

THE ARCLITE

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FROM THE PREZ

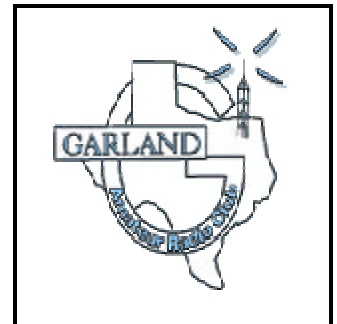
August, 2000 By Kaye Duncan

I want to start this brief article by saying thanks to Harold Yoder (N5MQA) and Bob Jones (W5BJ) for their informative presentation on QSL cards at the last meeting. I also want to remind everyone about the GARC QSL card contest that we will be judging at the next meeting. If you have any questions regarding the contest rules, contact Clay Orchard (KC5MXN). I look forward to seeing plenty of entries.

Thanks to Allen Yoder (KB5GME), we will be holding the December GARC Christmas Pot Luck Social on December 18, 2000 at the Freeman Heights Baptist Church on Garland Road north of Walnut and south of Buckingham. The festivities will begin at 7pm, so be sure to mark your cal-

endar. In addition we will be having live entertainment provided by club members willing to contribute to the fun. If you would like to add your name to the "list of performers", contact Jennilyn Schroeder (KC5YKZ) or another member of the Schroeder family to sign up. If my lessons go well, you might even get to hear me perform (scary, but true).

I promised to keep this short and sweet so I will. I just want to remind everyone that we have events coming up that we need volunteer communicators for. Check out John Galvin's web page at <http://www.qsl.net/n5tim/> for an updated list, or see his sign up sheet at the next meeting. In addition, Randy Dunning (KC5QHH) has set up



Where HAM RADIO IS FUN!!!

new training classes for 5WPM code and General Class Licenses. A schedule will be announced at the next meeting as well on August 28th. Our guest speaker will be Phil Silas (AD5X), and the program will be on "HF Mobile Antennas". I hope that you will make plans to attend. Until then.....73's, Kaye

NOW IS THE TIME...

Christmas is just around the corner and it is time to make plans now.

The GARC will sponsor a contest for the best Christmas light display. The rules are simple enough. Find a way to

combine ham radio and your seasonal display of Christmas Lights. Your entry must light up and be visible to the public. Must somehow have a ham radio tie in. Take a picture of your display and forward it to Kb5gme or bring a picture with

you to the December party. We will vote on the winning entry and award your prizes at that time...



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*Raising a
teenager is like
nailing Jell-O to
a tree.*

VP NOTES

Now is a good time to remind everyone the October's meeting is coming faster than most of us wish. It is time to get out your surplus gear and get it ready for the club auction. While we generally want you to bring HAM gear, it has been our practice to allow some computer related equipment into the auction. Please try to keep computer equipment as related to HAM radio as you can.

I am still receiving phone calls and notes from the Garland folks saying how wonderful it is that the GARC gives all the time that we do to supporting the City. Not only for the 4th, but also the other events that we help with. As my daughter's high school band motto goes. Stand tall, be proud, OH YEA.

I count it as pure joy, that I am privileged to know and work with each of you and I hope to continue to enjoy this companionship.

God bless each of you
73's Clay KC5MXN VP

QSL CARD CONTEST

Entries to the GARC QSL card contest will be judged at the August meeting.

If you have an entry it *may* not be too late to enter. Contact Clay kc5mxn for details.

DECEMBER PARTY NEWS

The December meeting/ potluck dinner and party will be held at Freeman Heights Baptist Church instead of the Garland Woman's Building. This is because the Woman's building is booked up for the entire month.

The church's fellowship hall is equipped with a kitchen and is large enough for our meeting.

**The church is located at
1120 N Garland Ave Gar-
land, TX**

ARRL AND REACT STEP TOGETHER

ARRL and REACT--Radio Emergency Associated Communications Teams--took some first steps together this summer. The ARRL Board of Directors approved a memorandum of understanding between the two radio organizations at its July meeting.

The ARRL was on hand July 26-28 for the REACT 2000 International Convention in Kissimmee, Florida. The event included attendees from the US as well as from Canada and Trinidad and Tobago. ARRL Southern Florida Section Manager Phyllisan West, KA4FZI, coordinated activities for ARRL's representation at the event with Walt Young, convention chairman for the 25th annual REACT gathering.

"REACT folks are dedicated to public service, responding dependably to cover emergencies, mara-

thons and other charity events," said West, who set up and staffed an ARRL exhibit table at the REACT event. "They operate mainly on GMRS and FRS to avoid problems of unlicensed CB channels, and are excited about working more closely with hams." West said that copies of the ARRL *Public Service Communications Manual* at the ARRL table were snapped up. "REACT folks were interested in how hams handle NTS and tactical messages," West said. While a lot of REACT members already are amateurs, West said she encouraged those who were not to get ham licenses "to enhance their ability to participate in emergency communications." While REACT has been associated primarily with Citizens Band in the past, the organization has widened its focus to embrace amateur and

other services. Young called REACT "just another radio group that is doing the same basic job as ham radio operators" that provides emergency communications when and where needed.

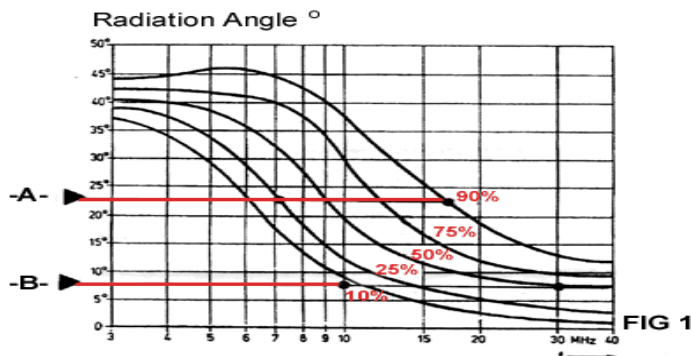
"The trick is to get various groups to work together," he said. Approximately one-quarter of the REACT conventioners were ham operators, and one of the official events at the convention was the Amateur Breakfast, at which West and her husband, Art, were guests. FCC Special Counsel for Amateur Radio Enforcement Riley Hollingsworth, K4ZDH, presented an FCC seminar during the REACT convention. REACT International has a Web site at <http://www.reactintl.org/>.

REPRINTED FROM
ARRL

The real art of conversation is not only to say the right thing in the right place, but to leave unsaid the wrong thing at the tempting moment.

Sommer Antennas & Antenna Height Info

For someone surrounded by houses, power lines and trees, a 30m/98ft high tower is desirable. A high tower is also desirable for someone situated on perfectly reflecting ground, such as saltwater. However, in most "real world" cases, the 30m/90ft height is less advantageous than you might think.



Why is this the case?

The angle of radiation can be so low that most of the signal is eaten up by ground loss. For the 21MHz, 24MHz and 28MHz bands, an antenna on a 30m/98ft high tower has a radiation pattern of 5 degrees or less (depending on ground conditions, the electrical height may be even higher and the angle of radiation even lower). At these low radiation angles, the ground tends to absorb a large portion of the signal. To overcome this loss, it would be advantageous to be able to lower the antenna to increase the angle of radiation at higher frequencies -- a remote-controlled variable-height tower. Hams with these towers have reported up to 12 dB "DX-gain" (e.g., on 21 MHz) by lowering the antenna from its full 30m/98ft height to 20m/66ft height.

Note that the low radiation pattern of 4-5 element beams has about 14-15 dB/i ERP "DX-gain.". This portion of your DX radiation can be partially or totally lost, at maximum tower height.

The best (only) solution for maximum DX results at higher HF frequencies? Provide a variable-height antenna tower.

Check for the most favorable radiation angle on medium-distance and long distance DX (typically 2000-12,000 miles / 3000 - 20,000 km) with the help of the chart above.

Example:

See Figure 1. At a Radiation Angle of 23 Degrees (See Fig. 1A) your "DX-chance" at 7 MHz is 25%, while at 18 MHz it is 90%. At a Radiation Angle of 7 Degrees (See Fig. 1B) your "DX-chance" at 10 MHz is 10%, while at 30 MHz it is 50%.

While professional radio applications generally require "long-time" connections, such as an S-4 signal for 5 hours, for amateur radio applications an S9 +40 signal for just ten minutes can often be more desirable.

Conclusion: Low radiation angles (typically 7-15 degrees) are effective for "big" signals over long distances for a relatively short period of time, which is usually adequate for DX purposes. However, if long-time QSOs are your goal, higher radiation angles may be better.

Information from "Neues von Rohde und Schwarz," Okt./Nov. 1973.

Sommer Antennas

P.O. Box 710

Geneva, FL 32732

Phone: (407) 349-9114 | Fax: (407) 349-2485

email: sommer@sommerantennas.com
www.sommerantennas.com

UPCOMING EVENTS

Walk to cure Diabetes - Septmeber 23, 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. To volunteer for this event, contact Bob Jones, W5BJ, bobj1@airmail.net or John Galvin, N5TIM, n5tim@arll.net or use the Easy Sign-up Form. More details soon!

White Rock Marathon - December 10, 2000 - Dallas' premier running event. This annual 27 mile run is one of the qualifying evets for the New York Marathon. Usually about 60 amateurs are needed to cover this event. Details to follow.

MINUTES – BOARD OF DIRECTORS GARLAND AMATEUR RADIO CLUB,

OFFICER REPORTS:

Arclite editor Allen Yoder, KB5GME, stated that Freeman Heights Baptist Church would make their fellowship center available to the club for the December meeting. Allen further presented ideas for contests and use of the ECC. Training Officer Randy Dunning, KC5QHH reported on the status of the current training class. The Technician class will be complete in two weeks with 5 students. There will be a code class in September and a General class later in the Fall. Randy further reported on the status of the Technician question pool that was being rewritten. There may be 2 or 3 classes later in the year for the Tech Camp kids, "Capture that License". Communications Officer, Mark Durbin, KC5GNG, reported that the 442.7 repeater was experiencing trouble and had an output of about 12 watts. He is working on locating another radio. Treasurer, Ed Hubbuch, KC5GGZ, reported the club checking account balance as of August 8 to be \$3,553.40. The club general liability and

contents insurance premium had been paid. President Kay Duncan, KC5JWB, offered the suggestion that future Board meetings be held at the main Library, thus not conflicting with classes being held in the ECC. She will check on the availability of a standing room reservation. There being no further business, the meeting was adjourned at 8:45pm. Respectfully submitted, L. D. Carpenter, K5LD Secretary

Hunting Season Opens

Dust off your dƒing equipment and join the GARC on the final Friday of each month for a challenging hunt. Somewhere within the city limits of Garland a hidden transmitter will hide in a public place.

Your job is to find it as quickly as possible. This game provides much needed training, usefull in locating lost operators malfunctioning equipment and the occasional turkey. Often after the first hunt finishes up a second, third is organized that same night.

Would you like your name in print? If there is enough interest we may start printing stats of our hunts here in the Arclite. Hunts start at 7:30pm on 146.66

The most frustrating thing in the world is when the key to success doesn't fit your ignition.

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.

Your two cents goes along way

If there is a article you want to see in the newsletter please let us know. We will bend over backward to provide it for you. We can use your comments to make the newsletter and the club

itself better. Is your employer hiring? Let us know, instead of having someone who is not working, we can help fill the position by NETWORKING.

Articles submitted to the Arclite for publication should be received on or shortly after the 2nd Monday of the month. This allows time to cover printing/ mailing considerations.

The Buck Stops Here

Take out a one dollar bill and look at it. The one dollar bill you're looking at first came off the presses in 1957 is its present design. This so-called paper money is in fact a cotton and linen blend, with red and blue minute silk fibers running through it. It is actually material. We've all washed it without it falling apart.

A special blend of ink is used, the contents we will never know. It is overprinted with symbols and then it is starched to make it water resistant and pressed to give it that nice crisp look. If you look on the front of the bill, you will see the United States Treasury Seal. On the top you will see the scales for balance- a balanced budget. In the center you have a carpenter's T-square, a tool used for an even cut. Underneath is the Key to the United States Treasury. That's all pretty easy to figure out, but what is on the back of that dollar bill is something we should all know. If you turn the bill over, you will see two circles. Both circles, together, comprise the Great Seal of the United States. The First Continental Congress requested that Benjamin Franklin and a group of men come up with a Seal. It took them four years to accomplish this task and another two years to get it approved. If you look at the left hand circle, you will see a Pyramid. Notice the face is lighted and the western side is dark. This country was just beginning. We had not begun to explore the West or decided what we could do for Western Civilization. The Pyramid is un-capped, again signifying that we were not even close to being finished. Inside the

capstone you have the all-seeing eye, an ancient symbol for divinity. It was Franklin's belief that one man couldn't do it alone, but a group of men, with the help of God, could do anything. "IN GOD WE TRUST" is on this currency. The Latin above the pyramid, ANNUIT COEPTIS, means "God has favored our undertaking." The Latin below the pyramid, NOVUS ORDO SECLORUM, means "a new order has begun." At the base of the pyramid is the Roman Numeral for 1776. If you look at the right-hand circle, and check it carefully, you will learn that it is on every National Cemetery in the United States. It is also on the Parade of Flags Walkway at the Bushnell, Florida National Cemetery and is the centerpiece of most hero's monuments. Slightly modified, it is the seal of the President of the United States and it is always visible whenever he speaks, yet no one knows what the symbols mean. The Bald Eagle was selected as a symbol for victory for two reasons: first, he is not afraid of a storm; he is strong and he is smart enough to soar above it. Secondly, he wears no material crown. We had just broken from the King of England. Also, notice the shield is unsupported. This country can now stand on its own. At the top of that shield you have a white bar signifying congress, a unifying factor. We were coming together as one nation. In the Eagle's beak you will read, "E PLURIBUS UNUM", meaning "one nation from many people." Above the Eagle you have thirteen stars representing the thirteen original colonies, and any clouds of misunderstanding rolling away.

Again, we were coming together as one. Notice what the Eagle holds in his talons. He holds an olive branch and arrows. This country wants peace, but we will never be afraid o fight to preserve peace. The Eagle always wants to face the olive branch, but in time of war, his gaze turns toward the arrows. They say that the number 13 is an unlucky number. This is almost a worldwide belief. You will usually never see a room numbered 13, or any hotels or motels with a 13th floor. But, think about this: 13 original colonies, 13 signers of the Declaration of Independence, 13 stripes on our flag, 13 steps on the Pyramid, 13 letters in the Latin above, 13 letters in "E Pluribus Unum", 13 stars above the Eagle, 13 plumes of feathers on each span of the Eagle's wing, 13 bars on that shield, 13 leaves on the olive branch, 13 fruits, and if you look closely, 13 arrows. And for minorities: the 13th Amendment. I always ask people, "Why don't you know this?" Your children don't know this and their history teachers don't know this. Too many veterans have given up too much to ever let the meaning fade. Many veterans remember coming home to an America that didn't care. Too many veterans never came home at all. Tell everyone what is on the back of the one dollar bill and what it stands for, because nobody else will.

> ~ Source Unknown ~

Wisdom is the reward you get for a lifetime of listening when you'd have preferred to talk.

JULY 2000 MINUTES
GARLAND AMATEUR RADIO CLUB MINUTES
JULY 24, 2000

*The force of love,
like the force of
gravity, is hard
to see but easy
to feel.*

The regular monthly meeting of the Garland Amateur radio club, held at the Garland Woman's Activities Building, was called to order at 7:30 pm by President Kay Duncan, KC5JWB. The club was led in the Pledge of Allegiance by Don Duncan,

KC5GLM. Minutes of the June 2000 meeting were approved as published in *The Arclite*. All members and visitors were introduced Grady Belt, W5TGF; Randy Dunning, KC5QHH; and Norman Fitzgerald, AC5ZG were recognized for upgrading to Amateur Extra during the previous month.

OLD BUSINESS: Clay Orchard, KC5MXN, reported on the Star Spangled 4th and extended a special thank you from the City to all volunteers. This year there were 845 man-hours volunteered. The city of hold an appreciation

function for the volunteers in August at the Firewheel Pavillion.

Additional net control volunteers were recruited for the GARC Information Net. The President requested the Information Net be included on the agenda for the July board meeting.

NEW BUSINESS:

By unanimous vote, the club welcomed new members Norman Fitzgerald,

AC5ZG and XYL Carol, KC5CYR.

John Galvin, N5TIM, reported on the upcoming community activities and

requested volunteers for the Juvenile Diabetes Foundation walk scheduled at White Rock

Lake on September 23.

On August 12, a Bike Ride will be held in Rockwall and Rowlett. Those wishing to volunteer should contact Scott Hammond KK5PP. The White

Rock Marathon will be held on December 10.

Sign-up for the event will begin soon.

STAFF REPORTS:

Randy Dunning, KC5QHH, Education Officer, reported a LINUX class will be conducted by Bill Richards, KM5VZ at 9:00 on July 29.

Randy stated there was still time for enrollment in the current Technician class.



August 2000

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
				Garc VEC Test	Fox Hunt	
27	28 GARC MEETING	29	30	31		

Same Net Time, Same Net Frequency

The Following nets occur on a regular basis throughout the month.

Every Monday night at 7:30 PM. local time except for meeting nights the GARC conducts a goodnews/info net on 146.66 MHZ

RACES holds nets on Every Thursday Night at 9:00 pm local time on either the 146.66 or the 147.24 repeater. In addition to these nets there are also additional RACES nets held at 8:00 pm local time on the first and third Monday of the month. These Sunday night nets are held on the 146.88

repeater. Only those stations who are authorized by the FCC or the regional Races authority may transmit on a Races frequency during Races nets unless there is a threat to life or property.

145.31 8:00PM Tuesdays
Mesquite ARC holds a goodnews/info net

146.94 8:00PM Wednesdays
FT Worth holds a info/swap net.

147.18 8:00PM Thursdays
Plano ARK holds a goodnews/info net

Dallas County REACT

REACT started per history as several folks on Chicago got road assistance and reported accidents or traffic tie ups using CB radio. This occurred Around 1961-62. One gentlemen Henry Kreer decided it was good and enlisted the help of Hallicrafter Radio Corp hence the Mike Logo, still used. Dallas County REACT Started in 1967 as a result of a group getting together to pick up and pack assistance packages for the south gulf coast as a result of a bad Hurricane. Picking up of phone in donations, monetary and material was facilitated with the use of CB Radio. The initial name of organization was Operation REACT Watch of Dallas County. A DBA of Dallas County REACT Inc has existed in the State of Texas for 33

(Continued on page 9)

(Continued from page 8)

years. In its early years with many many vehicles equipped with CB Radios the ratio at one time was quoted 6 in 10. Our organization was the CRW7 Community Radio Watch program of the Dallas police dept., DARC was #6 .Garland was #24. Smith Detective Agency was #1. Dallas P&L was #2, Lone Star Gas was #3. REACT with the help of all the CB equipped motorists accounted for nearly 95% of CRW Reports monthly. During the late 70's and early 80's Membership was normally between 450-500. As the accident reporting dropped off due to many things, we started to do more public event activity. The first Two MS 150 bike tours were done with CB Radio. As the air waves became more and more polluted the use of Class A began Rel-

tively small Hand held units while expensive were FM and more reliable for team activities. At Present time GMRS General Mobile Radio Service the new name for Class A is supported by Two Repeater operating on 2 of the 8 pair of frequencies designated. Note FRS Family Radio Service the low power hand holds recently introduced just below and in between the GMRS Service frequencies. In addition to CB GMRS members approximately 85% of DCR members also hold amateur licenses. Because of this DCRAC became the first REACT CB associated Amateur group to become an ARRL Special Service Club just as GARC is. At present time beside supporting the Two GMRS Repeaters and the 442.075 Mhz Repeater connected to the 146.88 Two meter DARC repeater during all RACES Activities in Dallas County. The 442.075 repeater is an open repeater

and its use by all operators is encouraged. Due to it's location a tone of 110.9 must be used for access. The repeater also transmits the same pl tone to avoid the inter mode interference experienced over many areas in Dallas. DCR also has available a 32 Ft mobile command trailer. A large step van supply truck (converted Maco like Snap On Tool Truck) also used to tow our crank up mobile mounted antenna used at various events. Such as special Olympics. Note in the MOU with ARRL the various groups REACT local and Internationally is associated with. Red Cross, Salvation Army, Baptist Men etc

DCR has operated the past three years at the Dallas White Rock Marathon helping to co-ordinate busses and other official vehicles.

September 2000

Sun	Mon	Tue	Wed	Thu	Fri	Sat
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
	GARC MEETING			GARC VE TEST SESSION	Fox Hunt.	

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:

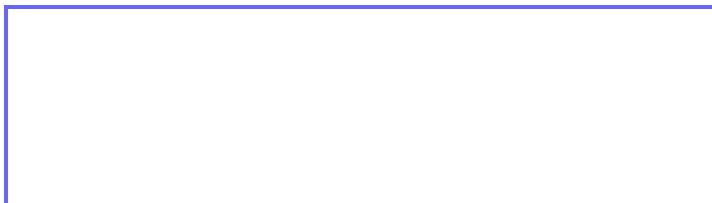
Membership forms are available at the GARC monthly meetings and on the GARC web site. Once the membership form and dues are submitted, new members are voted in at the next GARC monthly meeting.

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

The last Friday of month is Hidden Transmitter Night