electric power lines by RF lighting devices in the band 2.2 to 2.8 MHz.

GE proposed marketing to consumers an unlimited number of RF light bulbs that comply with the conduction limits for non consumer RF lighting devices in this band. (FCC rules already permit RF lighting devices used in commercial environments to place this signal level on the AC power lines.)

The FCC said that there has been "no record of significant interference problems from the use of these devices in commercial environments," and also said that radio operations in the range 2.2 to 2.8 MHz "are not normally employed or intended for reception in residential environments."

GE was granted a waiver for one year, and the FCC reserved the right to revoke it if it determines that RF lighting devices operating under the conditions of the waiver create "severe interference problems."

Three years ago a California company, Intersource Technologies, promoted an RF-powered lightbulb that operated at 13.56 MHz and was designed, according to the company, to keep unintentional radiation to a minimum (a story appeared in August 1992 QST, page 49). A 25-watt RF bulb was said to generate as much visible light as a 100-watt conventional bulb. These bulbs were never marketed.

The ARRL will obtain samples of the GE bulbs for testing as soon as they are available. ARRL Laboratory Supervisor Ed Hare, KA1CV said that the new bulbs should not, if properly designed, create any more interference to Amateur Radio operations than fluorescent bulbs, dimmer switches, or other similar devices found in the home.

tnx ARRL Letter

Rochester Hamfest

May 31 - June 2, 1996

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SETI GROUP TO EXPAND SEARCH

The nonprofit SETI League Inc plans to upgrade its scientific search for extraterrestrial intelligence, thanks to a donation of microwave test equipment from Merrimac Industries of West Caldwell, New Jersey. The equipment will enable the SETI League to set up a microwave design lab in conjunction with its search for radio signals of possibly intelligent, extraterrestrial origin.

"There's no doubt in my mind that there's someone out there," Merrimac's president and CEO, Eugene W. Niemiec, K2KJI, said in making the donation to SETI League President Richard Factor,

WA2IKL. "When SETI succeeds in finding other civilizations in the cosmos, it will change our world forever," Niemiec added.

The SETI League Lab will develop hardware and software for Project Argus, which has been called the most ambitious space research project ever attempted without government funds. The real-time microwave survey of the entire galaxy ultimately will involve 5000 amateur radio telescopes around the world.

H. Paul Shuch, N6TX, is the group's executive director. For more information, e-mail n6tx@setileague.org, or write PO Box 555, Little Ferry, NJ 07643; tel 800-828-7384 (TAU-SETI) or 201-641-1770.

Tnx ARRL Letter

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