

DELTA AMATEUR RADIO CLUB

SPARKS Web Edition

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W 4 B S R E P E A T E R S Y S T E M
146.82, 147.36, 224.42, 443.2 & 145.03 Packet

PRESIDENT'S PAGE

It was like one of those times you didn't realize you'd been holding your breath until you finally exhaled. The weather had been so hot for so long. Someone said we had ten days straight of three digit temperatures, with seven of them producing record highs. There was no rain to speak of for months, it seemed. Then we got a break in the weather, temperatures cooled down, and enough rain fell to reassure us Memphis wasn't going to turn into a total desert. Suddenly you could walk outside without losing two quarts of water immediately. You no longer feared being totally desiccated by the time you got to the car and turned on the air conditioning. The weather couldn't have been any better than it was for our Annual Delta Club Picnic.

Ellendale Park was the perfect location as well. While there weren't as many really obvious signs leading to the park as we would have liked, Freddy, KF4ZGJ, and Tom, K4TTA, both supplied a great talk-in service for our wayward members. It was in a secluded wooded area, away from the parking area, providing a semblance of privacy. There was a playground very close by for our future hams to occupy their busy hands and feet. The club reserved the pavilion, which sheltered eight large tables. The grill was fired up and we enjoyed a feast of chicken, hamburgers, and hot dogs, with all the trimmings, pasta salad, chicken salad, beans, and one table FULL of incredible brownies, cakes and cookies.

After the lure of food was taken care of, a wire was strung and, according to some folks, the real purpose of the get together was accomplished. Jim, K1H, brought his rig and a battery, and started making contacts. A bit of elmering was occurring as well, and talk turned to PSK31, contesting, and what can be traded in for what at the candy store.

Terry Edwards, KD5ITY, and Freddy Bratton, KF4ZGJ, did a wonderful job pulling it all together for the club this year. Thank you so much for all your efforts.

This October's meeting will initiate the two-month process of electing Delta Club's Board of Directors for 2001. For those who have been away from all manner of communications for the past month and don't know what's going on, the Nominations Committee will present the Slate of Officers to be voted on at the November membership meeting. I have chosen three people for the Nominations Committee who have been active participants in the Club's activities, and have been able to observe others who have likewise been active in the Club's activities. They are Tommy Thompson, KD4TJO, Bill Covington, KC4SXT, and Paul Cline, WMSQ.

There are four criteria that any candidate must meet: 1) He or she must be a current member of Delta Amateur Radio Club; 2) He or she must have attended six out of the previous twelve membership meetings, as recorded on the sign-in sheets; 3) He or she must be a currently licensed amateur; 4) He or she must be consenting to the nomination.

In addition to the Slate of Officers that will be announced, I will also take nominations from the floor, at both the October and November meetings. While I have total confidence in the ability of the Nominations Committee to put together a good Slate of Officers, I cannot expect all of you to agree with all of their choices. Please do not overlook this very important opportunity to add to the choices presented to the club by the Nominations Committee to elect the best Board of Directors for the upcoming year. If you meet the four criteria mentioned above and wish to run for an office, ask someone to nominate you. Conversely, if you know someone who wants to run for an office, by all means, nominate him or her when I call for nominations from the floor.

One last item.....November Prizes. Delta Club's operating budget does not provide the funds to buy the prizes given away at the November meeting. In all the years I have been on the Board, it never has. The Club has always depended on ticket sales and fund raising events to generate the funds to purchase the goodies given away at the end of the year. In light of the license restructuring that occurred this past April, the Board took a bold step and decided to set as its goal for the main prize the Yaesu FT100 HF rig. This radio costs almost as much by itself as what the Boards have spent for all the prizes in previous years. But this Board felt there would be enough interest in upgrading to General and Extra tickets and that there would be also a greater drive to purchase tickets for the drawing if we offered this rig as the main prize. This has not happened yet.

Therefore, after the October meeting, the Board might need to reconsider what the main prize could be and what else it can offer the membership in prizes for the November meeting. We have essentially one month left to buy tickets for the November drawing. Remember, the more tickets you have in there, the greater chance you have of winning something.

See you there, 73.

Kathy, KE4UYU

DEADLINES and OTHER NASTY STUFF...

I have always just absolutely hated deadlines, April 15th being one of the ones I most love to hate. Probably not alone in this regard! How does this relate to ye olde DARC, you ask. The CW licensing test is going from MULTIPLE CHOICE to FILL IN THE BLANKS at the end of the year. Folks, it's gonna be harder.

Also, we've had a bunch of folks who have successfully passed their General written exams, but haven't taken the CW test yet. Time is running out. CSCE's are good for only one year and the new test is, of course, from the new question pool. Do you really want to have to do it again???

Actually, learning CW isn't all THAT onerous. Consider CW just like another language - certain sounds mean certain things. You just have to learn what they are.

There are several ways to go about learning CW, but one thing in common to all is YOU GOT TO STUDY/PRACTICE on a regular basis. Some people have used code tapes and this includes listening in the car. People even do road signs in CW while driving on the road. Another pretty good tool is the Morse Tutor program available on the DARC webpage - <http://www.deltacub.org/software.html>

Morse Tutor runs in DOS, is menu driven, and extremely easy to use. Try it; you'll like it. Set aside a regular study time and stick with it for the two to four weeks that it'll take you to master 5 wpm! Two 15 minute periods per day should do it easily.

NET NEWS

After many years, David, KU4AS, had to give up the Saturday night net, due to work conflicts. Please welcome Rosie, K4MPQ, as our new Saturday night NCS. Also, Lance, N4GMT, and Bob - KF4NDH - have joined us as Alternate NCS. If you have any questions, comments, etc. about our net or would like to be an NCS or Alternate NCS, please let me know.

Anybody interested in starting a weekly PSK31 net on 80 meters?? Let me know.

73 and think CW,
Tom, K4TTA

VE CORNER

September sure has been a busy month - with the children back to school - all of the preparations, school supplies, traffic conditioning, etc. The Delta Club ARRL VE Team is no exception. Thank you Arlene AA5GX, Don KJ4PO, and Steve N4SG for helping with the session of September 12th. All of the VEs and all of the test takers were in place way before the 6:00 starting time. We got started about 5:45 and were finished before the start of the meeting. WE actually got to attend a full meeting!!!!

CONGRATULATIONS:
Richard Bonds KE4NTI General
Charles Gatlin KG4JQA Technician
James Osburn N4OXY General
Ralph Trammell KF4QFW General
Charles Tannehill KG4IRK Technician
Sandra Witt WD4MXE General
Ben Wofford KD5LSF Technician

Welcome to Ham Radio to all of the new Technicians.

REMINDER: Remember that when you come to upgrade your license to bring with you a COPY of your current license, any CSCE that may need to be considered, a COPY of any pre-1987 license or verification that you held that license to the testing session. This is needed wherever you test - at Delta Club or any other session.

Last month I promised some information about CORES, since I have had some questions posed to me.

CORES is a web based, password protected, registration system that assigns a unique 10 digit FCC Registration Number (FRN) for use when doing business with the FCC. Once CORES is fully implemented, every entity filing an application or paying a fee will be able to identify itself using its registration number. The same registration number can be used with ALL licensing and filing systems. The registration number will not replace call signs, license numbers, certification numbers, or other numbers in authorization of service documents. For general information please visit the FCC's Web site at www.fcc.gov and click on the CORES Registration link.

Everyone that has recently tested has noticed the need for your Social Security number on the 605 application form. This was for the Universal Licensing System that the FCC put into effect. When CORES goes into effect ALL of those that have been in the ULS system will automatically be in the CORES system. It seems, from this author's view point, that this will not be any problem for us, just another federal tracking program. The advantage will be to those that do business with the government under various agencies - they will only have need for one tracking number instead of two or three.

I am VERY GRATEFUL for all the questions from you, the Ham community. It keeps me ever so humble trying to find the many answers so dear to all of our hearts. If you are having trouble renewing your license on line - Remember that all you need to do is fill out a 605 at one of the testing sessions and I will send it in for you. Probably even FedEx it along with the testing session.

CHECK YOUR RENEWAL DATE ON YOUR LICENSE!!!!

See you at the next testing session on October 10.

73, Joan KN4PM
Delta Division ARRL VE Liaison
kn4pm@arrl.net

WHEN YOU USE THE REPEATER PART TWO

Delta Club is fortunate to have two main repeaters that cover a great deal of the Memphis area without any problem, and in many cases, they can provide adequate reception in a thirty-mile radius. But with any repeater, there are some areas where hitting the repeater is difficult and the quality of your transmission is less than optimum. Use the minimum power necessary to be understood in any situation, increasing it only when you must. If you cannot hold the repeater well enough to be understood, you may be too far away or your line of sight to the repeater may be obstructed. Sign off and try again when conditions are better. Conversely, if you and your contact are close enough, use a simplex frequency instead of the repeater.

Try to remember to allow the repeater to reset in between transmissions. There are two reasons to do this. The first and most important reason is that if a station needs to break in for an emergency, he or she can only do so if there is a break after one station unkeys and another one keys up. How do you know if the repeater resets? LISTEN FOR THE COURTESY TONE. If you don't hear it, the repeater has not reset and acts as if the initial transmission hasn't ended yet. This brings us to the second reason to allow the repeater to reset. The repeater will automatically reset itself and subsequently terminate your transmission after 3 minutes, 1.5 minutes during Drive Time, or rush hour. This is what hams call getting shot down. We all like to rag-chew going to and from work, but we all need to remember too there are other hams out there as well.

Now that you have the microphone keyed and talking, there are some dos and don'ts. Make sure you are in a QSO or trying to call someone. If you key up to warn other hams about a traffic jam, for instance, what you're doing is broadcasting and is forbidden by the FCC. Once you establish communication with someone, you can pass on that information about the traffic situation and be legal. Be aware of your language when you key up. The FCC does not allow swearing, off-color jokes and comments. We've all been in a situation, yours truly included, where something happens and something just slips out. We try very hard to make that the exception and definitely not the rule.

See you on the repeaters, 73.

Tom, K4TTA

SCOUTBASE 2000 update

Remember that the weekend of October 20 through October 22nd is the date for DARC's participation with the Boy Scouts of America in their Scoutbase 2000. They are expecting upwards of 15,000 Scouts at the event and we are invited participants. The same weekend is the Boy Scouts annual ham radio activity, Jamboree on the Air - JOTA - during which Scouts get together with ham operators and clubs and talk to other Scouts all over the world. This is a premier opportunity for us to "shine the light" of ham radio to a great number of young people. We are also going to be available to help the Scouts get their Radio merit badge (Thanks to Ed, KD5IEL, for the materials). Not only will this be a chance for us to demonstrate ham radio, but it will be a wonderful opportunity for everybody to operate several different modes, including SSB, CW, PSK31, RTTY, packet, etc. We've already had several folks sign up to help, but we could sure use SEVERAL more. If you're interested, please let me know.

73 and hope to C U there,
Tom, K4TTA

The Rocket-20 Antenna

For those of you who were intrigued (or amused) by the appearance of the antenna we were using for our PSK31 demonstration at the July club meeting, this article describes its construction so that you can build one for your very own!

When Freddy asked me to do the PSK31 program, I immediately began thinking about how I could easily construct a 20 meter antenna which was reasonably portable, easy to set up, and still perform well enough to provide a good demonstration of the PSK31 mode. I've had an old Hy-Gain 18-V vertical antenna which I've used off-and-on for 30 years with limited success, so I started thinking of a way to make it fit the bill. Those of you who know much about vertical antennas probably know that a good ground radial system is essential to efficient operation of such antennas. I had buried a few ground radials around my old 18-V, but it just never seemed to perform as well as my dipole. Going to the Internet, I found much more information about vertical antennas than I could handle! After reading everything I could find for a couple of days, I distilled the essentials down to a plan for what I would eventually call my "Rocket-20" antenna. I wanted to use this antenna primarily for 20 meter PSK31 at 14.070 MHz, so the standard formula of 234/14.070 yields a 1/4 wavelength calculation of 16.6 feet. So my top element should be 16.6 feet. Recommendations I had read indicated that I should add 5% for the radials, so I calculated that they should be 17.5 feet and further recommendations were for 4 radials. Since I wanted it to be portable, buried ground radials would be impractical. The next best thing (better by some accounts) is elevated radials, sometimes called "counterpoises". The desire for an elevated feedpoint, coupled with the desire for a moderate footprint, led me to decide to utilize the radials for legs to support the vertical element. I had the vertical element (the old 18-V antenna), but that was all. After perusing the aisles of the local Home Depot, I soon had the remaining parts for my new antenna. For the legs, I selected galvanized metal electrical conduit. This conduit comes in 10 foot sections, so I bought a bag of couplings with which to splice them together to get my desired length. For the junction box at the feedpoint, I selected a common square metal electrical outlet box. The legs would attach to this box with conduit couplings so, to insulate the top element from the legs, I selected a short piece of 3/4 inch PVC pipe, a 3/4 inch electrical wire nut to attach the PVC to the box, and 2 hose clamps to attach the top element to the PVC pipe. To insulate the legs from the ground, I inserted each leg into a short piece of PVC. For stability, I drilled holes in lengths of PVC for braces and ran the braces between each leg. Good old duct tape held the braces in place. The picture to the right illustrates the junction box with the couplings for the legs and with the PVC upper element support. Total cost, excluding the 18-V and the PVC, which was scrap, was about \$25. For those of you who don't happen to have an old 18-V, the vertical element could just have easily been made with 2 spliced pieces of conduit.

OK Ken, you say, this Frankenstein antenna is mighty ugly, but will it redeem itself when it's operational? Well, I finished duct taping it together, plugged it in, tuned 14.070 MHz (1.5:1 SWR without a tuner) and called CQ on PSK31. Back, immediately came W8FMR in Mt. Pleasant, SC, with a 599. He indicated my signal was 20 db over everything else he was hearing! Encouraged, I worked stations in Virginia, Ohio, Wisconsin, New Jersey and a station in France over the next hour. Not bad at all!

Ken, K4DIT

PACKET UPDATE

When running digital modes on the HF bands noise can be a big problem. The ability to block out interference to the digital signals allows you to get a clean copy in the mode you chose. For owners of the MFJ-1278/B multiple modes of operation are possible. MFJ now offers an add on DSP for the 1278/B. This provides automatic selection of the proper digital filtering to allow you to copy signals through the noise. The DSP will select the filter for Packet, AMTOR, Pactor, RTTY, ASCII, FAX, Color SSTV, Navtex, and CW. The add on MFJ-780 is added to your TNC to give it DSP capability. IF you have a 1278/B and want to move up to DSP filtering check out the MFJ-780.

James Butler
KB4LJV

AMATEUR HARDWARE UPDATE

When installing our mobile radios in the car we want the best performance possible. The best way to hook up the power connections is to make a short direct connection to the battery terminals. Making these heavy wire gauge connections to the battery also requires fusing for safety. This month's project is the DOUBLE FUSE HARNESS which allows for a safe connection to the battery. The double fuse arrangement is standard on new rigs and allows you total protection from shorts and ground loss. The fuses are also located near the battery to offer protection for the entire wiring harness. This harness allows you to hook up your older rig with safety. The DOUBLE FUSE HARNESS is easy to build and works to prevent wiring problems.

I will have the DOUBLE FUSE HARNESS at the meeting to show and answer questions on for those who wish to build up their own units.

SEE YOU AT THE MEETING
James Butler
KB4LJV

THE W4BS ELMER SHACK

Please feel free to contact any of our ELMERS to help you enhance your amateur skills. Anyone wishing to be added to the Elmer list please contact Arlene at A5GX@aol.com or 385-0995.

K4TTA (Extra) Tom Richardson 386-6268 k4tta@arrl.net (1,3,4,6,8,9,13,14)

KA4BLL (Gen) Ned Savage 363-9607 nssavage@juno.com (1,5,8,14, MARS, ARES/RACES, net control, traffic handling, emergency service)

KB4LJV (Extra) James Butler 294-2540 (2,7,9,11,13,14)

KD4NOQ (Adv) David Campbell 388-6166 kd4noq@juno.com (1,2,3,5,9,10,14, slow scan TV, ATV minor)

KU4AW (Extra) Ben Troughton 372-8031 bktrough@mem.quirk.com (2,4,8)

N9ACQ (Extra) Bill Kuechler 368-0532 wkuechl1@midsouth.rr.com (1,8,13)

WA2JQC (Gen) Gary Blinckman 794-5289 garyblin@midsouth.rr.com (1,7,10,14)

WA4MJM (Extra) Bill Hancock 853-7192 billwa4mjm@aol.com (1,2,8, emergency communications, ARES, MARS)

WMSQ (Extra) Paul Cline 385-0995 wm5q@arrl.net (7,8,10,14, RF safety, spread spectrum, trouble shooting, soldering, electromagnetic compatibility, CFR47 rules/reg.)

K4DIT (Gen) Ken Gregg 853-7384 k4dit@arrl.net (4,6,8,11)

Codes:
1. Antennas
2. APRS
3. Contesting
4. CW Operating
5. Direction Finding(fox hunting)
6. DXing
7. Experimenting/Circuits/etc.
8. HF Phone
9. Packet
10. Repeater Operation
11. QRP
12. Satellite
13. RTTY
14. VHF

CONTEST CALENDAR

Here are some of the contests coming up in the next few weeks...

California QSO Party, sponsored by the North California Contest Club, 1600Z Oct 7 until 2200Z Oct 8. <http://www.cqp.org>

Oceania DX Contest PHONE (formerly VK/ZL/Oceania DX Contest), sponsored by the New Zealand Association of Radio Transmitters Inc, 1000Z Oct 7 until 1000Z Oct 8. <http://www.nzart.org.nz/nzart/update/contests/occeania.pdf>

The TARA PSK31 Rumble The Fall Classic, sponsored by Troy ARA, 0000-2400z Oct 7, PSK31 only. <http://www.qsl.net/wm2u/rumble.html>.

Ten-Ten Day Sprint, sponsored by Ten-Ten International, from 0000-2400Z Oct 10. <http://listserv.lehigh.edu/lists/tenten-1/rules.html>

Pennsylvania QSO Party, sponsored by the Nittany ARC, 1600Z Oct 14 until 0500Z Oct 15 and 1300Z until 2200Z Oct 15. <http://members.aol.com/4b9rhdjv/paqsoparty/paqsop.htm>.

FISTS CW Fall Sprint, sponsored by FISTS International CW Club, 1700Z until 2100Z Oct 14. <http://www.FISTS.org>

Arkansas QSO Party, sponsored by the Ozark Wireless Society, 0000-2359Z Oct 21.

Illinois QSO Party, sponsored by the Radio Amateur Megacycle Society, 1800Z Oct 22 until 0200Z Oct 23. <http://www.megsnet.com/~jematz/rams.html>

QRP ARCI Fall QSO Party, CW, sponsored by QRP ARCI, 1200Z Oct 21 to 2400Z Oct 22. <http://www.qrparci.org/>.

Worked All Germany Contest, sponsored by The Deutscher Amateur Radio Club, 1500Z Oct 21 to 1459Z Oct 22.

CQ WW DX Contest, phone, sponsored by CQ Magazine, 0000Z Oct 28 to 2400Z Oct 29. <http://cqww.com/cqww/>

Ten-Ten International Net Fall CW QSO Party, sponsored by Ten-Ten International, from 0000Z Oct 28 to 2400Z Oct 29. <http://listserv.lehigh.edu/lists/tenten-1/rules.html>

For more information on these and other contests in October, please visit the ARRL contest page on the internet at: www.arrl.org/contests/months/oct.html

OCTOBER 10 CLUB MEETING

7365 HWY. 70

BARTLETT, TN

MEETING STARTS AT 7:00 PM

The October program will on Repeater Etiquette
presented by

Tom Richardson, K4TTA

VE TESTING:

Don't forget the monthly Volunteer Examiner testing session. Registration begins at 5:30p.m. and testing begins promptly at 6:00p.m. Please remember to bring two forms of identification the original and copies of any existing licenses or CSCE's you might have. Please be on time for registration, as you will not be allowed to enter the testing session after 6:00 p.m., so our volunteer VE team can finish in time to attend the club meeting. Call Joan Thorne 366-9722, if special testing arrangements are required.

W4BS REPEATER SYSTEM

146.82 net 8:00 PM

147.36 tone = 107.2

(BACK ON THE AIR AT A TEMPORARY LOCATION)

224.42 1.25 m reptr

443.20 patch, 107.2

145.03 packet / bbs

Other Important Contacts

VE Liaison
Joan Thorne, KN4PM
737-5795
joan@mem.net

Membership Chairpersons
Ben Barth, AF4TV
Eloise Barth, AF4TW
eloise@arrl.com

2000 Board of Directors

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