



# THE RARRA E-RAG

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NO. 2

## University of Rochester Repeater System

By Duane Fregoe, K2SI  
Vice President, RARA

Ever wonder what goes into a good repeater site? If you show up for the general membership meeting on Friday October 3, 2008 you will get an inside glimpse of what goes into a VHF/UHF repeater. Mike Rink, W2HYP, will explain what he has installed at the University of Rochester, Highland Hospital, Bristol Mountain, and other locations.

A few of the repeaters are set up with Echolink and IRLP which allows a repeater in Rochester to connect to a repeater in Alaska via the internet. Both of these modes can be fun when the HF bands are in the tank. Another repeater is currently running on battery power. One of Mike's goals is to use wind power for charging the batteries and removing the commercial power. Mike will touch upon these topics and other future plans for the repeaters.

Again the meeting is Friday, October 3, 2008 at the Henrietta Fire Hall #1, 3129 East Henrietta Road near the intersection of Lehigh Station Road. The meeting will begin at 7:30 pm.

As usual at all meetings there will be refreshments. I am looking forward to seeing everyone on October 3rd. Coming up on November 7th is the Annual RARA Auction.

**Meet your friends at RARA - Make new friends at RARA.**

### Inside this edition of the RaRa e-RAG:

The Prez Sez.....	2
Public Service.....	3
Upcoming Public Service Events .....	3
RaRa Rag 20 Years Ago.....	3
Calendar of Events.....	3
RDXA October meeting.....	4
ARRL: New Benefit of Membership.....	4
Sidebands .....	5
Shorts & Sparks .....	6



Mike Rink, W2HYP

## Awards Thoughts

By Dan & Sue, Waterstraat  
RARA Awards Chairpersons

Have you thought about building a one tube QRP transmitter and haven't gotten around to it? Well, come to the October RARA meeting and you could win one. We'll be raffling off a nice one tube 50C5 40 meter homebrew transmitter complete with crystal. Also, if you have any good ideas for what you would like to see as raffle awards, let Sue and I know. Please no IC-7800 or FT-9000 requests! Thanks, Dan, W2DEW, and Sue, KC2SUE. Send email to: [higreen@rochester.rr.com](mailto:higreen@rochester.rr.com), or 585-582-1149



## SILENT KEY



John "Chris" Jones, KA2WQE

August 22, 2008

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## The Prez Sez

By Frank Schramm, WB2PYD  
President, RARA

**Congratulations to W2DAS!** Don is the winner of the "Cleanest Shack Contest" as announced in the July e-RAG! To see a larger photo of Don Schichler's shack, visit the photo gallery on the new RaRa website. Want to post a photo of YOUR shack? Just send your best image to Len Crellin [kc2pcd@rochester.rr.com](mailto:kc2pcd@rochester.rr.com) and he'll add it to the gallery. It would be nice if YOU were in it, but that's not a requirement.



Don Schichler, W2DAS  
Winner of the "Cleanest Shack Contest"

This month, Mike Rink, W2HYP is going to explain all the tips and tricks of the vast repeater empire known as WR2AHL. While I can't wait to see Mike's presentation, I'm still obsessed by Raj Dewan's "Monkey in a Microwave". I still chuckle at the very thought of it. Now I understand why I always get seated at the kids table at family gatherings! But I take comfort in knowing I'm not alone: In mere seconds Max, KC2SPY, redesigned the control panel of future microwave ovens so that the top row of buttons include: Defrost, Popcorn, and Monkey! That's the sign of a great engineer - or evil scientist - only time will tell.

For the few of you who haven't been to a monthly RaRa meeting in a while, and can't tell by the antics above, we're all about Family, Friends, and Fun. We've done away with committee reports and boring business. That's what the BoD is for. In its place we open the floor to comments and questions. Feel free to speak your mind, or ask questions. Just no Karaoke please. If you're shy, please talk to any Officer or Director in private. Then it's on the refreshments, socializing and the evening's program. If you haven't stopped by in a while, come join us. If you don't laugh at least once our "attitude adjuster" sits against the back wall and his services are rendered free of charge. Hint: He's a big guy and drives an even bigger truck!

**Two reminders:**

First, as detailed in last month's RAG, your Board of Directors proposes three updates to our by-laws; a copy of which can be found in the Document Archives on our Website. A vote will be taken at our October meeting to formalize the amendments.

Second, also detailed last month, mark your calendar for 7pm on October 7th. That's the Tuesday after the RaRa meeting. We will be meeting in the Xerox Auditorium at RIT to discuss the health and well being of the Hamfest. The future of our Hamfest is in your hands. Literally! Poor attendance will demonstrate to the BoD and the Hamfest Committee that you don't care and appropriate actions will be taken.

I'll see you October 3rd at the Firehouse!

73 – Frank

**Public Service**

By Duane Fregoe, K2SI  
RARA Public Service Coordinator

September was a busy month with the Multiple Sclerosis Pedal to the Park, the Rochester Marathon, and the Fairport Regatta. Many thanks to all that participated in these events.

There is a very active calendar in October and we could use your assistance. All you need to do is go to [www.rochesterham.org](http://www.rochesterham.org) and click on "Public Service" to sign-up.

**Upcoming Public Service Events**

- **Barktoberfest: Lollypop Farm** – Sept 27
- **America's Walk for Diabetes** – Oct 4
- **Wine Glass Marathon** – Oct 5
- **Hike for Haccamo** –Oct 12 (Needs Event Captain)
- **Jamboree on the Air (BSA)** – Oct 18 & 19
- **NYS Thruway Pumpkin Patrol** – Oct 30 & 31
- **Special Olympics, Winter Games** – Feb 7, 2009

**Help Wanted:**  
*Interested parties may contact any club officer.*

**Webmaster** - Our new RaRa website is online and we need an experienced person to maintain it.

**RaRa Rag 20 Years Ago:  
October, 1988**



By Ed Gable, K2MP  
RARA Historian

This month's program was an interesting presentation by Dave Schwettek, NW2T, speaking about OSCAR satellites. The timing was just after the successful launch of the AO-13 satellite that contained bands and modes unused before. Dave enlightened people on tracking, telemetry, operating equipment and orbit characteristics. The RaRa venue at that time was the 40/8 Club on University Avenue.

The Rochester Radio Repeater Association announced their newest officers for the season as; John March W2SNF, president, Bob O'Connell NF2Z as VP, Joel Rossback N2EZV to Secretary and handling the Treasury tasks was Bill Shaw N2EKR. RARRA further announced that their popular radio tune up clinic, headed by Gary Seinkiewicz, W2TR, would be held in October at the Memorial Orthodox Presbyterian Church on Merchants Road.

A "thank you" letter appeared in this issue thanking amateurs for what appears to be a one time event, a 10K Puppy Walk raising funds for Guide Dog training. Participating were Sue N2HKA, Randy KA2UTI, Jay KB2CHZ, Chet WB2MDO and Dave N2DPF.

Writing for the RDXA was Fred, KB2SE, who told of the upcoming Fall DX contest season. With regret is was reported that Elmer "Buck" O'Connor, N2FI, and Clyde Van Dusen, KB2FM, were reported as Silent Keys. From the Want Ads you could buy a Commodore C64 computer from Chuck Oneske, K2YCO. Commercial Communications of Lancaster, run by George Krickovich, W2YJ, was a new advertiser.

**Calendar of Events**

- Oct 3** RARA meeting – 7:30PM, Henrietta FD #1
- Oct 7** RARA Hamfest Special Interest Meeting – 7:00PM in the Xerox Auditorium at RIT Bldg 9
- Oct 8** RARA Board of Directors Meeting – 5:30PM RIT Bldg-17, Room 2110
- Oct 17** RARRA – 8:00PM, Monthly Meeting at Pittsford Town Hall, downstairs room.
- Oct 18** RARA VE Testing Testing session – 10:30AM RIT, Bldg. 9, Rm. 3139
- Oct 21** RDXA – Regular Meeting – 7:30 PM EOC, Rm 200, 1190 Scottsville Rd.

## RDXA October Meeting

By Ken Boasi, N2ZN  
Vice-President, RDXA

RDXA's October 21's meeting will feature an Introduction to Contesting program geared to amateurs (new or old) who have an interest in contesting, but were wondering exactly how to get started. Topics discussed will be discussion on the different types of contests, operating technique, station layout, antenna theory, logging programs, and more. Also at this meeting, the new RDXA Operating Awards will be unveiled, and with the contest season just getting underway, it is the perfect time to think about earning the new awards!

The new RDXA meeting location is at the EOC center, 1190 Scottsville Road, 2nd floor in the front of the building (closest to Scottsville Road). It is located just to the east of the Burger King. The meeting starts at 7:30 PM., Oct 21st.

## Radio Club Contacts

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### **XEROX Amateur Radio Club (XARC)**

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## 2009 RaRa Hamfest

May 29-30

## ARRL "NEW MEMBERSHIP BENEFIT"

By Len Crellin, KC2PCD  
RARA Media Coordinator

With just a mouse click or two, ARRL members can now access the online QST magazine archive at:

[www.arrl.org/membersonly/qqnsearch.html](http://www.arrl.org/membersonly/qqnsearch.html).

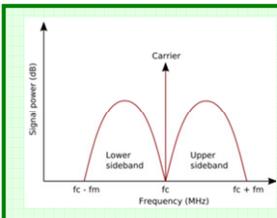
This new benefit -- a service of the ARRL Technical Information Service (TIS) provides PDF copies of all QST articles from December 1915 through December 2004, enabling members to view and print their favorite article, project and more. For many years, the TIS has provided members with assistance researching ARRL periodicals and publications, as well as providing members and non-members with article reprints for a small fee. Access to the new online digital QST archive is free for ARRL members, and is for their personal use only -- material in the archive may not be freely distributed or copied.

"Having access to every issue of QST through 2004 is absolutely incredible!" said ARRL Lab Manager Ed Hare, W1RFI. "The best of the best of QST from every era is now at the fingertips of every ARRL member with a keyboard and an Internet connection. Members can research articles on any subject that interests them, or just browse the past issues. This will be a popular membership benefit that will be of special value to new and long-time hams alike. This valuable content will help radio amateurs who use QST as a technical resource -- for projects, equipment 'hints and kinks' -- and for other research contributing to the advancement of the radio art. We know many hams will simply enjoy perusing these pages of history, too."

The ARRL Periodicals Archive and Search lists every article for QST from 1915 to the present, QEX from 1981 to the present, Ham Radio from 1968 to 1990 and NCJ from 1973 to the present (please note that beginning in 1998, each issue of QEX covers two months). Only ARRL members will be able to download and print copies of the QST articles.

QST magazine is the official journal of ARRL, the national association for Amateur Radio. An interest in Amateur Radio is the only essential qualification of membership. ARRL membership is \$39 per year in the US. For a complete list of membership benefits and dues, please visit the ARRL Membership Web page <http://www.arrl.org/join>.

If you are not already a member of the ARRL or you have not been a member for at least the last 2 years there is a SPECIAL DEAL available only through RARA. You will receive a \$15.00 discount on your first year's dues to the League. This means you can get both your RARA membership and membership in the ARRL for \$39.00 total, the normal price for the League only. If you are a Senior (65 and older) your total price would be \$31.00. Now that is really a SPECIAL DEAL.



## Sidebands: Amateur Radio in the News

Courtesy of  
Amateur Radio Newline™

### RESCUE RADIO: HAM RADIO FACES HURRICANE IKE

Amateur radio was ready when hurricane Ike made landfall on the East Texas coast on Saturday, September 13th. Bill Pasternak, WA6ITF is in the newsroom with a look at the storm and the work of the nations ham radio community during and after the storm. Ike came ashore on Galveston Island packing driving rain and wind gusts in excess of 110 miles per hour. It flooded thousands of homes and businesses, shattered windows in Houston's skyscrapers while knocking out power and telephone service to millions of people. Cellular

telephones reportedly became all but useless. But ham radio continued to operate throughout the storm and was the first to report the results of Ike's landfall. That was Jim Sellers, NOUAM, in Springfield, Missouri, who was in control of the Voice over Internet Severe Weather Net. This was one of a pair of severe weather nets that played a key rille in tracking Ike. The other was the Hurricane Watch Net with hits home on 20 Meter SSB and an alternate frequency on 40 Meter SSB. With long distance propagation on the high frequency bands not very good, the VoIP Net played a significant role in gathering information for the National Weather Service as the storm made its way up toward the North. Meantime, back along the Texas and Louisiana coastlines, Ike began to spawn a series of tornadoes as reported on the VoIP Net by then net control Richard Long, KF6BKA, operating from Nashville, Tennessee. Even with poor propagation, some stations in Texas were able to pass along information on the High Frequency bands, This transmission was recorded using the N2JEU Internet controlled remote receiver in upstate New York. Unfortunately the signal dropped back into the noise before we could get his callsign, but he was among many hams involved in keeping the information on Ike flowing.

As word of the immensity of Hurricane Ike became known, the staff at ARRL headquarters in Connecticut began to plan for its aftermath. Anticipating that communications

staffing requests would expected to exceed resources in the Hurricane Ike recovery areas the ARRL began planning the coordination requests for additional ham radio personnel. These would be volunteers from adjoining and near-by states out of Ike's path but close to Texas and Louisiana. Meantime, hams involved in the emergency continued to handle information requests from across the region. By late Sunday, September 14th, Ike had been downgraded to a Tropical Storm was moving out of Texas. Both the Hurricane Watch Net and the VoIP Nets were secured and it was time for relief efforts and damage assessment to begin.

And in another report coming in on Tuesday, September 16th, members of ARES South Texas District 14, were are manning at least six Points of Distribution in Harris County Texas. These operators were and possibly still are providing communications between the National Guard units at the distribution centers and the Harris County Office of Emergency Management, to coordinate the delivery and re-supply of food, water and ready to eat meals to Ike's victims. Ironically, most of the participating amateurs are also victims, having suffered property losses and expected power outages to last approximately three weeks.

### ENFORCEMENT: \$18,000 FINE AGAINST TEEN IS CANCELLED BY THE FCC

The FCC has dismissed an \$18,000 fine levied against a Largo, Florida teen they identify only as John Doe due to his age. This after the youth who now in state custody told the agency that he had no income to pay. Amateur Radio Newline's Bruce Tennant, K6PZW, has the rest of the story. As previously reported , back on August 24, 2007, the United States Coast Guard contacted an agent from the Tampa Office, who was en route to locate the source of the false distress calls received by that maritime service. The Coast Guard

told the FCC agent that it had used direction finding to determine that the false distress calls were coming from a location in or near a mobile home community in Largo, Florida. The Coast Guard also told the agent that the Largo Police Department had just apprehended a student who lived in this mobile home community and who had several radios. This included a marine band transceiver in his bedroom that was connected to a 12 volt marine battery and whip antenna.

Later that day the teen confessed to the Largo Police Department that he had stolen a marine radio from a boat

## RaRa Amateur Radio License Testing



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to reserve space.**

**Call (585) 703-4003 or e-mail [n2rd@arrl.net](mailto:n2rd@arrl.net)**

and used it to make five false distress calls to the Coast Guard from his bedroom.

The Largo Police Department arrested our John Doe on charges unrelated to the false distress calls. It also confiscated one marine radio, two CB radios, a marine battery and a whip antenna from his residence. On August 30, 2007 the FCC confirmed that the marine radio confiscated from the teen could in fact operate on maritime channel 16.

On April 30, 2008, the Tampa FCC Office issued a Notice of Apparent Liability for Forfeiture to John Doe in the amount of \$18,000. This, for the apparent willful and repeated violation of Sections 301 and 325 of the Act. John Doe did not submit a response to the notice, and this past June 30th the Enforcement Bureau released the Forfeiture Order. Soon after, our John Doe submit a petition for reconsideration of the Forfeiture Order. In his pleading he expresses sincere remorse for his actions. He also requested a reduction or cancellation of the forfeiture, because it would pose a financial hardship. In his filing he explained that he was only a sixteen-year-old, that he has never had a job and has no sources of income. He also noted that he has been in the custody of the state of Florida and in a juvenile detention facility since this past February. After examining the financial documentation submitted by this John Doe, the FCC concluded that cancellation of the forfeiture is warranted. This, based solely on his lack of income and the fact that he is currently in the custody of the state.

Because of the seriousness of the violation, the FCC did admonish this young John Doe for his willful and repeated violation of Sections 301 and 325 of the Communications Act. (FCC)



**Shorts & Sparks**  
By I. M. Zapped, FZZ1POP  
Reporting From the Geek Isles

## Cell Phones More Expensive Than Hubble Space Comms

by Kate Melville

A British space scientist has worked out that sending texts (SMS) via cell phone works out to be far more expensive than downloading data from the Hubble Space Telescope. Dr Nigel Bannister, from the University of Leicester, made the calculations for the UK television program The Mobile Phone Rip-Off.

To arrive at his finding, Bannister calculated the cost of obtaining a megabyte of data from Hubble - and compared that with the UK0.05p (US\$0.10) cost of sending a text. "The bottom line is texting is at least 4 times more expensive than transmitting data from Hubble, and is likely to be substantially more than that," he noted.

"The maximum size for a text message is 160 characters, which takes 140 bytes because there are only 7 bits per character in the text messaging system, and we assume the average price for a text message is UK0.05p (US\$0.10). There are 1,048,576 bytes in a megabyte, so that's 1 million/140 = 7490 text messages to transmit one

megabyte. At UK0.05p each, that's UK374.49 (US\$750.00) per MB - or about 4.4 times more expensive than the 'most pessimistic' estimate for Hubble Space Telescope transmission costs," Bannister explained.

Bannister said it had been difficult to work out exactly how much Hubble data transmission costs. So he contacted NASA who gave him a firm figure of UK8.85 (US\$17.50) per megabyte (MB) for the transmission of data from HST to the Earth.

But Bannister admits that some of his calculations involved a little bit of guesswork. "This [figure] doesn't include the cost of the ground stations and the time of the personnel along the way, but it is an unambiguous number for that part of the process. So that's UK8.85 (US\$17.50) to get each megabyte from Hubble, to the first point of contact on the ground, but no further. Hence we need to go a little bit further to estimate exactly how much it costs to transmit data from Hubble to the end user - i.e. to the data archive which scientists can access. This is difficult, so I had to make some conservative assumptions."

To that end, Bannister estimated the cost of the data from Hubble could vary between UK8.85 (US\$17.50) and UK85 (US\$170.00) per megabyte - much cheaper than the UK374.49 (US\$750.00) per megabyte cost of transmitting one megabyte of text. "Hubble is by no means a cheap mission - but the mobile phone text costs were pretty astronomical," he guffawed.

**RaRa Memorial Scholarship  
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March 15, 2009**

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**November Rag Deadline  
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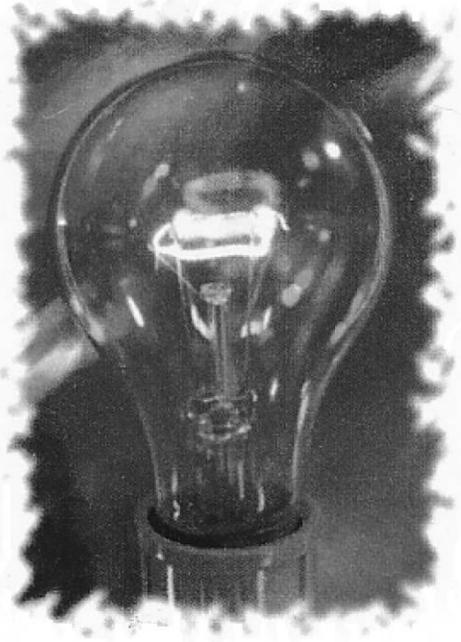
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