



The Link

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

December 1998

Join Us for the Annual BARRA Holiday Party

Monday, December 21 is the date of the 1998 edition of the Annual BARRA Christmas Party. The usual business meeting is put aside in favor of sharing some basic but good eats (pizza and wings) and fellowship with our fellow members and their families.

To cover costs, \$3.00 per person or \$5.00 per family will be collected. All members are welcome to bring spouses/significant others and/or non-member ham friends.

Join us on the 21st!



New Members

It has been some time since we have acknowledged the new members amongst us -- a quick look at the *Link* archives tells your editor it was January!! Our sincere apologies for neglecting this important aspect of the newsletter. Our new members for 1998 are:

K2YW Victor Gadzik
WB2DSS Rich Poczalski
KB2VGF Michael Mesoella
KC2DQD Jerome A. Leisner
KC2DGB Paul M. Kral
KC2CSG Peter Piccirilli
KB2EBI Berney Cunningham
KB2ECC Chris Cunningham

Welcome to all!

Dues Are Due

The membership year for BARRA runs from October to September, which means that dues are due. Please check your mailing label for the status of your dues. Several members have gotten us off to a good start on the renewals and we thank them for their promptness. Don't let your membership expire, renew today!

BARRA Welcomes N2OBW to Board

At the October General Membership meeting, Gene Kremzier, N2OBW, was elected to the BARRA Board of Directors. Gene has been active in the local amateur scene for some time now, and has been active in ARES, RACES and other public service activities. We look forward to Gene's participation on the board.

At the same October meeting, Ed Swan, KD2JW, was re-elected to the board. The November board meeting saw the re-election of officers, resulting in no changes from the previous slate.

As we welcome Gene to the board and look forward to Ed's continuing work, we want to extend our thanks to outgoing board member Vince Luckoski, N2WUV, for his service to the board and the club over the past few years.

A Thank-You from N2WUV

Hello everyone, I would like to thank everyone for their support during my tenure as a BARRA board member. I hope some of the decisions made have been beneficial for the club and the hobby. I may not be a board member but I will still be an active member taking care of the Elmwood repeater site and working with Karl Weir, the EC for Erie County. Again thanks for the vote of confidence.

73 de Vince N2WUV

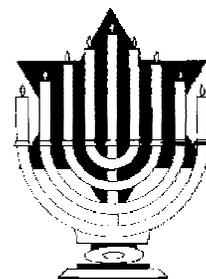
It's Raffle Time!

It's once again time for the annual BARRA raffle, and tickets are included with your newsletter. Cash prizes will be awarded as in the past. Let's help out with this important fundraiser for BARRA!

The drawing will be held at the Annual Auction in February, winner need not be present to win.



Happy Holidays



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>

A Message From the President

Well, it's that time of year again. I'd like to wish everyone a Merry Christmas and a Happy New Year. I look forward to seeing everyone at the BARRA Christmas party this month. We'll be having pizza and wings so bring your appetite. I also hope Santa brings you all the things you want for Christmas. Here's my Christmas wish list; A Yaesu VX-1R, lots of good DX, and an impeachment! Those three things would make me happy!

See you there!

Mark Lienert, KG2DE

Bob Dow, WB2CJL Silent Key

Many in BARRA were shocked and saddened to learn of the death of former BARRA member and past president, Bob Dow, WB2CJL, on November 28th. A memorial service was held December 9th. Bob was active in local ham activities and was an active DXer. He will be missed.

Repeater News

Things have been relatively quiet on the BARRA repeater front. The bugs in the new linking software in the Cole Road controller continue to be worked out and we hope to publish the new codes next month.

At Wethersfield, the 442.000 repeater has a new call -- WR2AHL. It is still owned and maintained by Mike Rink, ex-WB2HYP, now W2HYP. Only the calls have changed.



The 147.00 repeater has undergone a good overhaul at the GLB shop, after having pulled off the air due to low sensitivity and reports of transmitter spurs. A front end semiconductor that stopped doing its thing is to blame for the receiver problems and the entire transmitter chain from exciter to duplexer has been worked on. The machine has been on the air from the shop in West Seneca and will return to Elmwood very soon.

Ted, WA2HKS, has added a really great feature to the 444.00 repeater -- a space link! Passes of the AO-27 satellite are automatically tracked at Ted's QTH and linked to the 444 repeater. There are a few passes each day between 11 am and 2 pm. Anyone can "talk back" to the satellite by uplinking on 145.850 MHz. Ted has reported successfully uplinking to the satellite on the road with his 50 watt mobile!

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

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.).

A Special Eyeball Meeting of Two Ham Friends

D. Mark Robinson, WB3JIS

Two hams meet by chance at a hamfest for their first "eyeball QSO" -- so what? The events leading up to that meeting tell a story far more interesting.

My father, Duane Robinson, W3KXR, and I were walking through the 1998 Dayton Hamvention flea market when 20 feet ahead we heard a young Indian gentleman say to someone "my name is Miku." This piqued our interest. Ten years before Duane and Miku, VU2WAP, would often find each other on 20 meters. I witnessed evenings when a worldwide pile-up would be calling Miku and W3KXR would simply say his call once. Miku would respond "everyone please stand by. Helloooo Duane!" During one QSO Miku was relating how he wished he had a phone patch interface but they were rare in India. Duane had an extra one and mailed it to Miku. The following Holiday season he received a Christmas card from his Indian friend which hangs in his shack to this day. These two gentlemen had met on the air as fellow ham operators and become friends via 20 meter SSB. As propagation worsened they heard less and less from each other. Now, standing in the Dayton flea market, they were talking face to face in such a manner that one would have thought they ragchewed on 20 last evening.

During the Dayton encounter both men excitedly chatted, exchanged e-mail addresses, and promised to look for each other on the bands as propagation becomes friendlier. After parting my father said "I could go home right now without seeing another radio or person. That made the 1,000 mile trip worthwhile." We've read it many times that ham radio creates friendships that transcend economic, philosophical, and political boundaries. This was an encounter that proved those claims and one which I hope every ham operator can personally witness.

Read another article about a global friendship developed through Amateur Radio on the next page

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Eyeball Meeting

David S. Faul, VE3TIJ / N2ZVK
davidfaul@compuserve.com

Hams use the term "eyeball" to denote a face-to-face meeting between hams. It allows hams to meet in person someone they have met on the air.

I was able to meet Tatsutomi, JI1GVV, in late August. Tatsutomi and his wife Yuka from Japan visited Toronto for several days. We agreed to meet for a day for an "eyeball."

I first met Tatsutomi on 2m packet shortly after I had assembled my packet station in 1996; after that we exchanged e-mail messages and home videos of our respective ham stations. On occasion, we spoke on the telephone when his research activities brought him to North America. He is an instructor of dentistry at the Tokyo Medical and Dental School. His interest in ham activity extends into his dentistry research as well. He charts the interaction of teeth and the jaw structure in humans by radio telemetering data from sensors in artificial teeth in humans to recording instrumentation for later analysis. The teeth are placed in the jaws of human test subjects and supply raw data on the bite, jaw, chewing and wearing characteristics. The test results will be used to aid in dental treatment for geriatric patients -- his specialty. He is currently doing research in this area at UCLA in Los Angeles. His interest in ham radio started when he was in High School and has become part of his electronic skills that are applied in dental research.

In Tokyo he works 2m packet; 2m, 70cm and 23cm FM and does some 40 m phone SSB work. However, he is hampered by a lack of space for HF antennas in Tokyo. He has built his own modem for packet. One of his videos highlighted the consumer electronics district of Tokyo. Many stores in this district specialize in new and used electronic parts, ham gear and computer components. Imagine the new equipment exhibit hall at the Rochester Hamfest at a least a 50-fold increase in size to appreciate the size of this commercial area in Tokyo.

I helped Tatsutomi obtain a temporary operating permit from the Toronto District Office of Industry Canada, our FCC, in August. IC required a Canadian citizen to act as a liaison between Tatsutomi and IC during his stay. Tatsutomi had to supply a copy of his Japanese radio license and operating permit. I agreed to act as the liaison; Tatsutomi faxed the necessary documents from Los Angeles to IC in Toronto. I also agreed to obtain, supply and review an up to date copy of the Canadian amateur rules with Tatsutomi. Fax machines, long distance telephone calls and air mail letters reduced this process to less than three weeks.

My wife Diane and I enjoyed meeting Tatsutomi and his wife; I had arranged for a lunch-meeting at my favourite restaurant and table (at table 54 my table ... I had made a shot of the place for a video to Japan of my favourite haunts) in Pickering near Toronto. The restaurant even placed a special welcome sign at the table for my guests and wife. We sat and talked for a two hour lunch on a variety of topics. They were

both fascinated with the wide open spaces and the natural beauty of our landscape. I was able to provide them with detailed maps of several areas in Ontario to include in their four-day driving tour. He e-mailed me a list of Toronto hotels that his Los Angeles travel agent provided. Where would I stay he asked? I noted that he was at the mercy of his travel agent. I helped him pick a place that would suit his needs not the travel agent's. The rest of the day was spent at my station with a home-cooked supper provided by Diane.

Tatsutomi noted that he had seen most of my ham equipment in Tokyo only at a greatly reduced price! On occasion, I was reminded that my use of many North American expressions had no translation into Japanese. I used the term "McJobs" to indicate the new economic conditions in North America and later referred to a poor car driver as a "Wacko." The term Wacko just did not translate in Japanese, for example! I do know that he will take the term "Wacko" back to Japan with him and will look at a certain fast food outlet differently.

This meeting and friendship developed out of a 2m packet interaction. The friendship has prompted me to take a greater interest in Japan and its economic situation in the world. I now read a Japanese-English language newspaper each week. It is interesting to note that 1.2 GHz FM is a relatively new band even in the Toronto area. In Tokyo, 1.2 GHz FM is a very popular band that yields contacts with a simple HT at a 1/2 watt output. We had several contacts during his stay. We talked daily from his hotel in Scarborough to Ajax via a linked 2m-70cm system. His triband HT only put out 2 watts on 2 m, 1 watt on 70 cm and a 1/2 watt on 23 cm as these levels are more than adequate for urban Tokyo.

This experience was the most interesting aspect of amateur radio that I have experienced to date. Tatsutomi noted that in Japan they call this type of meeting an "eyeball" too using the English word. It has no Japanese equivalent. My experience shows that amateur radio is still a viable means to communicate and make friends. Even if the follow-up mode of communication is e-mail or telephone, the commonality is the ham interest and what makes the friendship work. I would not trade ham radio for unlimited internet access!

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DeLorme's Topo USA

Ben Bass, N2YDM

I'm no stranger to DeLorme software. I have reviewed several of their software products in the past and I own one of their Tripmate GPS receivers. I received a press release for a new product, Topo USA. When I read the press release, it looked like an interesting product. When DeLorme offered me the opportunity to evaluate it, I agreed.

Topo USA is intended to give an overview of an area, either in 2-D or 3-D. DeLorme intended this program for hikers, bikers, RV'ers, and other outdoor enthusiasts. I saw a different potential use for the software. I thought it might be useful to get an overview of antenna transmitting or receiving patterns or paths.

System requirements for Topo USA are Microsoft Windows 95 or later, a Pentium 60 MHZ or faster processor, 16 MB ram, 30 MB of free hard drive space, CD-ROM, VGA graphics and a mouse. A printer, graphics accelerator card, joystick, and printer are recommended. A 150 MHZ or faster processor is recommended for the 3-D flight.

One of the things I always liked about DeLorme software is the ease of installation. When I tried to install Topo USA, it just wouldn't install. I tried everything and was contemplating pulling my hair out. I e-mailed my contact at DeLorme with my problem. As it turned out, they had a bad run of CD's from the company that duplicated them. The replacement disks arrived in a couple of days and this time, it was the flawless install I was used to.

Speaking of CD's, I don't know who thought up the packaging for the disks in this program, but I don't like it. Each disk slips into a slot in a cardboard folder. I found the disks tended to fall out of the slots and also seemed to get scratched. Yes, it is a compact way to store the four CD set, but it is inconvenient and looks cheap. My advice to DeLorme would be to charge a couple of bucks more for the program and package the CD's in jewel cases.

Unlike other similar software, Topo USA maps are from DeLorme's own database. They are currently the only company producing topographic maps on CD-ROM which are not simply scanned-in USGS maps. This allows Topo USA to provide better detail when zooming in or out, because these are vector images and not raster images; that is "clean" lines versus a screened photo image.

Topo USA can deliver seamless topographic coverage of the United States. Topographic contour lines at 50 to 100 foot levels are also included to show elevation data for any region. DeLorme's maps are overlaid over the topographic maps to give the usual street-level and back road detail we expect. This allows you to view a route or GPS track in the "normal" 2-D map mode or a unique 3-D mode.

Points can be found by place name, zip code, telephone exchange or latitude and longitude. The search functions worked well and were reasonably accurate. Routes are plotted manually point by point. The completed route is displayed as a highlighted line on the map, just like DeLorme's other map

programs. The distance is also calculated. But this is where Topo USA is different. You can select an elevational cross-sectional view of the route. This view shows the average grade, elevation gain, horizontal distance and terrain distance of a route. This is intended to show a hiker or biker what changes in elevation they will encounter along a route. This view may also be useful for determining line-of-sight antenna coverage between points.

Other useful features include on-line links to local information, thirteen levels of magnification (from 368 to .08 miles), and the ability to add marks with text labels. Solus Pro is also included. This application allows route directions and maps to be downloaded to handheld computers, like the 3Com Palm Pilot or many Windows CE computers. You can then track your route with a DeLorme GPS receiver connected to your handheld computer. The cable for this is not included, but is available from DeLorme. The GPS receiver will also provide position, speed, heading and elevation data in real time.

A GPS connected to a notebook computer with a CD-ROM will also provide route tracking, position, speed, heading and elevation data in real time. Topo USA works with the DeLorme GPS receiver or other compatible receivers. Data can also be uploaded to many handheld GPS receivers.

In addition to the 2-D display, you can also view a point or an area in 3-D. You can select a panoramic view from a mountaintop or circle around mountains from any angle. If you have a joystick, you can even fly a route. The 3-D views are interesting. Personally I was disappointed with the flyover mode. While I didn't expect Flight Simulator, I thought the performance of this feature left a lot to be desired.

I tested this program on a 400 MHZ Pentium II with 128MB of SDRAM and an ATI 3-D AGP video card and 24X CD-ROM drive. This should have been plenty of power for this application, but I thought the screen redraws in the 3-D mode were very slow. 2-D map redraws seemed slow as well, even given the level of detail.

Despite what I perceived as sluggish performance, Topo USA does what it's advertised to do. For an estimated street price of \$99 this is an outstanding value. More information is available from their web site www.delorme.com. Look for a special offer for our members on this and other DeLorme products.

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DeLorme's Street Atlas 6.0

Ben Bass, N2YDM

Sometimes when you think a good thing can't get any better, there is a surprise in store. This was the case with Street Atlas USA 6.0 from DeLorme. I frequently (and eagerly) review DeLorme products whenever I am offered the opportunity. I never cease to be amazed that they continue to improve and innovate with their products.

System requirements are a 486DX/66 or higher processor, 8MB ram, 35MB available disk space, Windows 95, Windows 98, Windows NT 4.0 or later, Super VGA card, 256 color monitor, mouse, and CD-ROM drive. A printer, sound card and microphone are recommended.

In addition to the DeLorme Tripmate and Earthmate GPS receivers, most other fully compatible NEMA receivers with serial connections are supported. Many 3Com Palm Pilots and Windows CE handheld computers are also supported when used with the optional cables.

One of the things I like about DeLorme's software is the ease of installation. Street Atlas USA 6.0 is no exception. It installs like any Windows program. Like version 5.0, this version has separate installation and runtime CDs. While I'm speaking about the disks, my only real complaint about this program is the package the two CD-ROMS come in. While the dual CD package has a "real" insert, similar to a jewel case, it falls just short. I've had problems with this type of case, also used in version 5.0, not holding up well. Again, I suggest that DeLorme charge a couple of bucks more and give us a real jewel case.

Of course Street Atlas USA 6.0 does all of the things we've come to appreciate in previous versions. The tutorials are simple and excellent as is the help documentation. Routes are very customizable as is the level of detail displayed. You can print maps with symbols, notes and area markings of your choice. You'll be plotting routes in no time.

What's new in version six? For starters, there are 600,000 new or improved streets for better matching when searching by street. Start and finish points can be designated by right (mouse) clicking on the points. Street Atlas will calculate to route. You can choose the type of roads or add any stops along the way. Street Atlas will now find intersections; with the map in view (at a magnification of 12 or better) plug in the street names and Street Atlas USA will find it for you.

Exit services such as truck and RV parking, store types, scales, fuel, car washes, and restaurants are also included. If you don't need that detail, just turn it off. The "points-of-interest" detail included in version 5.0 has been removed (DeLorme says it is because of user feedback). It has been replaced by enhanced exit services detail for business travelers, truckers, and RVers. Personally I never used the "points" feature, but I do use the exit services, so I welcome this enhancement.

Of course you can still print out detailed maps and routing directions. If you use an (optional) GPS receiver with a notebook computer, there's not need to do that. I use the

DeLorme Tripmate GPS receiver. One of the things I really liked is the improved interface for the GPS receiver. Details of what satellites are being received are displayed graphically. The usual detail of speed (in mph, km/h, or knots) direction, position (latitude and longitude) and elevation are available and are updated about every two seconds. Using the GPS receiver, you get a continuously updated position displayed on the map, including street level detail, cities, and bodies of water as you travel. If you have a multimedia computer, you can hear directions and upcoming exit information as you drive.

I made particularly good use of those features on a recent trip to Troupsburg, New York. There are two ways to go there (yes, you can get there from here) either through Hornell or through Wellsville. From Buffalo, the route through Wellsville is actually about 30 miles shorter. The disadvantage is that it goes through many small towns and its easy to miss a turn. I haven't taken this route in several years because I didn't think it was worth the effort to save 30 miles. Besides, I kept missing turns. This would be a perfect test for Street Atlas USA 6.0 and my Tripmate GPS receiver.

Before leaving Buffalo, I programmed the route into my notebook computer and wired up the Tripmate. I verified proper operation and stowed it away. I wouldn't need it until I got to Wellsville. I know the route to Wellsville very well from my days at Alfred State College. The trip went well (except for the \$\$\$#& dump truck doing 45 in a 55 mile zone on two-lane route 243) and I made it to Wellsville where I stopped for "supplies." Before leaving Wellsville, I set up the computer and GPS receiver and waited a minute or so for the Tripmate to "lock in" to the satellites. Once it locked, I was on the road again.

Using the Tripmate, Street Atlas USA tracked my position as I drove out of Wellsville and on to Stannards, Hallsport, and into Whitesville (Yes, they're real towns). This is where it gets tricky. Allegany County route 19A becomes Steuben County route 124. I always had trouble finding my turn onto Steuben County route 84, the "highway" to Troupsburg. Like magic, a computer voice advised me to watch for a turn onto county route 84, 30 seconds ahead on the left. My gosh, there it was! No missing the turn this time. You may think the talking directions is a gimmick. Make no mistake, this is a VERY useful feature.

DeLorme has another winner with Street Atlas USA 6.0! For more information, check their web site at www.delorme.com and look for a special offer for our members in this issue.

The order form for the special DeLorme offer to BARRA members appears on the next page. Hurry! The special offer ends December 31st!!

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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, December 21, 1998 - Annual BARRA Christmas Party. Bring the spouse and share in the holiday merriment with the BARRA family.

Monday, January 18, 1999 - Annual report of the BARRA Technical Committee. Come hear the "war stories" of keeping the BARRA machines up and running.

Monday, February 15, 1999 - Annual BARRA Auction. Turn your collection of unneeded electrical widgets into cash to benefit yourself and BARRA.

**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.