

Lanierland ARC W4ABP Newsletter

August 2005

President's Corner

Terry Jones, W4TL

Well, after almost a two-year lapse, we are pleased to have a newsletter again. It is very important to have a newsletter, especially for those who may not be actively involved in club functions and activities. It's main function and purpose is to keep members informed. THANK YOU, Robert Copelan, WB4DHC, for enthusiastically taking on the role of Newsletter Editor and Web Site Manager. I am confident that Robert will do a commendable job with these responsibilities. He can't do it alone; he needs our input on what might be interesting articles to publish.

Concerning club activities, we hope that as many as possible can attend the LARC Family Picnic on Saturday, August 27, at River Forks Park just west of Gainesville. This is an event that brings the families together for fun and fellowship. After dinner we will have the August meeting.

The LARC Tailgate Party and club raffle was held on Saturday, July 9, at Johnson High School. Considering we did no advertising, attendance was fair and LARC made a little profit from the raffle.

LARC is known for it's participation in the public service arena. Our members are involved in numerous activities related to public service and disaster relief. We have already seen several hurricanes form this season and several of LARC's members have responded to some of these storms. We always need to stand ready to serve in these situations when our time and situations permit. I sincerely appreciate those of you who sacrifice to make yourselves available for public service.

We hope everyone continues to enjoy the summer and make every effort to participate in LARC activities. Our Activities Manager, Larry Tyson, W4WLT, usually keeps us informed of upcoming LARC activities and I appreciate Larry's efforts in this regard.

Thank you and I hope to see you at a LARC activity soon.
73, Terry, W4TL

Club Family Picnic & August Meeting

The location will be at River Forks Park just off Brown's Bridge Road west of Gainesville. We will start gathering around 3 PM and plan to eat around 5 PM. For a description of River Forks and a link to a map go the following URL: <http://www.hallcounty.org/parks/details.asp?ID=29> then under directions click "map". This will be a "covered dish" picnic, so bring everything you and your family plan to eat and drink, including utensils, plates. **Alcoholic beverages are NOT allowed.** If you want to grill something there are several grills available around the pavilion. You might also like to bring your favorite fold up chair for comfort. We will be using the main pavilion which is located at the end of the beach parking lot. Those of you who have campers and RV's might want to consider camping at the park during this time. The park has 63 campsites and is very well maintained. There is a \$3 per vehicle charge for admission to the park if the driver is under 55. Those vehicles with drivers 55 and over are admitted free. We will have the August club meeting after the meal. This will take the place of the regular meeting which would have been on Tuesday, August 30. Please join us at River Forks Park for some good old time fellowship and fun. If you have any questions or need any additional information please contact Terry, W4TL.

Health Report

Keep Bob McDonald (WK4T) in your prayers. He remains hospitalized at Lanier Park Hospital.

OSCAR Today

(Orbiting Satellite Carrying Amateur Radio)
Doyle Gnat, KI4KLQ

Working satellites is one of Amateur Radio's hidden treasures. When I earned my Technician ticket, I began searching for ways to use my limited privileges and equipment to "reach out" as far as possible on the UHF & VHF bands.

One of the first things to know is that unlike most TV satellites, Ham satellites are synchronous, meaning they rotate the Earth, and are not at a fixed location. This means you must track the satellites with computer software. Many software programs are available on the Internet for this. The one I use is a freeware program called SatScape. You can download the program at WWW.satscape.co.uk. SatScape features include: pass predictions, map views with ground tracks and footprints, horizon view, tabular list and a very useful Keplerian Elements updater. Keplerian Elements are numbers used to describe a satellite's position, speed and direction. The program does the math for you. SatScape also gives you each satellite's frequency. Another useful web site is www.AmSat.org. This site has lots of useful information on each Operational and Semi-operational OSCAR including frequencies and mode. Several Sats have multi-mode capability such as CW, Packet/APRS, Digitaltalker, analog and/or digital.

Ham Satellite work also requires a dual band rig for 2m and 70cm. Why? You will uplink (transmit) on one band and downlink (receive) on another. Dual band HT's can even be used but I haven't tried that yet. When you have "touched" the Oscar, you can hear your transmission on the downlink trip. When you do, you are in business.

The International Space Station also carries Amateur Radio. Try it at 144.490 uplink and 145.800 downlink. Calls will be U5MIR (Sergei Krikalev) and KE5DRY (John Phillips). These guys are busy so be patient. Also remember the ISS crew is on GMT. ISS crew schedule can be found on NASA's web site. Best time to catch them is around their evening meal time (GMT). The ISS also carries a cross-band repeater that was recently pressed into service. 437.800 uplink and 145.800 downlink. The ISS crew has nothing to do with this repeater so it will be rather hard to break the pileup. SatScape will also track ISS.

Recently I made short contacts to FN42 (Boston, Massachusetts, pileup prevented catching call sign), Texas (N5TD EM11) and the National BSA Jamboree in Virginia (K2BSA) via ISS repeater. Not bad for a rookie when you consider the distance on 2m at 5 watts on a very modest vertical antenna on these frequencies. To get started, try the ISS repeater, AO-51, SO-50, FO-29 or VO-52. If you try AO-51, use PL 67 on the uplink trip. Several have beacons

that will help to know when the transmission footprint is within range and also with correcting for Doppler shift. When the bird passes, the bands will be very busy. Be ready, be patient and use headphones. **LISTEN LISTEN LISTEN** Give it a try. It's not easy catching an object whizzing through space at mind boggling speeds but the rewards are GREAT. Let me know when you're successful.

Next time we'll discuss how Doppler Shift affects satellite work.

73 de KI4KLQ Doyle

Great Circle Bearings, Beginning

Ed Cravey, KA4HPY

Hi all, I found these notes in an old scroll, the "ARRL Antenna Book-1974". There were two methods mentioned. One is for the man who has only one world globe, the other is for the globe rich.

Bearings for beam heading may be determined easily with nothing more complicated than a small school protractor, found at school and office supply stores. For best results the globe, should be at least 8 inches in diameter. A thin strip of paper or string may be used as a straight edge to determine the great circle path between your location and any other place on earth. The bearing from your place may be determined with the aid of the protractor. For convenience a paper scale circle calibrated in degrees of bearing may be made and affixed over the point of your location on the globe. The 0 (zero) mark of this scale should point to the North Pole. Lay one end of the strip of paper or string on your location and extend the strip of paper or string beyond the distant location and read the bearing in degrees from the protractor. This completes the one world globe navigator method.

For those of you who have globe mines all over the Earth and beyond Orion; this one is for you. This little piece is called, "A Simple Direction Finder". Of course you need a globe big enough for details to be clear. Start by removing the globe from its brazen meridian (half circle support) and prepare to remount it differently. Drill a hole that will accept the support at your location on the globe. Drill another hole on the opposite side of the globe. This second hole will be located at the same LATITUDE as yours, but on the OTHER side of the Equator (north latitude vs. south latitude). Its LONGITUDE will be opposite in direction from the Greenwich or 0 (Zero) degree meridian (east vs. west). It will be equal to 180 degrees MINUS your Longitude.

For example; if your location is 42 degrees North Latitude and 72 degrees West Longitude; the opposite point on the globe is 42 degrees South Latitude, by 180 minus 72 or 108 degrees East Longitude. This is the intersection for the second hole. Drill it here.

Once the holes are drilled, mount the globe with your location in the place formerly occupied by the North Pole, Rotating the globe until the distant location is under the brazen meridian, this indicates the Great Circle path. A new EQUATOR must be drawn with India ink and calibrated to indicate the bearing.

At two points on the globe the old equator will be crossed by the new equator. For those of us living in the USA, the crossing point to the West of us should be labeled 270 degrees on the new Equator. The crossing point to the East of us should be labeled 90 degrees on the new Equator. North and South will indicated by an imaginary line passing through the North and South poles and running through your location as well.

Zero degrees is North, 180 degrees is South. So taking the brazen meridian and allowing it to pass over the North pole to a point on the new Equator which should be marked 0 (zero) degrees; you can see what countries can be on line with your antenna. The brazen meridian can be marked for distance as well. So you can now see that 90 degrees or East does not take you to the Mediterranean but to southern Africa. Surprise! 270 degrees not to Japan but Australia. Take the Great Circle Route.

From the Editor

Robert Copelan, WB4DHC

This edition of the newsletter is my first as editor. In the interest of getting some news out to the club membership as quick as possible, not a lot of time has been spent on the layout or graphics. In the coming months you will see changes in the layout as I become more experienced with using OpenOffice as a production tool. This newsletter will only be as good as the contributions. I would like to see original content from the club membership. You have expertise in various aspects of Amateur Radio. If you would like to contribute a single article, be the author of an ongoing column or just give feedback on the newsletter please me on the 146.67 repeater, via email, wb4dhc@arrl.net or by phone at 678-989-5576.

Thanks to all of this month's contributors. A special thanks to Bob, KG4SJS for the design of the masthead logo.

Repeater Update

Alfred Westbrook, KT4VP

146.670 (-) 131.8 Hz
 224.840 (-) open
 444.950 (+) 131.8 Hz

To help reduce interference from paging equipment the repeater has been temporarily moved into an adjacent building. This building does not have a telephone connection, so the autopatch is presently out of service. The move has certainly reduced the interference. A permanent fix (location) is in the works. Malicious interference, unlicensed users, foul language, etc should not be tolerated on the repeater. If anyone hears this type of activity on the repeater please send an email to Terry W4TL and myself and let us know what time you heard this type of transmission. It is best if you do not attempt to confront the person on the air. This usually results in more of the same. If the time is on the weekend or evenings before about 10:00 PM give me a call at home. Some times turning the repeater off due to inappropriate activity will get the message to the violators.

Upcoming Hamfests

contributed by Roger Gibson, W4RLG

Date	Location
Aug. 20	Fort Pierce, Fl.
Aug. 20-21	Huntsville, Al.
Aug. 27	Tampa, Fl.
Sept. 10	Dalton, Ga.
Sept. 10-11	Melbourne, Fl.
Sept. 17	Dallas, Ga.
Sept. 17	Anniston, Al.
Sept. 24	New Port Richey, Fl. Orlando, Fl.

Lunch Bunch

Every Friday at 11:30 AM there is a lunch get-together at a local restaurant. The location is announced on the Wednesday night net as well as the Yahoogroups discussion list and the 146.67 repeater.

Reminder: when Magic Dragon is the location everyone should remember it is the **restaurant**, not the other establishment of the same name.

Hall Co. Nets

W4ABP repeater
146.67 Mhz(-) 131.8 hz

Net	Time
LARC	Wed. 2030R
Hall Co. ARES	Wed. 2000R

Where in the world is... Loganville?

Well Bobby , W4BLB found it. It's in Walton Co. about 8 miles East of Snellville on Hwy 78. Reason, my daughter lives there and of course my grandson had a lot to do with us making the move. My house is on a hill and according to the radio reports , on 2 meters, I have a better signal now than I did from Buford. My antenna. is a home brew dual bander. A clone of the Arrow ant. It's sitting in my attic and that may be where it will stay. You know the subdivision thing we have all heard about. I do plan to put up a dipole before long.

73,Bobby W4BLB

Would you like to feature your hometown, birthplace or an interesting location you have visited? Send a short description of it to the editor.

Lanierland Amateur Radio Club
c/o Robert Copelan
3727 Windsong Chase
Flowery Branch, GA 30542

ADDRESS CORRECTION REQUESTED