



March 2017

The Newsletter of the Alford Memorial Radio Club



The Secret Life of Dipoles



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TOTR EXPLOSION CONTEST ACTIVE AMRC MEMBERS **REMEMBER!!!!!!!!!!!!**

Logs must be submitted electronically by midnight on March 26, 2017 to AB4YL@arrl.net. An Excel spread sheet log will be uploaded to the club Facebook page & Yahoo site, as well as emailed out on the Club's Yahoo email reflector.

President's Message

Greetings fellow ham radio enthusiasts and members of the Alford Memorial Radio Club! I hope everyone is having a great winter/spring crossover. Before all the leaves fill up the trees, get your antennas that are up in those trees seen to, tightened up or untangled. I'm sharing this from experience.

Gretchen Mann, W1MKW, will be editing the newsletter. Please send your information to be placed in the Totr to her at gretchelby@gmail.com

Now that the **Top of the Rock Explosion Contest** is in full swing, I wanted to share some of my observations. I personally found that my CTCSS and offset, which I downloaded from the RT systems software wasn't exactly matching the club's 440 repeater. So right off the bat the TOTR contest helped me fix a problem I didn't know I had. Another member who was trying to hit the 440 repeater found the same issue on his radio. So, if you're not getting into a repeater, recheck all your settings and programming. Last year we had fun with earning points for new hams contacting old hams and getting points. The top winners will receive gift certificates to HRO again this year. Rules for the contest can be found [here](#). There is a log sheet which you should use and it is found [here](#).

Publix Marathon March 19. Atlanta track club volunteer site to sign up. March 11th for orientation and assignments will be at the DeKalb EOC.

Tom Roderick, WA4GIM will present our April program by sharing his experience with the work he did in his shack this past year.

Save the Date: Color Vibe 5K Run, May 20th Stone Mountain, [click here](#) for more race info. The Color Vibe 5K Run is a fun, quick event where our club members provide communication for the smooth operation of the run, safety for the runners, as well as coronation for the traffic congestion within the city of Stone Mountain. It's a wonderful chance for you to use your HT and communication skills and public relations skills to promote the hobby and our club.

Field Day in June, a special event day the ARRL event, camping, picnic, games and fun. We will back at Stone Mountain Park again this year so make your calendar for June 24th and 25th. [Click here](#) for ARRL information on Field Day. Remember to mark your calendar for all three days, Friday to help setup, Saturday to finish setting up and start the festivities, and Sunday to finish the fun and pack up/clear out.

A successful field day requires a lot of commitment from all our members. It's never fun for a few members to do most of the work, like we did last year. Please plan to come out and support your club each day until we're finished and packed up

so we can continue to participate in the fun event. We will have a signup sheet with times that you plan to help.

July 4th the 48th Annual Peachtree Road Race. It takes more than 3,500 volunteers to support the AJC Peachtree Road Race and its 60,000 participants! They will need many ham radio volunteers this year.

[Click here](#) for volunteer information and registration.

Discussions at the Alford Memorial Radio Club Executive Board meeting this past week were as follows: Tom WA4GIM will present our April program by sharing his experience with the work he did in his shack this past year. Pat will give us "Monthly Tech Tips" on how to overcome problems in our shack and new ideas to improve our fun in the hobby. We're planning on a September club sponsored area wide "Fox hunt". Ruth & Jim Penland will assist in updating our bylaws and constitution so we can adjust club dues and other issues that will be discussed at near future club meetings. Jim Penland (N4RAR), has volunteered to be our club legal counsel.

In the past our clubs' major income has been from our Hamfest, which in the past years has declined in relationship to the decline of members in the hobby nationwide, ham related items being readily accessible at online stores, and rising gas prices, just to name a few. Subsequently with these negative financial consequences, we're looking at having a family style cookout on Saturday for field day. Also, we are considering doing some club fundraisers as soon as it can be organized and implemented.

If you're not signed up to receive messages through the Alford Memorial Radio Club Yahoo Group, You should [click here](#) to stay informed and post your response. Our TOTR newsletter, Club meeting minutes, pictures, club financial reports, as well as some presentations will be available under "Files and Attachments".

We'll see you at the club meeting, 73
Mike



AMRC March Meeting Program

Thursday, March, 9, 2017, at 7:00 pm

How to be an Effective Net Control Station

by Chuck McCord, KK4TKJ

The Alford Memorial Radio Club 76 Repeater is located on top of Stone Mountain, approximately 110 ft. up the TV transmission tower. Echolink is sometimes available on this repeater.



In February of 2015 the old Micor 145 and 444 repeaters and the cabinets associated with that equipment were



replaced with brand new Kenwood commercial grade repeater equipment .



Located at Exchange Park, up and running beautifully,

Up and Running at Exchange Park.



April

Program: To be determined
“The Secret Lives of Dipoles”

April Meeting 2017
Tom Roderick WA4GIM

Read his article in this month's Totr on page 9! Why did he go through all the trouble to make his own HF wire dipole? In April, come to the meeting to learn how he did it.

AMRC Membership Page

AMRC Membership

Welcome

**As of Feb. 28, 2017 we have
101 members**
**Please re-new your membership
for the January– December 2017
year. Please see below for links to
renew.**

AMRC MEMBERSHIP

To become a AMRC member, or to renew your AMRC membership, please visit our website

<http://totr-radio.org/membership/memapp.htm>

To make changes to your AMRC membership (moved, new email address, new phone number, etc.), please email the Membership Chairman-
steve.n4tty@gmail.com

You can **renew or update** your Amateur Radio license information with the FCC at their website for free

<http://wireless.fcc.gov/uls/index.htm?job=home>

To update your ARRL information, please visit their website - <http://www.arrl.org>

Membership Chair: Steve Garrison, N4TTY

**AMRC Club Membership 2017 Dues
Are Due.**

**Club Dues Help Support Our
Repeaters and Club Activities**

HAPPY BIRTHDAY!!

From All of Us at AMRC

Birthdays by, K4GZZ

3/2 Sharon Paschal
3/3 K4IT Jerry
3/4 KM4EQS Bill
3/4 Joline Maxwell
3/5 N4MPC Pat
3/5 KJ4LUT Lihua
3/6 K7SZ Rich
3/7 KM1FDM Matt
3/8 K2TEC Mac
3/9 KK4UGG Judy
3/9 KI4LYM Hugh
3/9 KV4WH David
3/9 KK4CQJ Elliot
3/11 KK4KHS Mike
3/12 WA4BXA Jay
3/15 WA4VHF Ed
3/17 N4RAR Jim
3/17 KG4KKN Patrick
3/17 N4UJ Gene
3/19 KD8KDC Jody
3/21 KW4JK Greg
3/24 WA6NGC Mark
3/27 KK4ZIJ Phil
3/28 KE4RED Matt
3/30 Susan Coletti
3/31 W4ZOT Barry

TOTR EXPLOSION CONTEST ACTIVE AMRC MEMBERS REMEMBER!!!!!!!!!!!!!!

Logs must be submitted electronically
by midnight on March 26, 2017 to
AB4YL@arrl.net. An Excel spread
sheet log will be uploaded to the club
Facebook page & Yahoo site, as well as
emailed out on the Club's Yahoo email
reflector.

Famous HAM of the Month— Chet Atkins, W4CGP (1924-2001)

Mr. Guitar, Chet Atkins, known as Chester to his friends was born in East Tennessee in the Clinch Mountain area. As a youngster he was forced to live with his father in Georgia after he escaped death from severe asthma attack. He attended school and would play guitar in the boys bathroom all day as he liked the echo.

As a teenager in the 30's he loved electronics and built his first one tube radio by hand. He also crafted his first amplifier for his own guitar.

He started in show business playing the fiddle, but was found to have a distinct guitar picking sound in which he could play melody and harmony at the same time. He was labeled as a country artist but was also quite well versed in jazz. He wrote and played for the Carter family and also the Everly Brothers. He was well loved in his community of musicians and became well loved as an individual by his fans. He was easy going and made music look simple.

He was thrilled when HAM radio became available and turned in his first call sign for the vanity call W4CGP, "CGP" stood for Certified Guitar Picker. His shack was installed in the kitchen next to the dinette so he could tune the bands during breakfast and dinner. He love to listen to the banter on 160 meters and he kept anonymous by doing CW and calling himself "CB". He had a Hammerlund HQ-170AC receiver followed by a Collins KWMZA transceiver that was passed down to a band member later who fully restored it. Chet suffered from cancer for some time and passed of complications from it. He was silent key at age 77. To see Chet in his shack calling CQ go to <https://vimeo.com/26445462>.



UP-COMING PROGRAMS FOR ALFORD MEMORIAL RADIO CLUB

Join us for our weekly
breakfast gathering at
7AM most Saturdays at:
Metro Café Diner

1905 Rockbridge Rd. Stone Mountain, GA 30087

2017 Officers

Mike Smith, KK4KHS President

Pat De Loe, N4MPC Vice President

Allison Lynch, AB4YL, Secretary

Greg Mann, KM4RKT, Treasurer

Public Information for Alford Memorial Radio Club

See Steve Vogel, W4PSV or email him at svdec@bellsouth.net with questions about club public events or for sharing public event information.

From Agnes Scott College:

The next Observatory Open House will be Friday 3/10/2017.
The Shack will be open.

3/7/2017- Peak Week Spring Break Program Forum "Social Networking Before The Internet. What is HAM Radio?" by Steve Vogel W4PSV

Merchandise from Alford Memorial Radio Club

Stop by the Merchandise table at the next AMRC meeting and order your Ham vest, check out the new AMRC polo shirts with club logo and your call sign.

See Richard Dickson, W4WRD or email him at richie707@aol.com with questions about items, or size and cost.

2017 AMRC Officers, Committee Chairs

Mike Smith, KK4KHS
President
smithm71@yahoo.com



Pat De Loe, N4MPC
Vice President
patdeloe@gmail.com



Allison Lynch, AB4YL
Secretary
allison48fan@yahoo.com



Greg Mann, KM4RKT
Treasurer
km4rkt.greg@gmail.com



Gene Blackburn, N4UJ
W4BOC Trustee
g.blackburn@ieee.org



George Olive, AI4UR
DeKalb ARES EC
george@universalcogs.com



Steve Vogel, W4PSV
Public Information
svdec@bellsouth.net



Richard Dickson, W4WRD
Apparel Coordinator
richie707@aol.com



Steve Garrison, N4TTY
Membership Chairman
Steve.n4tty@gmail.com



Cooper Morris, WA4PZD
Counsel

Al Hughes, NZ4A
Field Day Chair

Frank Haynes, KV4SP
VE Team Chair

Gretchen Mann, W1MKW
TOTR Editor gretchelby@gmail.com

AMRC TIP OF THE MONTH BY

Pat Deloe N4MPC

Antenna Weight

Some means of strain relief is needed when hanging a dipole between trees as the trees will move with the wind.

One method is to tie a rope to one end of the dipole, run the rope through a pulley and attach other end of rope to a weight.

Materials

1. Stainless steel eye bolt with nut
2. Ready Mix Concrete
3. Large oatmeal box or other form.



DIRECTIONS:

Mix the concrete with as little water as feasible.

Too much water in the concrete mix will soak into the oatmeal cardboard rendering it a soggy mess with poor outcome.

Fill the oatmeal box form with the concrete. Place the eye bolt with nut in center of concrete so that the eye is just above top of concrete. Let set until concrete hardens and then remove the oatmeal box.

You will now have an antenna weight that will out last the antenna system and can be passed on.

Ares State Net Listings:

Georgia State SECTION HF NETS!!!!

- Georgia ARES Statewide 3975 KHz 2200 UTC Sunday K4GK Net Manager
- Georgia ARES Digital 3583 KHz 2100 UTC Sunday K4GO Net Manager
- Georgia Single Sideband Net 3975 KHz 7 PM Daily KE4VPD Net Manager
- Georgia Traffic & Emergency Net 3982.5 KHz 7:15 Daily KI4NGD Net Manager
- Georgia Cracker Net 3995 KHz 7 AM M-Sa & 8 AM Sun AF4XZ Net Manager
- Georgia Traffic Net 7287.5 KHz (3587.5 Alt) Mon-Sat; WA0CGZ Net Manager
- Georgia Training (CW) Net 3549 KHz slow speed CW; 9 PM Daily; KG4FXG Net Manager
- Georgia State Net (GSN) 3549 KHz 7 PM & 10 PM Daily; K4GK Net Manager

New Georgia ARES Web Site, Check it out!!!

<https://gaares.org/index.php>

3/19/2017 Publix Marathon & Half Marathon.
More Info coming. [Click Here](#) Then the below links are required also.

<http://tinyurl.com/marathon2017step1>

<http://tinyurl.com/marathon2017step2>

More info at DeKalb ARES site

A couple of years ago my wife Luann decided to run, I volunteered to work the race. She did all the work. I had all the fun. KK4KHS



- ♦ Monthly club meeting is the 2nd Thursday of the month at 7:00pm
- ♦ Every Sunday at 7:00 pm: AMRC Sunday Night Net on the 146.760 repeater.
- ♦ Every Sunday at 8:00 pm: DeKalb ARES Net on the 145.450 repeater.
- ♦ Every Saturday at 7:00 am: AMRC Weekly Breakfast, Metro Café Diner, Stone Mtn, Ga.
- ♦ Turnip Truck Net at 11pm Saturday Night



The Secret Life of Dipoles

Tom Roderick , WA4GIM

How do you make a wire dipole antenna for HF? Well, everybody knows you have to have it resonant at the frequency you want which means the right length, so you dig out the books and find that formula you memorized for the test, but then forgot. Uh, wasn't it $468/F$ with F in Mhz to give the full length in feet. Then you cut that in half to form the two sides of the dipole connect your coax in the middle, and a 1 to 1 balun wouldn't hurt and might help keep some RF out of your shack. You get it up as high as you can and either hook up your antenna analyzer or, lacking that, test it out and check the SWR and hope that the antenna is a bit long for the frequency you picked (most of the time it will be) and then bring it back down prune a bit off each end being careful to keep each side the same length. Hoist it back up and repeat until you get too tired to do more, the antenna breaks or you get it "close enough." However, there is a better way.

A dipole antenna does NOT have to be resonant to work! The old maritime distress frequency of 500 Khz would require a dipole of over 900 feet according to this formula and back in the day most of the ships were not quite that long. A dipole DOES work better if it is at least a half wavelength on the lowest frequency you want to operate on but they can work lower. The reason resonant dipoles have become so common is that they are relatively easy to feed with coax and coax is the most common transmission line. Why? Because 50 ohm coax is a pretty close match to the impedance of a resonant center fed dipole, and maybe the SO-239 connectors on all the rigs has something to do with it. If the dipole is NOT resonant it will reflect more energy back down the coax and that causes STANDING WAVES to exist in the coax. In coax, a high Standing Wave Ratio is a bad thing since it means that most of your power is being used to heat the coax. However, there is a trick.

For a wide or all band dipole don't feed it with coax! Use open wire, window line or even old flat TV twin lead. All of these have lower loss than even the best coax and can operate with SWR well over 10 to 1. Since these lines have low loss they don't convert much of the energy to heat and the power is NOT lost.

Most modern rigs, even with built in tuners, don't like SWR over about 3:1 so a real external tuner is needed. A balanced tuner is best, but many of them use a balun on the output to APPEAR to be balanced but really are not. Most baluns can't handle high SWR either. You can use a hot tuner, but that puts the entire tuner at high RF voltages – might be a tad uncomfortable at times, but it has been done. Another approach is to use a remote tuner but "float" it above ground at RF using RF chokes on anything that would ground it. The tuner is still at DC ground but can float at very high RF voltages without problems. This can give you one antenna that will operate on almost any frequency higher than its half wavelength. A final note is that there are some feed line lengths to be avoided from the tuner to the dipole. Anything around a quarter wave length on any frequency you operate on can cause an impedance inversion of the feed point making the impedance the tuner sees way too high for any tuner.

As for the non resonant dipole itself; make it as long as you can and at least a half wavelength on the lowest frequency you want to use it on, get it as high in the air as you can, use a wide range external tuner and don't use coax for a transmission line to feed it.

\$\$ Buy Sell or Swap \$\$

Used Grundig Satellite 750 Receiver, Never has had batteries installed, always used indoors. AM/FM/SW/LW/SSB/AIR bands.\$175 Greg Mann, KM4RKT

**Please send your listings for Buy Sell or Swap to Gretchen, W1MKW
gretchelby@gmail.com**

2017 - Year of the Female Ham Radio Operator

To join the Young Ladies Radio League please go to

www.ylrl.org

Check into an all YL Net on Thursday nights please go to <http://www.nfarl.org/nets.html> for details. YL's only please. OMs are welcome to listen.



Allow Us to Present Miss Kathleen Parkin, Expert Radio Operator at Fifteen Years of Age. She has made her own apparatus.

February NETS REPORT

| AMRC | | DeKalb ARES | | | Turnip Truck | |
|------------------|----|-------------|----|---------------|--------------|----|
| Sunday Night Net | | | RF | Winlink/DRats | | |
| February 5 | 15 | February 5 | 13 | 7/4 | February 4 | 18 |
| February 12 | 36 | February 12 | 18 | 7/8 | February 11 | 21 |
| February 19 | 30 | February 19 | 19 | 10/8 | February 18 | 18 |
| February 26 | 28 | February 26 | 18 | 10/10 | February 25 | 18 |

AMRC CALENDAR OF EVENTS FOR MAR 2017

| SUNDAY | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY |
|--|--------|---------|-----------|--|--------|---|
| | | | 1. | 2. | 3. | 4. 7am Breakfast at Metro Café Diner 11pm Turnip Truck Net |
| 5. 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET | 6. | 7. | 8. | 9. Alford Memorial Radio Club Meeting 7pm | 10. | 11. 7am Breakfast at Metro Café Diner 11pm Turnip Truck Net |
| 12. 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET | 13. | 14. | 15. | 16. | 17. | 18. 7am Breakfast at Metro Café Diner 11pm Turnip Truck Net |
| 19. 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET | 20. | 21. | 22. | 23. | 24. | 25. 7am Breakfast at Metro Café Diner 11pm Turnip Truck Net |
| 26. 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET | 27. | 28. | 29. | 30. | 31. | |
| | | | | | | |

**HELP WANTED
HRO ATLANTA
A GOOD, STRONG, FULL OR PART TIME
WORKER
FOR WEEKDAYS AND SATURDAYS.
MUST HAVE AMATEUR LICENSE
CONTACT MARK KJ4VO
HRO MANAGER
770-263-0700**





ATLANTA, GA:

Store Hours:

10AM-5:30PM Mon - Sat

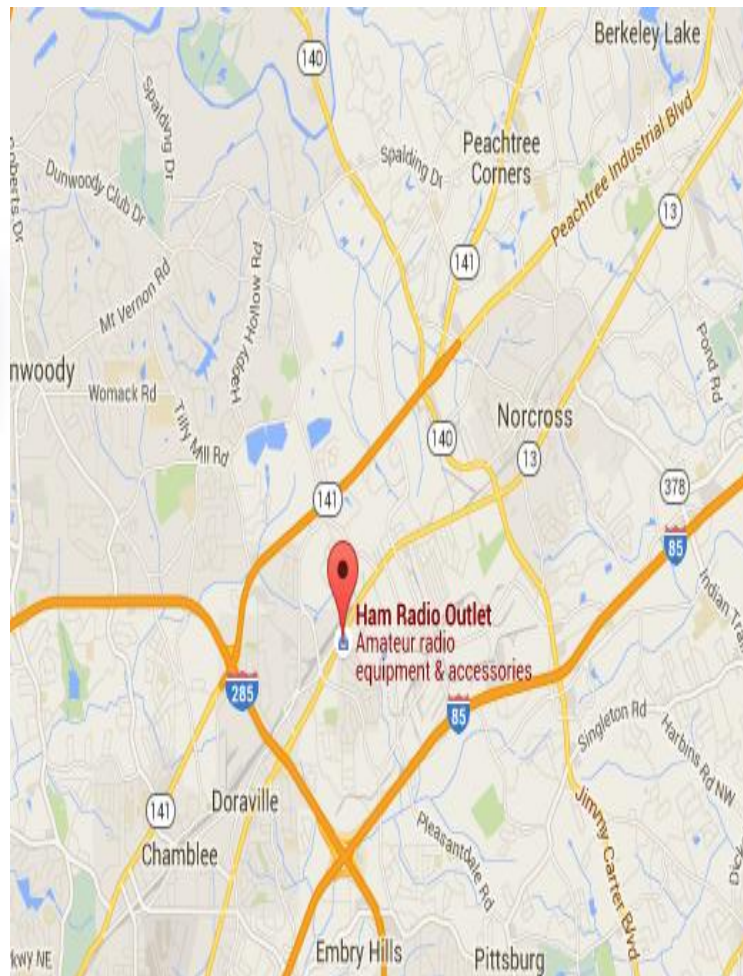
Telephone hours:

9:30AM-5:30PM Mon-Sat

LOCAL: 770-263-0700

FAX: 770-263-9548

EMAIL: atlanta@hamradio.com



From ARRL Contest Calendar

April 2017

16 Rookie Roundup – Phone

For more information: <http://www.arrl.org/contest-calendar>

Hamtoons™

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Jim Massara,
N2EST
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Robert (Mike) Smith
 5191 La Paloma Dr.
 Lilburn, GA 30047
 Phone (404)-509-3104
Smithrm71@gmail.com

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