

THE ARCLITE

GARC OFFICERS

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KC5JWB

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• **Vice President:**

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• **TRUSTEE:**

Bob Jones

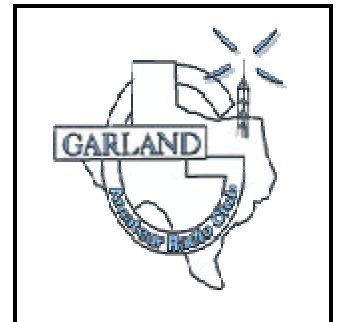
W5BJ

FROM THE PREZ June, 2000

Let me start by saying thanks to Jacob Schroeder (AC5NA) and the rest of the Schroeder family for the informative presentation they provided the club at the May meeting on their tower installation. Hopefully, those of you who are considering such a project were able to attend and got some helpful ideas for your project.

The first topic for discussion is Field day on June 24th and 25th at Bradfield Park in Garland. We will be meeting at the ECC at 8am on the 24th to load equipment and head out to the site (Castle & Country Club, Mapsco 19A-T) for setup. We

need to have the site set up and ready to go for the 24-hour contest starting at noon. We have secured the equipment needed this year for a successful operation, and hopefully we will have a large participation around the clock again this year. If you have not attended a field day, let me assure you that you are in for a treat. Getting to talk on HF for the first time is very exciting to say the least. Also, we will have dinner again Saturday evening at 7pm for GARC members and guests. Thanks to Chris Engleman (KC5COF) who is providing a smoker and wood, our main course



Where HAM RADIO IS FUN!!!

will be brisket this year. The club will also provide hot dogs, baked beans, chips, and drinks. We ask members to bring a side dish or dessert to round out the dinner. Hopefully, it will be an enjoyable evening for all. Continued See Planning...

tact Mark Durbin (KC5GNG) or Randy Dunning (KC5QHH) so

BOB JONES, W5BJ TEACHES WITH CLASS

Bob Jones will be conducting a class on Field Day and HF operations. The first half of the class will cover field day rules and operations, and logging contacts, The second

part of the class will cover HF operating, gentleman's band use agreements, dx procedures and protocols, courtesy on hf bands, and how to use qsl bureaus. Please plan to be at the

ECC at 9:00 AM Saturday June 17th. The class should conclude by 12:pm After the class, a lunch time social may be held at a local restaurant of the classes choosing.

PLAN AHEAD, THE STAR SPANGLED 4TH NEEDS YOU!!!

If you are planning on assisting with setup or teardown, please contact Mark Durbin (KC5GNG) or Randy Dunning (KC5QHH) so they can add your name to the list of volunteers.

The second topic of discussion is the City of Garland Star Spangled 4th on July 1st through July 4th. I would like to encourage all GARC members who have not had a chance to volunteer for this four-day event to please contact Clay

Orchard (KC5MXN) and do so if at all possible. I believe that we all know how important it is to continue our strong relationship with the City of Garland by providing support during this event.

I hope to see you all at the next GARC meeting on June 26th. A City of Garland EMS unit will present the program schedule for the evening. Their program should be very informative, especially since they are visiting us prior to the Star

Spangled 4th.

Until then...73's, Kaye

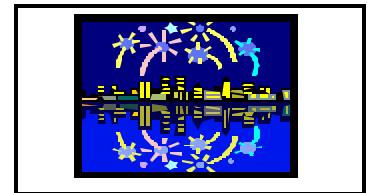
Field Day Officers:

Mark Durbin COMM

John Dake Safety

RandallDunning Power

Kay Dunkan Provisions



Star Spangled 4th of July



*Amateur Radio
License Plates
cost \$758.48 in
Great Britain*

HAM COMM 2000 NOT A WASHOUT

It hardly seems possible but Ham Comm 2000 is already history. This year mother nature tried her best to Rain the event out. I am sure the outside flea market vendors consider the event a great loss. From the inside vendors I have talked to, all reported that we came despite the rain, we saw, and in large

numbers, we bought! The upgrade test sessions conducted by the Lockheed ARC and Kilocycle Club of Fort Worth added many new hams, and upgraded many more. On Friday June 9th over 90 hams were tested. On Saturday June 10th over 140 were tested. Because the VE Team had several versions of

the test many hams tried until they passed. I did get a chance to view the new vendor area, it was down from years past with fewer vendors. The indoor flea market was a riot. Fred Maia, W5YI. Gordon West, WB6NOA, Jim Haynie, W5JBP were among the more notable attendees.

ARRL-VEC SEEING LIGHT AT END OF TUNNEL

ARRL-VEC Manager Bart Jahnke, W9JJ, says staff members and volunteers are making substantial progress processing the flood of amateur applications resulting from FCC restructuring. Jahnke says the initial surge of applications already has been processed, and fewer applications remain in the pipeline.

"We're making headway fast now, as the number of applications diminishes the further we get away from April 15," Jahnke said. He reports the ARRL-VEC sent some 6700 applications to the FCC last week and has been averaging a pace of well over 1000 per day. "Last Friday was our strongest day ever--at 1966 applications transmitted to FCC," he said. Since April 15, the ARRL-VEC has logged more than 12,000 General and more than 9500 Extra upgrades. The ARRL-VEC has logged in approximately 3800 test sessions since the beginning of the year.

Jahnke said he anticipates the time from exam session to license grant to continue to diminish from the current five weeks or longer to just over

three weeks by next week. On June 8, applications were being processed from May 12 test session receipts. Typically, the FCC processes applications within 24 hours of receipt, although there were some delays last weekend.

Still remaining in the queue are applications from another 507 test sessions. Jahnke estimates these will yield 600 new Technicians, 2100 new Generals, and 1400 new Extras. By the time ARRL-VEC personnel work their way through that stack, Jahnke said, the wait should be down to less than 10 days.

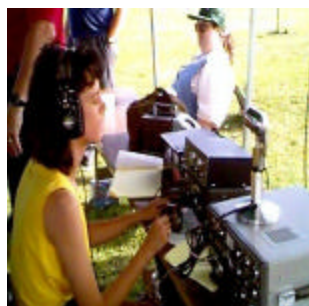
Jahnke reminded applicants that the best license grant information is available from the FCC's Universal Licensing System site, <http://www.fcc.gov/wtb/uls> (click on "License Search"). Typical Web call sign servers are at least 24 hours behind the FCC in updating license data, he said.

ARRL-VEC staff members and volunteers have been working nights and weekends--including Memorial Day weekend. Seven VEC staff mem-

bers, two temporary employees, and a half-dozen or more HQ staff volunteers from other departments have been whittling down the stacks of applications. "We're just about ready to lift the moratorium on sick days," Jahnke joked.

Test session processing status is available on the ARRL-VEC Web site, ><http://www.arrl.org/arrlvec/status.html>.

REPRINTED FROM The ARRL Letter, Vol 19, No 22



VP NOTES

It was a pleasure to see so many of the GARC members at the Ham-Com 2000 this past weekend.

It was fun to hear the many call signs of GARC members that were picked for door prizes.

It seems that at one time of Friday afternoon, we had about half the club gathered in front of my booth. K8DNE said that at one time a small cherry bomb might have taken out about half of his VE team. Thanks for visiting and for your comments.

The 4th of July activity is still needing operators. N5TIM, who will be the parade Marshall needs a total of 10 operators for the parade on the 4th. These folks will need to report at 5:00 pm in the staging area. If you wish to help with the parade, please contact John.

We have a great club and now is our first time this year to do our thing for the City of Garland.

See you at the next meeting.

73's Clay KC5MXN V.P.

UPCOMING EVENTS

MADD'er N Hell Bike Rally - June 27, 2000 -

MADD sponsored bike rally at Lake Ray Roberts. Rally starts and ends at Isle du Boise State Park (No fee on this day). A great day with communications, APRS and maybe even ATV. Please come out and en-

joy a day at the park. To sign on, please e-mail to : Jim Dye, N5JZ.

4th of July in Garland - July 1-4, 2000 -

The annual City of Garland, Texas Fourth of July celebration in old downtown. Events include a parade. Contact Clay Orchard, KC5MXN,

mcorch@juno.com to sign up for this event.

Walk to cure Diabetes - September 2000 -

The JDF walk at White Rock Lake. This annual event starts at Winfrey Point and goes half way around the lake and back. A fun time for all. Details soon!

The Tube vs. Transistor Or Tubes are from Mars Transistors are from Venus..

"A verbal contract is not worth the paper it's written on."

-Samuel Goldwyn

Vacuum Tubes, developed just after the turn of the century, were the devices that made modern electronic amplifiers viable. Tubes were used exclusively in audio and radio amplification products until the transistor was introduced by RCA in 1956. The transistor quickly replaced the tube as the device of choice in power amplifiers except the RF high power amplifier because of the lack of available devices to operate at the amateur power levels. That is until recently. This article is to hopefully enlighten us on one or two features of the transistor vs. tube amplifiers in the high power RF world. Tube amplifiers have about 50 to 60% efficiency and Solid State Power Amplifiers (SSPAs) have 25 to 30%. Something to consider when figuring the heat load in

your Shack!! Assuming amplifiers of the same power output level then SURPRISE Solid State amplifiers are going to generate more heat than tube amplifiers. Ever wonder about those heat sinks and why they are so big? Reliability is also a major concern for users of power amplifiers. The largest study performed on the relative MTBF's (Mean time between Failure) for the two types of amplifiers was accomplished by the satellite world and has indicated that the transistors are 15% less reliable. Surprised!! The reliability of the power supplies for the two types of amplifiers is about the same. Either High current Low Voltage (transistors), or High Voltage low current (tubes) seem to have the same reliability. However note that power supply for the transistor amplifier must be larger than

tube amplifier because of the efficiency issue. Assuming of course again that we are comparing amplifiers of the same output power.

The final issue Cost!! THAT'S UP TO YOU TO DECIDE..

Note that I have been only talking SSB amplifiers that must remain linear. The world of FM which utilizes saturated amplifiers and doesn't care about linear amplification is a different beast, and the source of another article.

My amplifier of choice is the Tube amplifier for power levels above 300 Watts. Of course the reader has to realize that I like Knobs, and switches, and meters and things that glow in the night!!
Mike Durbin K5MJD

Reprinted May 2000 'The Repeater'

HamCom Report: 1999/2000 Emergency Planning & Lessons Learned

Valli Hoski N8QVT led a late afternoon panel at HamCom on Sat. June 10, 2000 that provided a moment to look back upon our emergency planning experiences of Y2K. Although the audience was small, interest was high and comments were plentiful. Randy Dunning KC5QHH offered some insights on how "any plan which has not been executed at least twice is unproven" and "everything takes longer and costs more". Bob Jones W5BJ shared his views on

the increased visibility and importance that training provided for all interested parties (hams, families, police, other civic groups) in 1999.

Members of the audience commented that, in some communities, Y2K and emergency planning seemed minimal and no information was offered to the public. In summary, lessons learned centered on how individual resourcefulness as well as group collaboration and cooperation helped us to be prepared,

smarter in our preparation and more ready than before for emergency service. Our challenge is to keep our skills and our community's emergency awareness high and ready as we move into the 2000s.



"We apologize for the error in last week's paper in which we stated that Mr. Arnold Dogbody was a defective in the police force. We meant, of course, that Mr. Dogbody is a detective in the police farce."

-Correction notice in the Ely Standard, a British newspaper

Mark Durbin's Field Day Report

Ok, ladies and gentlemen it is that time again. Field Day is just around the corner on June 24 and 25th and we are just about ready. We will be at Bradfield Park again this year. Bradfield Park is on Castle Road between Country Club and Mars Road. We will be right in the middle between the ball fields and the swimming pool. Yes, there is a swimming pool. This pool is the public pool at the park. The only details I have are the open times, I think there is a nominal charge.

One small bit of business I need to take care of, I would like to get volunteers to be control operators. We need Extra class licensees so that we can operate all bands. The volunteers will need to be there at all times. We will be there

for 24hrs so if we can get several volunteers to split up the time that would be great. Also, we need to get the board members scheduled so that we have a board member there at all times.

We will be operating a 2A NTX (2 transmitters North Texas) Field Day station. This means that we will only have two HF (30Mhz and below) rigs on the air at any given time. This does not limit us on bands like 6 meters, 2 meters, 70cm, 23 cm, and others. Remember that we can also operate different modes CW, SSB, Packet, SSTV, ATV, and others. So everyone who is interested in trying different modes or other bands that we do not normally operate please let me know at kc5gng@qsl.net. We do need to keep the frequencies coordinated so that

we do not end up with interference or blowing out the receiver on any of the radios.

One of the main things to keep in mind is that we are supposed to be learning how good are emergency setup procedures and capabilities are. We should keep in mind that this is a simulation of something that could occur at anytime and we could be pressed into operation. However, on that note please remember that this is the simulation so everyone is to have fun, enjoy the eyeball QSOs, food, and hopefully the weather.

Thanks to everyone who is helping coordinate this effort and making the GARC Field Day a big success.

Mark Durbin
KC5GNG
Communications
Officer

Make a note on your Calendar for the following dates.

June 22 2000 Garland VEC Test Session Please arrive before 7:30PM

June 30 2000 Garland Fox Hunt Starts at 7:30pm Listen on 146.66 for details.

A current club roster can be downloaded from the club website.

Visit <http://www.qsl.net/garc/arclite/juneroster.pdf>

Contact a club officer for password.

MINUTES
BOARD OF DIRECTORS
GARLAND AMATEUR RADIO CLUB, INC.
JUNE 6, 2000

The regularly scheduled monthly meeting of the Board of Directors of the Garland Amateur Radio Club, Inc. was called to order at 7:00pm by the President, Kaye Duncan, KC5JWB. A quorum was present.

Those in attendance were:

Kaye Duncan, KC5JWB
President

Randy Dunning, KC5QHH
Training Officer

Allen Yoder, KB5GME
ARCLITE Editor

L. D. Carpenter, WA5LD
Secretary

OLD BUSINESS:

Preparations for Field Day were discussed. Bill Lewis, K5GHR, will provide the beam antenna. Randy Dunning will make available the needed rotor as well as alternate power sources. The President requested that Randy Dunning begin to prepare a list of volunteers to make the setup for Field Day. Chris Engleman volunteered to provide a smoker for food preparation. It was agreed to change the menu from burgers to brisket. Kaye Duncan will secure all food items. Williams Funeral Home will supply the tent. A letter was received from the Parks and Recreation Department granting permission to use Bradfield Park and to allow overnight

operation for the Field Day exercise. The setup crew and anyone wishing to help will meet at the ECC at 8:00 am on June 24.

General discussion of Star Spangled 4th. There remains a need for additional volunteers.

NEW BUSINESS:

The President presented a Resolution to be acknowledged by the Secretary appointing Kaye Duncan, Ed Hubbuch and Mark Durbin as authorized signatories for the club checking account. On a motion by Allen Yoder and Second by Randy Dunning, the resolution was approved without opposition.

Kaye Duncan discussed the need for maintaining the GARC information net and the attraction of more volunteers as net control. Several items were discussed for revamping the net. The training officer will develop a training class for net control operators. Kaye introduced the idea of a "Kid's Korner" column written by a youth club member to appear in the *ARCLITE*.

The President brought to the attention of the Board the need for consideration of actions of individual club members acting on behalf of the club without Club or Board authorization. It is the position of the Board that no individual club member may act alone or in concert with others in com-

mitting or binding the club to any obligation, membership or participation in any activity without express approval of the Club membership or Board.

OFFICER REPORTS:

The President reported on behalf of the Treasurer the balance in the club checking account is \$2,758.55.

Training Officer Randy Dunning reported on the activities of the TECH-CAMP 2000 and the opportunities for future GARC involvement.

ADJOURNMENT:

There being no further business, the President adjourned the meeting at 8:45 pm.

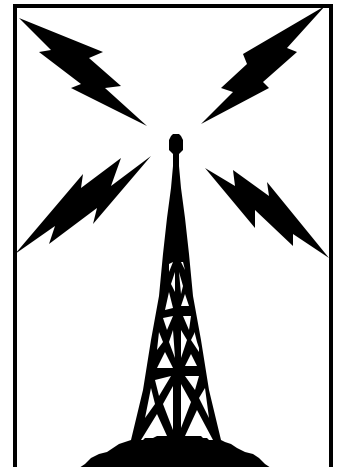
Respectfully submitted,

D. Carpenter, K5LD

Secretary

An Excellent article on Cheap Yagi Antennas for VHF/UHF can be found at the Clear Lake Amateur Radio Web site.

<http://clarc.org/Articles/uhf.htm>



MINUTES
GARLAND AMATEUR RADIO CLUB
May 22, 2000

The regular meeting of the Garland Amateur Radio Club held at the Garland Woman's Activities Building was called to order at 7:30 p.m. by the President, Kaye Duncan, KC5JWB.

The club was led in the Pledge of Allegiance by Don Duncan, KC5GLM; followed by the introduction of all members and guests present. Minutes of the April 2000 meeting were approved as printed in *The ARCLITE*.

OLD BUSINESS:

Willem van Tuijl and parents were present and Jacco van Tuijl reported on Willem's progress and prognosis. Kaye Duncan reported Steve Ackerman, KC5WYE was improving at home from recent by-pass surgery. The entire clubs joins together to wish Steve a speedy recovery.

NEW BUSINESS:

The club welcomed new members Bobby Rose, KC5VNW and John Myers, KD5JMV. John Galvin, N5TIM, stated the need for operators to assist the Mesquite Radio Club on June 3 for a bike ride. John introduced Wayne Baird, AA5NE, President of the Mesquite club and he gave details on the ride and took signups. Clay Orchard, KC5MXN gave new details for the Star Spangled 4th and encouraged members to sign up for shifts.

Field Day will be June 24th and 25th and the club still needs rotor and tri-band beam. The location will be at Bradfield Park.

Randy Dunning, KC5QHH pre-

sented an opportunity for the club to become involved with TECHCAMP 2000 being presented through the auspices of Collin County Community College. There is a need for counselors and clubs for resources and mentoring. The camp is 4 hours and will cost \$250.00 with the topic RDF. The cost does include a Kenwood HT for each participant.

STAFF REPORTS:

Vice-President Clay Orchard, KC5MXN, stated the June GARC program will be presented by a Garland Fire Department EMS team that will explain procedures for preparing for the Star Spangled 4th.

Treasurer Ed Hubbuch, KC5GGZ, reported the account balance at the start of the meeting was \$2,807.00; received \$40.00 in dues and expenditures of \$35.00 for the voltage controller for the solar panels. ARCLITE Editor Allen Yoder, KB5GME, reported printing costs for the last issue of *The ARCLITE* was the paper cost only, due to a contribution by his employer. Allen requested that his employer will continue to contribute the printing cost and suggested that the club offer advertising in return. Training Officer Randy Dunning, KC5QHH, advised that

an H-F Operator's Class would be conducted prior to Field Day. Signup will begin soon. Randy also stated a Connector Class may be conducted prior to Field Day. **PROGRAM:** The program, "The Step by Step Progression of Raising a Tower", was presented by the Schroeder family.

ADJOURNMENT:

All matters of business complete, the President declared the meeting adjourned. Respectfully submitted,

L. D. Carpenter, K5LD
GARC Secretary



GARC General Information

Repeaters:

The GARC operates two open repeaters for its members and for all local or visiting Amateur Radio Operators: Two meters: **146.66 (-)** and 70 Cmeters: **442.70 (+)**

Voice Mail:

For late-breaking news or to leave the club a message, call our 24-hour voice-mail line at **(972) 272-4499**.

Information Net:

GARC Information Net: held every Monday at 7:30PM on 146.66 (except for meeting nights and holidays). The net features current events, "swap shop", and a technical information exchange. All area hams are encouraged to check in. All members are encouraged to volunteer to be net control for this net. Contact the GARC communications officer, Mark Durbin (kc5gng@qsl.net), if you are interested.

Internet:

Information on the GARC can also be found on the world wide web address below:

<http://www.qsl.net/garc/>

The web site includes a map to the monthly meetings, classes, links to local public service events, and other items of interest to the hams in the Garland area.

Newsletter:

The Arclite is published monthly for the members of the Garland Amateur Radio Club. The contents of this

newsletter are copyrighted the date of publication, but may be reprinted without permission in any Amateur Radio Publication provided proper credit is given and the motive is the advancement of amateur radio and not for profit.

The deadline for Arclite materials is the 2nd Monday of each month. If you have any informative or educational articles that you would like to see included in this newsletter, or if you have items to be included in the GARC calendar, please send it to the Arclite editor.

Arclite Editor, 1027-B West Austin St.,
Garland, TX 75040

or emailed to the Arclite Editor at ady@yodertronix.com

Membership:

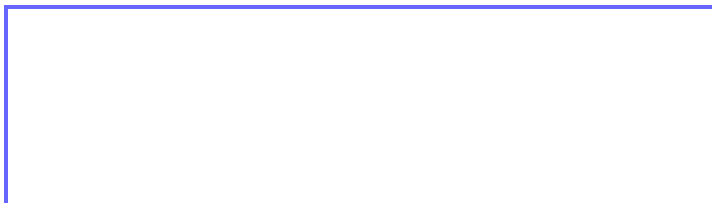
Membership forms are available at the GARC monthly meetings and on the GARC web site. Once the membership form and dues are submitted, new members are voted in at the next GARC monthly meeting.

The GARC membership roster is distributed to GARC members only and is included twice a year in the Arclite. It is not to be used for any commercial purposes.

To submit changes to the GARC roster (such as change of address, updated phone numbers, license upgrade, etc), send them to the GARC secretary, LD Carpenter (K5LD) at ldcarp@flash.net



Garland Amateur Radio Club
Emergency Communications Center (ECC)
1027 B West Austin Street
Garland, TX 75040



Please Rush!!!

Reminder

Star Spangled Forth is 4 Days Long this year, July 1-4, 2000.