



The Link

Official Journal of the Buffalo Amateur Radio Repeater Association, Inc.

September 1999

Program for September: Solar Energy Products

At the September 20 general membership meeting, we will be pleased to welcome Jeff Smith of National Solar Technologies who will give a presentation on the products offered by his company. Featured will be solar electric panels, batteries, and power pack systems. There have been many major advancements in the field of solar technology in recent years, so this should be an interesting and informative program.

Another don't-miss aspect to the meeting will be to address the special notice that appears in the next column on this page. BARRA has been approached by the heirs of Chet Riker, W2QMK, to purchase Chet's land which is adjacent to our current repeater site property on Cole Road in Boston. The resolution which is printed here will be discussed and voted upon, so it is important that all voting and regular members of BARRA attend the meeting. If you are a voting member (list appears in last September's *Link*) and cannot attend the meeting, please direct your questions and comments about the matter to Ed Swan, KD2JW, either by telephone at 877-0417 or by email at EASwan@compuserve.com. This is an important matter which impacts on the future of the club, so please be sure to attend or contact Ed.

BARRA Table at Buffalo Hamfest

Saturday, September 18 is the date of the annual Buffalo Hamfest at the International Agri-Center (Erie County Fairgrounds) in Hamburg. BARRA once again will be hosting an information table at the 'fest to provide information about the club and to hopefully sign up some new members.

We are looking for some members to help staff the table throughout the course of the day. The time spent there needn't be long -- an hour is fine.

If you are interested in helping out, please contact Doug, KA2WFT, at 833-8375 or 834-2664, or Mark, KG2DE, at 447-1738.

New Members

BARRA welcomes the following new members:

N2NJK	Raymond Miller	Williamsville
KC2ESC	Arthur Sweet	West Seneca

Ray joined last spring and somehow his name was overlooked for the new member welcome. Sorry about that, Ray!!

SPECIAL NOTICE

Pursuant to Article III; and Article X, Section 1; of the BYLAWS of the **Buffalo Amateur Radio Repeater Association, Inc.**, notice is hereby given that, at the next general meeting of the club to be held on **September 20, 1999**, the following resolutions will be voted upon:

1. That this corporation should enter into an agreement to borrow from interested members, with no interest, a total sum of \$5,000.00 for the express purpose of purchasing (from the heirs of Chester E. Riker) the real property (100' x 390') immediately west of the current BARRA property at 8741-A Cole Road, Boston, NY., and extending from that BARRA property to Cole Road.
2. That this corporation should enter into a purchase agreement with the heirs of Chester E. Riker for the purchase of real property (100' x 390') immediately west of the current BARRA property at 8741-A Cole Road, Boston, NY., and extending from that BARRA property to Cole Road. Purchase price to be \$5,000.
3. That on the sale or other disposition of the above property, or the dissolution of the corporation, each lender shall be entitled to a proportionate share of the proceeds of the disposition of the above property.
4. That the Treasurer of this corporation, Edwin A. Swan, is hereby authorized to act on behalf of the corporation in completing all negotiations for such a purchase, receiving and disbursing all funds, and to take whatever action is necessary to effectuate such loans on behalf of the corporation.

Buffalo Amateur Radio Repeater Association, Inc.
BARRA, INC.

Board of Directors
September 3, 1999

The BARRA E-Mail Listserver

To join, send an empty e-mail message to:

barra-subscribe@perdix.acsu.buffalo.edu

To send a message to the list subscribers, address your e-mail to:

barra@perdix.acsu.buffalo.edu

Buffalo Amateur Radio Repeater Association, Inc.

Club Officers & Directors

President	Mark Lienert KG2DE '00	447-1738
Vice President	Steve Riek N2QJE '00	731-3452
Secretary	Brian Neri WA2CWF '99	838-1673
Treasurer	Ed Swan KD2JW '01	877-0417
Directors	Voit Drankhan KA2WIO '99	941-5569
	Keith Hendershot KB2VKK '99	822-3393
	Gene Kremzier N2OBW '01	632-4369

Committees & Chairs

Technical	Gil Boelke W2EUP
Link Editor	Doug Alderdice KA2WFT
Associate Link Editor	Dave Sewhuk N2GH
WNYSORC Representative Chair	Ben Bass N2YDM
Membership,	
Roster & Passwords	KA2WFT, W2EUP, KD2JW
Activities List	Ed Swan KD2JW
ID Badges	KD2JW
Erie County Emer. Coord.	Karl Weir N2NJH

Voice Repeaters

WB2JQK	29.68 -	Buffalo
K2ISO	145.17 -	Wethersfield
K2GUG	146.73 -	Grand Island
W2EUP	146.91 -	Boston
W2OXB	147.00 +	Kenmore
W2EUP	224.82 -	Boston
WR2AHL	442.00 +	Wethersfield
WA2HKS	444.00 +	Buffalo
WB2DSS	444.75 +	Kenmore

Digital Repeaters

W2EUP-1	145.59	Niagara Falls
N2GH-1	145.59	Wethersfield, NY
K2IMF-1	145.01	Marilla, NY

RACES Net

Stop by Sunday evenings at 7:00 pm and join the Erie County ARES/RACES net which meets on the 146.91 and 444.00 repeaters. N2NJH is net control.

BARRA Packet BBS

BARRA has a bulletin board area on the IPBUFF (N2NJH) Packet/Internet gateway system. Connect through any local node that shows IPBUFF in its node list. IPBUFF is available to 1200 baud users directly on 145.63 Mhz.

BARRA Home Page

<http://hamgate1.sunyerie.edu/barra.htm>

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The *Link* is published eight times a year by BARRA, the Buffalo Amateur Radio Repeater Association, Inc. The opinions expressed herein, however, are not necessarily those of the Board of Directors, nor of BARRA. Letters to the editor are solicited and must be signed. Names and addresses will be withheld if requested. Material for the *Link* should be sent to the Editor:

Buffalo Amateur Radio Repeater Ass'n
 P.O. Box 507
 N. Tonawanda, NY 14120-0507

or may be submitted electronically to the editor's CompuServe address: 73323,672. If submitting through the Internet, the full address is 73323.672@compuserve.com. The editor may be reached by telephone in the evenings at (716) 833-8375.

ARTICLES

Articles for the *Link* on any subject, technical or general interest, are always welcome and encouraged. When submitting material to the *Link*, please type it or submit it electronically, if possible. Remember that the editor reserves the right to make necessary changes including reformatting and condensing for space and that Full Membership may be obtained by writing articles.

LINK DEADLINES

All material must be submitted to the Editor by the end of the month previous to the issue (e.g. December 31st for the January issue). Of course, if the material is received earlier than that date, you will have a better chance of getting your article in the next issue. All advertising is subject to the same deadline.

ADVERTISING

Want-Ads are free to BARRA members and are published in the next available issue. Ads from other hams are accepted free on a space-available basis. Ads appearing in other club newsletters with which BARRA has an exchange agreement are reprinted on a space-available basis.

Display advertising is available at the prevailing rates. Business card size is currently \$2.00/mo; full page is \$16.00/mo. Contact the editor for rates for other sizes.

DUES

Basic membership rate	\$20.00
Family member in the same household as first member	3.00
Discounts from basic rate	
Senior Citizen (65+)	-5.00
Disabled	-5.00
Voting member	-5.00
Full-time student with ID	-5.00
Each new member recommended	-1.00

Note: A voting member is a member who has performed a service for BARRA (e.g. helped out at an activity, written a *Link* article, etc.).

The BARRA Space Link

For over a year now, a special feature has been in use on the BARRA WA2HKS 444.00 repeater -- a Space Link. Some members are active users, others may not know just what it is. Your editor is extremely remiss in not reporting on it sooner!

Created by 444 repeater trustee Ted Ertl, WA2HKS, the Space Link is an automatic satellite tracking system, located at WA2HKS' home, that tracks the AO27 amateur radio satellite, and when it is in range, links the downlink of that satellite to the 444.00 repeater.

What's the AO27 satellite? Basically a "repeater in the sky" taking FM signals input on 145.85 MHz and repeating them on 436.80 MHz. What's so special about AO27 is that it doesn't take a lot of the usual equipment (big directional antenna arrays, all-mode VHF/UHF rigs, etc.) to work this satellite. In fact, with Ted's Space Link system, most of the hard work is already done for you -- tracking and grabbing the downlink signal! What's more is that this Space Link "gateway" system is only one of *two* on the entire North American continent.

AO27 is in a low orbit around the earth, about 800-1000 miles above the surface. This means it is a fast-moving satellite with a usable window of only 15 minutes or so a couple of times a day, generally in the late morning and early afternoon.

What do you need to do to work stations on AO27? Just a receiver on 444.00 MHz and a 2 meter transmitter with 40-50 watts output to a "decent" vertical antenna. Most mobile setups with a 5/8 wave vertical and a 40 watt rig do just fine. Ted is often heard on the satellite *from his car*. Listen for when the satellite signal comes up on the repeater, and have at it, whether you are on the base rig at home or in the car!

Being VHF/UHF, stations who make contact trade grid squares, those 2 degree by 1 degree segments of the earth. The immediate Buffalo area is in grid square FN02. The traffic on "the bird," as satellite enthusiasts like to call satellites, at first can seem rather daunting. Many stations calling, some making contact, and on weekends when usage is the highest, it can seem like a general free-for-all. Listening to a couple of passes before trying a contact may be the best way to see how you go about making a QSO. Remember the FM capture effect whereby the station with the strongest signal will be the one copied by the bird, so you may be covered up by another station.

When you transmit, you should be able to hear yourself coming back on the downlink, so feedback can be a problem if you have the receiver volume up and/or your microphone near the receiver's speaker. QSOs tend to be brief, with an exchange of calls, names and grid squares. During the week the bird tends to be less hectic and longer chats are possible, particularly on the early pass which occurs in the 9-10 AM time frame when the satellite is over the Atlantic ocean.

Some BARRA members are regular visitors to the AO27 satellite. Your editor has been chasing the bird "the hard way"

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You Just Never Know

Paul Beeman, W2PB

EC Islip, NY

It's July 4th weekend and the family has decided to meet upstate in Magaretteville (about 35 miles east of Kingston). Saturday is hot, hazy and humid. As night begins to fall, and the sunny afternoon skies darken, the kids grow anxious to go the Firemen's carnival in town. The skies also are showing signs of an approaching weather front.

Fireworks are due to start at 10 PM. As the hour approaches, nature starts its own light show in the distance -- approaching thunder and lightning. Soon after the fireworks begin, so does the rain. The fireworks continue only to be accented by the sounds of "poof...poof" as the rain puts out the fireworks as they descend towards the ground. Everyone makes a dash for the cars. The rain continues all night.

On Sunday morning the town's fire horn blows continuously at 8:41 AM. This is not normal. As the clouds still looks menacing, I reach for my HT and tune in the weather service. Much to my surprise a tornado is being reported seven miles north of town -- in the Catskills! The clouds abate and the sun makes its arrival. The men folk decide to go into town for food stuff for lunch. As we drive through town we hear the PA systems of the fire trucks as they are announcing, "be prepared to evacuate, there is a flash flood watch." As we drive back to our cousin's house on top of one of the sizeable hills overlooking town (about a 500'-600' rise), we stop to talk to a neighbor who is one of the local firemen. They are assembled on one of the bridges spanning one of the five rivers that go through town.

It is reported that there are great fears that the dam upstream, along with a local pond are going to break their banks and send a crashing wall of water down the rivers. Within a hour water starts to rise at a rate of four inches every 5-10 minutes. While the dam and the pond do not break, they overspill their banks and water begins to cascade down the mountainside. The normal peaceful streams and creeks begin to change into raging torrents of brown water filled with debris. Concern mounts that the debris could form an artificial dam under a bridge.

Once back at the house I pull out the rest of the HTs. One now monitors fire on 46.220 MHz, one listens to 146.52 MHz, since the local repeater is down. Still another monitors county sheriff and DEP. The last is used to occasionally monitor NWS.

We hear the towns upstream comment that roads are flooding and several homes are affected. Our cousin calls his friend that owns the local golf course to advise him to get people off the 9-hole course since high water is due within a half an hour. His message is well received and people are rushed off the course. We also call the fire department to advise them that there are people on the golf course. They had been concentrating on a finding a camper in harm's way and forgot about the golf course.

It's 1 PM and the river continues to rise. We have a full

panoramic view of the valley from our vantage point. I can cover the valley with 1/2 watt from here. Since the local repeater is down, I serve as a simplex repeater connecting the two towns in the valley. We venture forth to check out local roads as we continue to monitor the frequencies. We notice the golf course is now a complete mud field except for the high greens. There are reports from upstream that there are many propane tanks that have broken free and are floating around town posing problems. The river is still rising and while normally only forty feet across, it now spans over 500 feet in many low lying parts of the valley. Current is estimated to be over 20 MPH.

At 4 PM we hear that the main road through the valley is now closed in several areas because of high water. A few bridges are closed due to water flowing not only under the bridge, but also over the roadway of the bridge.

As night approaches the river has crested and is starting to show signs of retreating. However, flooding is still widespread. We continue to monitor the frequencies. The fire department has decided to continue with the carnival that night -- with caution.

As darkness falls on this sleepy little valley we put away our radio play things. All but one. The NWS is forecasting more rain. We have served to warn people of impending danger, and aided in communications in the valley. All this without a repeater, APRS (no one around), satellite or HF. Just simple listening and simplex VHF communications.

It's Monday morning and we start packing the car to journey to Atlantic City for a few days. The NWS was wrong, no more rain fell. We had traveled to the Catskills to seek refuge from the heat only to be greeted by temperatures over 100 degrees, high humidity, a tornado close by, and a flash flood. "You just never know."

Space Link continued from page 3

that is, using a handheld directional antenna (the popular Arrow Antenna available from many ham radio equipment suppliers) from the cottage for over a year now and hears many stations from Buffalo. He finally was able to transmit into the satellite late this summer and talked to a number of stations from around the continent, as well as BARRA people.

If you haven't checked it out already, put on your UHF receiver and listen into the fun. Even if you don't have a UHF transceiver, punch up 444 on a scanner -- that's good enough to use as a receiver, all you need is the 2 meter transmitter. What could be simpler than that?

See you on the bird.

A BARRA membership application is occasionally printed (as it is this month) as a convenience to members who have friends who wish to join BARRA. Pass it along to those ham friends (especially new hams) who are looking to join an active, repeater-centered ham club!

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Calendar of Events

GENERAL MEETINGS

General meetings are held at St. Bartholomews Episcopal Church, Brighton & Fries Roads, Tonawanda, across from Kenmore East HS. Doors open at 7:00 pm for rag chew, business meeting at 7:30, with program following.

Monday, September 20, 1999 - Regular general membership meeting at the church, with special vote about Chet Riker's land adjacent to the Cole Road site. Program topic: Solar Energy.

Monday, October 18, 1999 - Annual BARRA Meeting and election of board members. Program topic TBA.

Monday, December 20, 1999 - Annual BARRA Christmas/Holiday Party.

Monday, January 17, 2000 - Annual report by the Technical Committee.

**NO GENERAL MEETINGS IN
MARCH, MAY, AUGUST OR NOVEMBER**
The *Link* is not published in those months

BOARD MEETINGS

Board Meetings are held the second Monday of every month at GLB Electronics, 151 North America Drive (formerly Commerce Pkwy), West Seneca. The meetings begin at 7:30 pm and members are always welcome to sit in on a meeting or bring concerns to the board.

TECHNICAL COMMITTEE

The Technical Committee has work parties every Wednesday evening, 8:00 pm, at GLB Electronics. Stop by and give a hand to a repeater or other BARRA project.

The Technical Committee has formal meetings the first Friday of each month around 7:30 pm at GLB. Come on out to BARRA's own CCITT (Coffee & Crumpets Interrupted by Technical Talk), where progress of current projects is evaluated and new projects are planned. The meetings usually conclude with munchies at a nearby restaurant.