



GARC OFFICERS

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W5BJ

**FROM THE PREZ
BY KAYE DUNCAN**

Well, here I am again, writing what is one of my final articles to you as club President. It seems hard to believe that I only have one more left, but that's the way it goes. Anyway, I will try to be brief in my comments to you, since I tend to get a bit long winded at times.

I want to start by conveying my thanks go to our January guest speaker (and one of our newest club members) Jim Haynie (W5JPB) for updating us on what's going on at the ARRL. It is comforting to know that we have him in our corner looking out for our interests, and we hope that he will visit with us again next January.

I want to remind everyone again about the annual Dallas County Skywarn School that will be held at the Garland Performing Arts Center this Saturday February 23th from 9am till 2pm. As usual, there will be informative information on storm spotting, and the latest and greatest storm videos. In addition, be sure to stop by the GARC booth. You can renew your dues at that time and also buy raffle tickets for the weather station that will raffled away in the afternoon. Ticket prices will be \$2.00 per ticket, or 3 tickets for \$5.00.

Another reminder for all club members is the GARC Board elections that are coming in March. Volunteers for the election committee so far consists of Garland Newman (KD5NKR) and Bob Brunskill (KC5GMZ). I do need someone else to step up to the plate and assist them in recruiting new board members. We have several positions that will be available this year so they will need help in contacting the membership. In addition, if there is a board position that you would be interested in running for, please contact one of the election committee members to let them know.

Finally, if you are interested in volunteering for a public service event, please check out John Galvin's web page www.qsl.net/n5tim/ for the current list. Also, check out the GARC web page at www.qsl.net/garc/ for the latest information on classes being offered, as well as other current GARC information.

Due to Skywarn School, we will not be having the GARC Breakfast this month. We will resume the 4th Saturday breakfast on March 23rd.

The next GARC meeting is on February 26th at 7pm. Dave (N5DAV) had lined up a really great program on APRS, and our guest speaker will be John Fullingim (WN5PFI). So, we hope to see you there. Until then.....73's, Kaye

MINUTES OF JANUARY GARC MEETING

BY ALLEN YODER, NG5Y

New Business

- 7:25 PM Meeting brought to order by President Kaye Duncan K5AYE
 7:26 PM Pledge of Allegiance led by Don Duncan KC5GLM
 7:28 PM Members and Visitors introduced
 7:40 PM Recent Upgrades acknowledged
 7:42 PM Report on Status of Clay Orchid KC5MXN
 7:45 PM W5JBP Jim Haynie Voted Life Membership
 New Members Voted in
 W6BMY Bill Evans
 KD5QKT Joe Talleson
 7:50 PM Bill Reynolds K8DNE gave report on VE activities for 2001
 Awards for VE participation were issued
 7:55 PM Kaye Duncan thanked Bill and his VE team for years effort.
 7:56 PM John Galvin N5TIM gave reports on Home Land Security
 Need for antenna on Leland Medical Center
 \$200.00 approved for antenna expense
 ARRL Public Service Honor Roll Announced
 8:00 PM Announcement made that March 2002 would be elections for board members.
 Need for a election committee to nominate candidates for GARC board.
 8:01 PM Announcement of a new Tech class forming after Feb 23 Sky Warn School
 Deadline for new Arclite materials the Friday before next meeting
 Ed Hubbuch KC5GGZ reported the club treasury balance to be at \$2769.00

New Members Voted in
 W5AW Jack Hunter
 W5AX Barbara Hunter
 W9ON Allen Shuff
 WD4CGF Patricie Shuff
 K5HW Bud Walton
 (Pending) Carrye Lethgo

There being no further business the business portion of the meeting was adjourned and after a short break W5JBP Jim Haynie gave a report on the status of several issues pending with the ARRL and the FCC...

Respectfully Submitted
 Allen Yoder
 NG5Y
 Club Secretary

HAM FEST CALENDAR

<u>Date</u>	<u>Event</u>	<u>Location</u>	<u>Information</u>
March 23rd, 2002	ARC Of Parker County	Weatherford, TX	817-594-8091
April 13th, 2002	Ham Expo	Temple, TX	www.tarc.org
June 7th & 8th, 2002	Ham-Com	Arlington, TX	www.hamcom.org
July 20th, 2002	North Texas Hamfest	Sherman, TX	home1.gte.net/wb5dcu/nortex00
August 3rd, 2002	Hunt County Hamfest	Greenville, TX	www.qsl.net/svara

THE AMATEUR-AMATEUR: ASSAULTING THE BATTERY

BY GARY HOFFMAN, KBOH
CONTRIBUTING EDITOR
WWW.ARRL.ORG

Last time on The Amateur Amateur: I described how the battery for my hand-held stopped holding a full charge, vented my frustrations regarding a battery seller, and went on to discuss my dubious attempts to revive my failing battery.

I had zapped and frozen my ailing NiCad battery pack and gotten nowhere. I didn't even know if the so-called "whiskers" said to form inside NiCad cells--and which I was trying to destroy--were real or just in the mind of a chemist who had inhaled too many fumes. All I knew was that if the battery hadn't been dead before, I surely must have killed it. I decided to perform an autopsy.

Battery cases are *not* really designed to be opened, so my battery dissection was not particularly neat. Once inside, I found 10 cells--individual 1.2-V NiCads--of about the same diameter and half the length of regular AA cells. I found a local vendor who sold replacements and bought 10 of them. I then carefully measured the charge of each of the old cells (yes, I actually know how to operate a voltmeter) and determined that two of them were in bad shape. I removed the two bad cells, replaced them with new cells, closed up the case and everything worked perfectly. Yeah, right.



Battery and battery-ettes--the cells found inside.

You know me better than that. Of *course* that's not what happened. Everything was true up until "I removed the two bad cells . . ." The cells were linked in series by what appeared to be metal tape. I tried peeling off the tape. Nope. It wasn't held on with glue. I tried unsoldering it. That didn't work either. I examined the cells and "tape" under a magnifying glass and found tiny little marks indicating the tape had been sort-of *riveted* to the cells. I busted a lot of "rivets" and tore up much of the tape, but did manage to extract the two bad cells. I soldered in two new ones and closed up the case.

Before I could attach the repaired battery to a charger, I noticed it was getting warm. No, hot. *Very* hot. I suddenly felt like I was in a World War II movie holding a live grenade in my hands. I resisted a strong impulse to throw the battery through the nearest window then drop to the floor and cover my head. Instead, I quickly disassembled the battery and yanked out the collection of cells. It only took a moment to find the short circuit. I *carefully* reassembled the package and closed the case. It stayed cool this time.

I charged up the repaired battery. After one day's use, it *still* acted as if two cells were bad. I disassembled it again. I checked each cell again. There *were* two bad cells--two of the older cells that had checked out okay the first time. I replaced them.

The same thing happened the next day. And the day after that. I felt like I was in some sort of time warp in which the same events repeated themselves day after day (remember that movie, *Groundhog Day*?). Every time I replaced two cells, two more of the original cells would die. Each time I broke the "riveted" tape, things got messier. And for some reason, each time I opened the battery case, it was harder to close.

I gave up the idea of replacing cells. It just wasn't working. Replacing *all* of the cells with new ones cost about the same as just buying a new battery. I decided that doing the latter was easier and safer. But why had my battery died in the first place?

CONTINUED ON PAGE 4



Battery charging station: Check the oil, wash the windshield, and charge s-l-o-w-l-y.

I heard a lot about something called the "memory effect." This is, by far, the most talked-about "problem" with NiCad batteries. I did a little research into it and found a vast amount of conflicting information. Some people described the phenomenon in great detail. Others said that the memory effect existed only in certain NiCads, and definitely not the ones in popular use. Yet others insisted that the memory effect was nothing more than an urban legend. Egad! Who was an amateur amateur to believe!?

I was not a battery scientist. I didn't know which "expert" to believe. I knew, for sure though, that the memory effect was *not* what ailed *my* battery. The reason my battery failed was that the fast charger had cooked it. Literally.

Fast chargers pump electrical energy into the batteries at such a high rate that the batteries heat up. The heat eventually causes a chemical breakdown. Many

battery vendors do not mention this when you buy a fast battery charger. They will sell you batteries, then sell you the means to destroy them, apparently so that you will have to buy more.

There is another well-known battery vendor that sells nickel metal hydride (NiMH) batteries. If you browse this vendor's Web site and look *very carefully*, you will find a very small message telling you that the vendor recommends using only *slow* chargers on NiMH batteries. It seems that fast chargers can cause NiMH batteries to explode. The vendor sells a special fast charger that apparently shuts itself off when the battery gets hot (notice that I didn't say *if* the battery gets hot, but *when* the battery gets hot). I guess it's more like putting it in a crock pot than putting it in a microwave oven.

I kept checking the Internet, but cold-fusion batteries hadn't hit the market yet. Since it looked like I was stuck with NiCad and NiMH batteries for a while, here's what I did.

First: I threw away my fast charger and bought *three* battery packs. I rotate these in service. When battery A is in the radio, battery B is a backup and battery C is in the slow charger. At the end of the day I simply put A in the charger, B in the radio, and C is the new backup. None of them gets cooked, stewed, or nuked.

Second: I received a lot of advice on the proper way to "zap" NiCads back to life. Except for one hellishly dangerous recommendation (use a stun gun), all of the suggested techniques required much more time, equipment, and effort than I'm willing to invest. Although I'm taking the easy route (just buy a new battery), I do wish to thank everyone who wrote to me.

Third: Even *dead* NiCads are dangerous. I was considering having a nice, quiet burial ceremony at a toxic waste dump. Before I actually did that, however, I found information on how to recycle them on the Missouri Household Hazardous Waste [Web site](#). (Your state's recommendations and regulations may vary.) [The Rechargeable Battery Recycling Corp](#) is a nonprofit organization that provides recycling assistance in the US.

Do I have any final advice? Yes. If it takes a hacksaw to open something, there's probably a reason for it, and it's best left alone.



**Dead but still deadly.
Dispose of carefully.**

For additional information, see "Honey, They've Shrunk the Batteries!" by Ken Stuart, W3VFN, in December 2001.

Editor's note: ARRL member Gary Hoffman, KB0H, lives in Florissant, Missouri. He's been a ham since 1995. Hoffman says his column's name-- "The Amateur Amateur"--suggests the explorations of a rank amateur, not those of an experienced or knowledgeable ham. His wife, Nancy, is N0NJ. Readers are invited to contact the author via e-mail, grh@heartbeat.wustl.edu.

WE STUDIED, WE TESTED & WE SUCEEDED

YEAR 2001 VE RESULTS

BY BILL REYNOLDS, K8DNE

DATE	NEW	UPGRADE	PARTIAL UPGRADE	FAIL	TOTAL	PASSED	FAILED	TOTAL
JAN01	1	9	0	1	11	7	2	9
FEB01	8	2	0	3	13	14	7	21
MAR01	4	2	0	2	8	4	5	9
APR01	12	1	3	6	22	15	10	25
MAY01	17	2	0	17	36	19	20	39
JUN01	9	2	2	3	16	14	8	22
JUL01	5	3	2	10	20	15	14	29
AUG01	1	2	0	0	3	3	0	3
SEP01	7	4	1	3	15	11	6	17
OCT01	4	4	0	0	8	10	1	11
NOV01	5	0	0	0	5	5	0	5
DEC01	6	2	1	1	10	13	3	16
TOTAL	79	33	9	46	167	130	76	206

As seen from the above table, the Garland Area V.E. Team is responsible for upgrading 31 amateurs and creating 79 new amateur radio operators during the year of 2001. The team has provided services of some kind, including single element testing or partial upgrading, to 167 applicants.

2001 EXAMINATION TEAM MEMBERS:

Dennis Alsup	W5DDA	Wayne Baird	AA5NE	Terry Barlow	AC5AX
Eugene Barnard	W5QPP	Bob Brunskil	KC5GMZ	Mike Collins	KJ5VL
Gerry Crenshaw	WD4BIS	Janet Crenshaw	WB9ZPH	Randy Dunning	KC5QHH
William Hammon	KA5SOT	Robert Ivey	WA5OYE	Wayne Lussmyer	N5LDD
Max Mondragon	KC5INV	Dana Moses	KD5MZO	Garland Newman	KD5NKR
Jim Paltjon	KD5WE	Ed Prasifka	KF5NQ	Laura Richards	KD5KJC
William Richards	KM5VZ	Jacob Schroeder	AC5NA	James Schroeder	KC5EOR
Jennilyn Schroeder	KC5YZK	Sharon Schroeder	KC5ZGK	Wayne Williams	WT5J
Allen Yoder	NG5Y	Harold Yoder	N5MQA		

Anyone wishing to become a team member, please contact K8DNE and I will do all the paperwork necessary. The basic requirements are that the V.E. applicant be at least 18 years of age, and hold a general, or higher, class amateur radio license.

Submitted by: W. H. (BILL) REYNOLDS K8DNE
 12-28-01 8821 WILLOWBROOK DR.
 ROWLETT, TX 75088-4614
 972-475-9407 V.E. RECORDING
 E-MAIL = k8dne@airmail.net

UPCOMING EVENTS

April 6, 2001 - Mesquite Rodeo Parade - The Ham Association of Mesquite (HAM) finds itself in need of radio operators. On Saturday April 6th, the 47th annual Mesquite Rodeo Parade is scheduled. We can also use those folks that have an interest in amateur radio and do yet have their license or just interested in helping with their time. On April 6th we gather between 8:00 a.m. to 8:30 a.m. at the corner of Newsom and Carver in Mesquite for our assignments. Our part is usually completed between 10:30 and 11:00 a.m. Any interested folks can sign-up by sending an e-mail to [Rob Ashmore at rashmore@swbell.net](mailto:Rob.Ashmore@swbell.net) or [Wayne Baird, AA5NE](mailto:Wayne.Baird@aa5ne.net). On the HAM Tuesday on-air net, open to all licensed amateurs, we will take names of those that can volunteer a few hours of their time. The net is on Tuesday evening on the HAM repeater at 145.310 (-) with a PL of 162.2 at 8:00 p.m. This repeater will be used for talk-in on Saturday morning.

April 7, 2002 - MS Walks - Sunday MS Walk in Dallas and Plano, Texas. To volunteer for the **Dallas** event, contact John Galvin, N5TIM, n5tim@arrl.net or use the [Easy Sign-up Form](#). To volunteer for the **Plano** walk, contact Jonathan Sennetti, K5VX at k5vx@arrl.net or use the [Easy Sign-up Form](#)

April 13, 2002 - MS Walks - MS Walk in Denton and Waco, Texas. For information on this event, contact John Galvin, N5TIM, n5tim@arrl.net. Still need amateur radio coordinators for these events.

April 27, 2002 - WalkAmerica 2002 - March of Dimes walk at White Rock Lake, Dallas, Texas. Would like to have a ham photographer work with us this year. To volunteer for this event, contact John Galvin, N5TIM, n5tim@arrl.net or use the [Easy Sign-up Form](#).

May 4 & 5, 2002 - The Bennigan's MS 150 - MS Society's annual Red River Challenge 150 mile bike ride. James Marple, KB5ZDG can be contacted at jmarple@dhc.net to sign-up and/or get additional information. [Easy Sign-up Form](#) - MS150 [Volunteer Information](#).

Please visit www.qsl.net/n5tim for all the latest event information.



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Garland Amateur Radio Club Application for (circle one): New Membership or Renewal

Date: _____

Call Sign:	License Class (Circle one): Novice Tech Tech+ General Adv Extra
First Name:	Last Name
Street Address	
City:	State: Zip Code:
Home Phone:	Work Phone (Optional):
Pager # (optional):	E-Mail (Optional):

General Information

(circle your response)

Are you a paid member of the ARRL? YES NO

Are you a RACES member? YES NO

Are you interested in Public Service Events? YES NO

What are your areas of Interest/Expertise? _____

Membership Type:

	Mar-May	Jun-Aug	Sep-Nov	Dec-Feb
New or Renewal	<input type="checkbox"/> \$15.00	<input type="checkbox"/> \$11.25	<input type="checkbox"/> \$7.50	<input type="checkbox"/> \$3.75
Senior (65 or over)	<input type="checkbox"/> \$10.00	<input type="checkbox"/> \$7.50	<input type="checkbox"/> \$5.00	<input type="checkbox"/> \$2.50
Each Add'l Family Member	<input type="checkbox"/> \$5.00	<input type="checkbox"/> \$3.75	<input type="checkbox"/> \$2.50	<input type="checkbox"/> \$1.25

Additional Family Member Info (put additional family members, if any, on the back of this sheet):

Name: _____ Call: _____ License Class: _____

Name: _____ Call: _____ License Class: _____

Payment Type:

Cash Amount: \$ _____

Check Amount: \$ _____ Check Number: _____

Please make checks payable to: Garland Amateur Radio Club and mail or give to:

**GARC Treasurer
1027B West Austin Street
Garland, TX 75040**

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MARCH 2002

SUN	MON	TUE	WED	THU	FRI	SAT
					1	2
3	4 GARC Info Net - 7:30	5	6 Garland & Rowlett Siren Test	7 Garland RACES	8	9
10	11 GARC Info Net - 7:30	12	13	14 Garland RACES	15	16
17	18 GARC Info Net - 7:30	19	20	21 Garland RACES	22	23 GARC Breakfast
24/31	25 GARC Meeting - 7:00	26	27	28 VEC Testing - Garland	29	30

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 good news/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 Sunday 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 Ham Association Of Mesquite holds a good news/info net

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

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

GARLAND SIREN TEST

The Garland early warning sirens are tested by the city the first Wednesday of each month at noon, weather permitting. Tests are generally conducted on the GARC repeater at 146.660Mhz with 600Khz negative offset.

Amateur radio operators wishing to help with these siren tests should contact Bob Jones, W5BJ if interested in helping out.

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 kd5lgu@arrl.net

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, Allen Yoder (NG5Y) at ng5y@atubi.com.



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



Please Rush!!!

Reminder

GARC 4th Saturday Breakfast - Grandy's at 9:00 am (Garland Rd & Austin St.)