



TOP OF THE ROCK



The Newsletter of the Alford Memorial Radio Club

September 2015

<http://totr-radio.org/>

Power Pole Connectors, HANDS ON!!—September 2015



ARRL President Kay Craigie N3KN, visits with XYL's of the Alford Memorial Radio Club at August Meeting.

L to R

Kay Craigie, Theoan Le Doux KM4FQP Allison Lynch, KZ3JFY

September Issue Contents

- President's Notes
- Next Meeting Program, Repeater Info
- Pictures from Last meeting
- Turnip Truck Net Info
- Ham radio supports Peachtree Road Race
- Antenna Selection for your property
- Crossword Puzzle for Ham Radio and Electricians
- Birthdays and member info
- Upcoming Ham Radio Events in the Atlanta Area
- Calendar for September
- VE Testing and Club Meetings
- Sponsors



Message from the President

Where did your August go? I know mine got lost with a 25 day stay at Emory Hospital. Not a very exciting way to spend most of the month, but I'm home now and really do appreciate all the well wishes and prayers sent my way by so many of you. I'm on the mend, but it is progressing much more slowly than I had hoped, but I should be out and about amongst you soon.

This month Mike, KK4KHS, our VP, is hosting an event in the City of Stone Mountain near the Visitor Welcome Center (The Caboose!). It will be on Saturday September 19th from 1:00pm to approximately 5:00pm. It will be in conjunction with Amateur Radio Awareness Week and Emergency Preparedness Month. Mike plans on having a couple of stations operation from emergency power to showcase Amateur Radio to the City of Stone Mountain and to the other attendees of events taking place in the City on the 19th. Please consider coming out and helping for a short while to talk to passer by and to hand out literature about ham radio. Please let Mike know if you can give him a hand. Help is especially needed with setup and tear down, in addition to during the event. Mike can be reached at smithrm71@yahoo.com.

On October, in fact on October 3rd & 4th, is the Makers Faire in Decatur. The Alford Memorial Radio Club is again taking part and I have been asked to return with my teletypewriter displays. I was a bit hesitant to commit to this, but have decided to go ahead and plan on

being there with the "Banner Printing" tape punch machine and the "Marriage of Old and New Technology," sending and receiving text messages from a Teletype machine. It was a big crowd draw last year and I hope it will be again this year. However I really need some help with this to pull it off. Last year I had some help but this year I'm going to need much, much more. Please consider giving me a hand. It was a fun event and I think you will enjoy the outing. I can be reached at n4tty@arrl.net.

And then in November, the first weekend, Nov. 7 & 8, is our own Stone Mountain HamFest at the Gwinnett County Fairgrounds. Please, please, please plan on helping out for this event. We need every one of you to contribute at least a little time. We are relying heavily on the GARS club for their help and they are responding accordingly. The HamFest is becoming more of a joint effort each year. I for one want to thank the entire GARS club for their help and look forward to working with them again this year.

You might want to check out the Forums on the Hamfest website: www.stonemountainhamfest.com. It looks like we are shaping up to have one our best years for forums in a long time. That's about it for now,

73 and keep making those contacts,

Steve, N4TTY



AMRC September Meeting Program

“Power Pole Connectors, Another Hands On Program”

Thursday September 10th at 7:00 pm

*Meet at Shane’s Rib Shack for
supper before the meeting*



**Meeting are held at the Annistown Road Baptist Church
at 4554 Annistown Road, Snellville, Ga. 30039**

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



Located at Exchange Park, up and running beautifully,



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 .



Being relocated to Exchange Park, currently not operational.

**Get ready for the Upcoming
Special Event Club
Meeting!!!!** At the Nov. 12th meeting we'll have the Home Made Show and Tell. So get your gadgets ready, open to all members, or bring a buddy who you think needs to share his gizmo.

Contact Mike KK4KHS



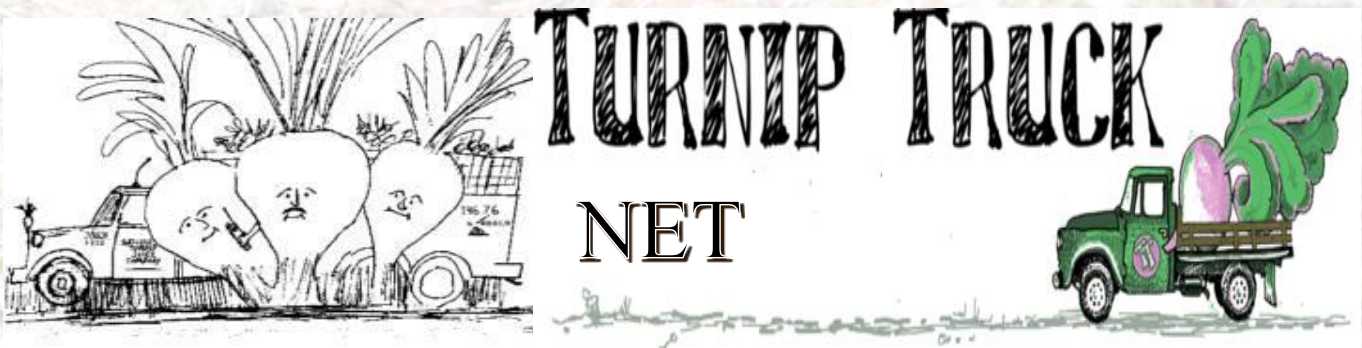
Kay Craigie, ARRL President Visits Our Club

August 2015 Meeting AMRC



Special Station Event Sept 19th, At Stone Mountain, Ga.

The Alford Memorial Radio Club was established in 1972 to provide amateur radio operators in the area an opportunity to learn, communicate and provide community service. In celebrating it's 43 years of service and to promote local public awareness of our club, several members will give their time on Saturday September 19th to demonstrate **HF and vhf/uhf** radio as a method of communication during emergency situations, (digital and Morse code may be available). September 19th has been designated Amateur Radio Awareness Day and in conjunction with National Preparedness Month, it's time to get the word out to our community here in Stone Mountain of who we are and what we do. Several of our club members will be setting up stations near the welcome center caboose. W4BOC will be downtown Stone Mountain on Saturday from 1pm to 5pm. We will be making contacts with the DeKalb county ARES unit while they are setup at **North DeKalb Mall along with the Emergency Preparedness Festival from 10am to 3pm**. Also we will be handing out ARRL and AMRC information. So, please support this event, or if you can't, come out and visit us. Special recognition for those members who assist in the event. If you'd like to bring your go-kit and work from it, that would be great. Antenna hanging will began at noon. Bring your launcher, YEA!!! Tool Time Kind of Fun.



Join us on the "Turnip Truck Net" Saturdays 10:30pm-1am 146.760 pl107.2

Turnip Truck Badges now available for Turnips from The Sign Man.

<http://www.thesignman.com/>

Bill and Sam receive their Turnip Truck Badges, Get Yours at Hamfest!!



Send me a picture of your Turnip Truck Net Name Badge, Check in late Saturday Night

ARES® Supports 60,000 Runners in Atlanta for Peachtree Road Race

For the last 45 years, Atlantans have celebrated Independence Day in the United States in unique fashion: by closing one of the City's busiest thoroughfares and allowing 60,000 runners, supported by 5000 volunteers, including over 50 Amateur Radio volunteers, and nearly 200,000 spectators for the Peachtree Road Race, sponsored by the Atlanta *Journal-Constitution* and the Atlanta Track Club.

The Amateur Radio response is coordinated by Race Committee Members David Ziskind, KE4QLH, and Chris Balch, KS4MM (ARRL Volunteer Counsel and AEC for Atlanta ARES). Operators come from ARES groups and Amateur Radio clubs all over the metropolitan Atlanta area.

Working closely with the Atlanta Fulton County Emergency Management Agency (AFCEMA), Atlanta Police and Fire Departments, as well as numerous federal and state law enforcement and public safety agencies, the Amateur Radio contingent provides crucial on course intelligence and safety reports for injured runners, race conditions, and even the occasional suspicious package. Learning from the experience of colleagues in Boston, net control operations for the race are located at AFCEMA's underground Emergency Operations Center. AFCEMA Director Matthew Kallmayer has worked closely with Atlanta ARES EC Ken Reid, KG4USN, to stock the EOC with 3 dual band radios (2 Kenwood V71s and an ICOM IC-2820). Accordingly, we were able to run and respond to 3 different nets (as well as a D-STAR link to the Atlanta Police Headquarters) providing coordination among public safety, Atlanta Track Club organizers, and media outlets. Race communications benefited from the loaned repeaters of the Atlanta Radio Club, the Metropolitan Atlanta Telephone Pioneers Amateur Radio Club, and the Georgia Tech Amateur Radio Club.

This year provided a particularly challenging environment as July 4 saw Atlanta hit by a long line of severe and dangerous thunderstorms just as the race got underway. As the storms intensified, Track Club officials made the decision to hold the last half of the runners (half the field was already on the course) and move those waiting to start indoors for safety. After a 30-minute delay, 25,000 race participants emerged into the rainy late morning and completed their annual jog down Peachtree Street. - *Chris Balch, KS4MM, AEC Atlanta ARES*

ANTENNA SELECTION FOR YOUR PROPERTY

FIRST:

Define your priority plus wants.

HF, weekends during the day – probably 20 meter. single band. Or wants would be 20, 15 & maybe 10 meter.

HF, evenings or early mornings would be 40 meter. Or wants would be 40 & 80 meter.

HF, want it all then go for 10 thru. 80 meter.

Looking for Long distance - out of country; Medium distance - would be to East Coast; or Short distance - surrounding states (400 miles & less). Defined by Freq. & height above the ground. Higher requires stronger pole/tower or guying or combination.

Local communications – VHF (majority) or VHF & UHF – Dual band antenna's.

NEXT: (Based on above – it will be an iterative decision-making-process, with physical availability, maximizing performance, restrictions & costs)

Evaluate your property for three dimensional space with structures like buildings, trees, fences, etc.

Another important consideration is covenants (CC&R's) which puts restrictions on what type of antennas can be installed. You should read them first & determine your restrictions. Typically, this means antennas must be stealth or within the roof of the house or in the addict. Stealth could mean an American Flag Pole that doubles as an antenna. Other stealth things could be a wire antenna that is attached to trees or does not require free standing structures to hold it up. Some verticals can be telescoped up at night & lowered during the day. Antennas such as short dipoles, small loops, or hex beams can be mounted within the roof of your house.

Dipoles-HF, longest dimension of property is important for 80 meter dipole (over 120 feet or shortest 80 feet with reduced performance). Also height is important, especially for long distance signals. Less height is required for higher Freq. bands like 10 meter (about 15 ft.). Try for 1/2 wave length above grd. or one quarter wave length above grd.

Verticals-HF, needs area of 360 degrees for radials. Radial wire for 80 meters needs to be 66 plus feet long. Shorter for higher bands like 10 meters or about 9 feet (1/4 wavelength).

A typical multiband 10 thru. 80 meter vertical is 43 feet high. Minimum four radials per band makes the efficiency of the system at about 20 percent which will work good. The appropriate number of radials is about 12-16 per band and less for multi-band verticals because some of the low HF band radials will work for the higher band HF frequencies. Note the ends of the radials can be curved like an ("L") to accommodate space limitations.

Yagi antennas are typically for 20 thru 10 meter and require a structure to hold them up (tower & a rotator). This drives cost many times over the cost of a vertical or a dipole. Yagi's are directional & will provide long distances with less power & less QRM. The height for yagi's is the same for dipoles. Try for one half wave length high.

A suggestion would be to Develop your wants & needs & take measurements of your property & the structures on it, with pictures. Then get Elmers from the club to walk the property & make suggestions based on your needs, property configuration & available funds.

VHF & UHF antennas are typically small enough that they can be mounted almost anywhere without generating visible ques. Otherwise they can be mounted on or in the house.

Costs:

10 thru. 80 meter dipoles cost about 50 to 300 dollars & about 100 dollars for a thirty foot pole – guyed.

10 thru. 80 meter 43 foot verticals cost about 300 to 600 dollars with radials & a balun and/or matching

(Continued on page 8)

(Continued from page 7)
network.

10 thru. 40 meter 28 foot verticals with a counter-poise are about 300 to 700 plus dollars.

Mono-band verticals are about 170 to 250 dollars.

Hex Beam (2 ele.) 6-20 meters about 700 dollars.

3 ele. plus Yagi 10-20 meters full size about 600 to 5 thousand dollars. Towers cost about 2 – 50 thousand dollars plus installation.

Home Brews can reduce costs significantly.
<http://www.ac6v.com/antprojects.htm> (Stealth)

www.radioworks.com AV40 (check it out)

People have attached their twin lead to aluminum rain gutters, pieces of pipe, etc and made them work.

Note – Non-typical antennas require a high capacity matching network or antenna tuner.

None of the perspectives above include coax. Good coax is about \$1 per foot.

Safety:

Always check for power lines before erecting or putting up an antenna. Remember, antennas can sway in the wind, so place your antenna as far away as you can from power lines.

Do not put an antenna next to the children's bed room with more than qrp RF power & operating for long periods.

Get a perspective of RF exposure to your family and your neighbors (property line, i.e. public access).
FCC RF – Exposure Regulations – The Station Evaluation – <http://www.arrl.org/fcc-rf-exposure-regulations-the-station-evaluation> This will provide instructions on how to cook book your evaluation.

Things to think about:

Always use the longest & tallest & highest above the ground antenna, as you can! This maximizes the efficiency & is easier to tune.

Many short (for a band or frequency) antenna's require manual manipulation to use more than 25 kHz of a band width or to change bands. Others have remote control to tune the movement in frequency or bands.

Always use the best coax you can afford. For example – on 10 meters, RG-58 has more than twice the loss of signal as LMR400 does per 100 feet (sending & receiving).

First - Always tune the antenna as close to 50 ohms for the frequency you will be using. At 25 ohms and above or 100 ohms and below will work – 2 to 1 SWR.

Always check the SWR with low pwr (5 watts) and if necessary use an antenna tuner to provide a good match for the transmitter before turning the power up.

NUMBER ONE PRIORITY IS TO PUT SOMETHING UP AND GET ON THE RADIO!!!! EVERY SO CALLED ANTENNA WORKS!!!

Electronics Crossword

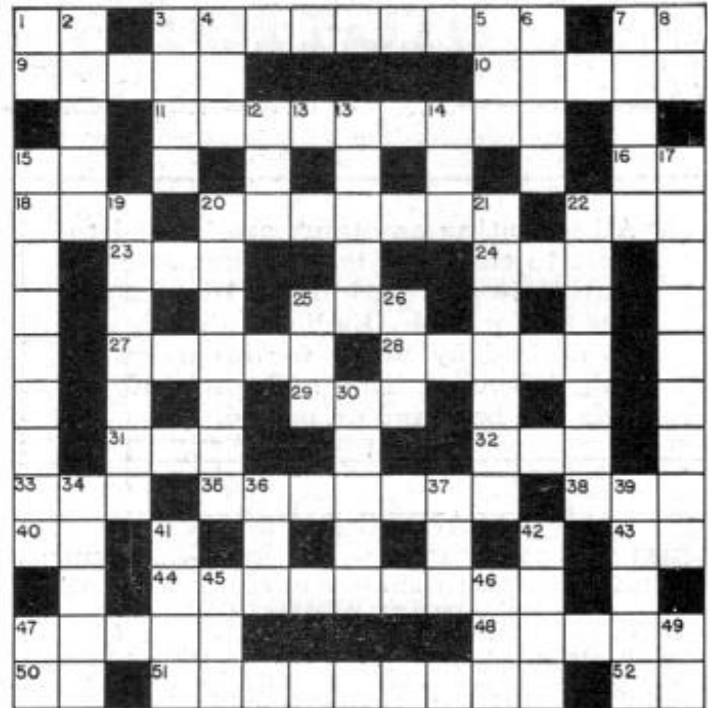
ACROSS

1. Freq. Absorption.
3. Reduces TVI.
7. Freq. measurement.
9. Modulation checker.
10. Chassis front.
11. Demodulation.
15. Here.
16. ARRL appointment.
18. Noise filtering circuit. (ab).
20. Type of amplifier.
22. "King Spark —" (Pre-WW-I).
23. Intermediate Freq. Oscillator.
24. Phono part.
25. "Your sig. fades."
27. Intermediate.
28. Unusable.
29. Station leading a net.
31. Electron Coupled Oscillator.
32. Beam direction: Little Rock to Dover.
33. WX description.
35. S.S.B. amplifiers
38. Iterate (ab.)
40. Beam direction: N.D. to Ga.
43. Electrical degree.

44. Reduce.
47. Grid signal.
48. Electrocut (slang).
50. Been
51. Ham service opportunity.
52. AØ activity. (ab).

DOWN

1. Field Strength (ab).
2. Small tube type.
3. Type of switch.
4. Henry, easy, easy.
5. Negative coefficient designation.
6. Multiple capacitor.
7. Measuring instrument.
8. "I am closing my station."
12. Chart of values (ab).
13. Instrument covers.
14. "I".
15. Children.
17. To mark a dial.
19. Reducer.
20. Gain potentiometer.
21. Speaker mounts.
22. Radiator.
25. Static troubles.



26. — bar.
30. Crisp, smooth, clickless, and chirpless.
34. Code license requirement.
36. Brilliancy (ab.)
37. Power source for rural hams.
39. "P".
41. Radiation element.
42. vy.
45. Test equipment meter (ab).
46. Messages (ab).
47. Power ratio unit. (ab).
49. Type of current. (ab).



AMRC Membership Page

New AMRC Members since August Meeting

No new members in past month.

New Members: 0

Total Members as of Sept 1, 2015:
152

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

Metro Café Diner
1905 Rockbridge Rd. *Stone Mountain, GA 30087*

The following members are
celebrating birthdays
in September:

HAPPY BIRTHDAY!!
From All of Us at AMRC

KK4HUG Cheyenne
KK4VRM Rick
AJ4TT John
Rebecca Mele
KM4LVI Jon
KJ4ZDW Norm
WA6JQL Richard
N4DRO Phil
KC4ELV Tim
KJ4BSV Jamie
KK4JXV Steve
KM4FPN Stephanie
WZ4CW Carl
KJ4ZDL Jay
KM4PAX Steve

AMRC MEMBERSHIP

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

http://totr-radio.org/membership_files/membership.htm

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

ARRL CONTESTING INFO

(All names of contests are links in .pdf version)

September

5-6 [EME - 2.3 GHz & Up](#)

12-14 [September VHF](#)

19-20 [10 GHz & Up- Round 2](#)

<http://www.hornucopia.com/contestcal/contestdetails.php?ref=229>

DX Contesting and Operations links.

425 DX NEWS

[Amateur Radio Lighthouse Society - World List of Lights](#)

[Announced DX Operations by NG3K](#)

[Asia \(\(\(DX\)\)\) Window \(ASIA HF DX WebCluster\)](#)

[BOLETIN DE DX EN ESPAÑOL by CE1RKV \(Spanish\)](#)

[DX News Letter by DL1EK & DL7VOA \(at NG3K Web Site\)](#)

[DX SUMMIT \(last 250 DX-spots\)](#)

[hfradio.org - propagation by NW7US](#)

[Hot DX Tips From the NJDXA by NA2M](#)

[IOTA \(Islands On The Air\) Web Site](#)

[LES NOUVELLES DX \(French\)](#)

[LY4A "Daily Dx News"](#)

[Near-Real-Time MUF Map](#)

[Propagation by N6RT](#)

[Solar Activity Information - from DX-Listeners' Club, Norway](#)

[The OPDX Bulletin - Internet Edition by KB8NW](#)

Stay In The Loop!!!!

Get email notification from you clubs events, updates, announcements. Sign up for these links:

<https://groups.yahoo.com/neo/groups/alfordmemorialradioclub/info>

<https://www.facebook.com/groups/AMRC.TOTR/>

<https://www.facebook.com/DekalbCountyEMA?fref=ts>

<https://twitter.com/StoneMtnRadioCl>

HAMFEST CALENDAR

Southeast US

09/19/2015 | Paulding ARC Hamfest

Location: Dallas, GA

Type: ARRL Hamfest

Sponsor: Paulding Amateur Radio Club

Website: <http://pauldingarc.com>

HAMFEST/CONVENTION

09/26/2015 | Covington Hamfest

Location: Covington, GA

Type: ARRL Hamfest

Sponsor: Newton County Radio Club

Website: <http://ncrcga.org>

STONE MOUNTAIN HAMFEST/ CONVENTION

**11/07-08/2015 | Georgia Section
Convention (Stone Mountain
Hamfest)**

Location: Lawrenceville, GA

Type: ARRL Convention

Sponsor: Alford Memorial
Radio Club

Website: <http://>

www.stonemountainhamfest.com

Hamfest Online Ticket
Booth is OPEN!!!

Click on the below
hyperlink to purchase tickets
now via PayPal!!

<http://>

[stonemountainhamfest.com/
tickets.php](http://stonemountainhamfest.com/tickets.php)

Up Coming Ham Radio Events

SUPER IMPORTANT, MUST READ

Several members want to do a public radio setup near the Welcome and information center in the city of Stone Mountain. This event would be on a Saturday 19th, where we would operate several stations and have the opportunity to interact with our community.

Also we are planning for the 2015 Stone Mountain Hamfest.

If you want to be more involved and have more responsibility, let us know. We have lots that needs to be done and we are trying to spread the wealth to allow more member involvement. Email any club officer for more information.

UP COMING PROGRAMS FOR ALFORD MEMORIAL RADIO CLUB.

September - 10th Power Pole Connectors

October - 8th Preparing for Hamfest

November - 12th Home Made Show and Tell

December - Christmas Party

**Bring your Homemade "homebrew" things
you've made, show and tell to the Nov
meeting.**

**Contact Mike KK4KHS@arrl.net and let him
know what your bringing to the party.**

AMRC Officers and Committee Chairs

Steve Garrison, N4TTY
President



Mike Smith KK4KHS
Vice President



Dave Mc Whirter KB4UVV
Secretary



Barry Kanne, W4TGA
Treasurer



Chris Balch KS4MM
Hamfest Chairman



Gene Blackburn N4UJ
W4BOC Trustee



George Olive .. AI4UR
DeKalb ARES EC



Steve Vogel W4PSV
Public Information Officer



Richard Dickson W4WRD
Apparel Mgr



Chris Balch KS4MM
Counsel

Steve Garrison, N4TTY
Membership Chair

Al Hughes NZ4A
Field Day Chair

Frank Haynes, KV4SP
VE Team Chair

Opportunities

NORTHWEST DIGITAL NET: The Northwest District holds a digital net every Tuesday evening at 7:30pm taking check-ins on 3.583 with PSK125 centered between 1000 and 1500 depending on nearby traffic. Look for NCS to be call sign W4NWX.

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-Sa; 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

- ◆ Monthly club meeting is the 2nd Thursday of the month at 7:30pm
- ◆ 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 Every Saturday Night

Stone Mountain Hamfest

Part flea market, part educational seminars, part vendor displays and sales.

The Alford Memorial Radio Club announces its 44th annual

Stone Mountain Hamfest which will be held Saturday, Nov.

7 and Sunday, Nov. 8. It's part flea market, part educational

seminars, part vendor displays and sales. Amateur radio

operators and those interested in electronics and computers will

gather to see and talk about ham radio equipment old and new

and discuss the world-wide hobby.

As Club President Steve Garrison put it, "there are more

licensed amateur operators than ever before in the United States

and the Hamfest provides an opportunity for ham operators and

those who may have an interest in our hobby to get together to

see and discuss what makes amateur radio a fun endeavor that

at the same time can provide real community service."

The Hamfest runs from 8 a.m. to 4 p.m. on Saturday and 8 a.m.

to 2 p.m. on Sunday. The location is the Gwinnett County

Fairground, 2405 Sugarloaf Pkwy. Lawrenceville, GA 30045.

Free parking is provided. [Advance tickets for \\$6 are available](#)

[online](#). Tickets at the gate are \$8. One raffle chance for radio

equipment is included with each admission ticket and additional

chances may be purchased onsite.

The Alford Memorial Radio Club was established in 1972 to

provide amateur radio operators in the Atlanta area an

opportunity to learn, communicate and provide community

service. [Club website](#)

Club Member News Page

The proud parents of Patrick Ford announce the pending graduation of Patrick from Army Military Police OSUT training at Fort Leonard Wood MO.

His graduation date is September 3. It has been a difficult journey with bone fractures and torn muscles. But as a BSA Eagle Scout is expected to do, he has overcome and adapted without prejudice to none. Patrick has been known throughout the training as a person who will inspire others and is always willing to help.

Patrick will be returning to the University of North Georgia Cadet Corp for Spring semester. He plans to finish his education with a degree in International Affairs. And commission as an officer in the U.S. Army.

Proud Parents:
Mike Ford KK4NZE
Martha Ford KK4SPS



Club Members Want, Sell, Buy Items.

G5RV 6-80 MFJ Never opened, Mike Ford KK4NZE

This section will be for club members who would like to list some items which seem to be cluttering up their shack and aren't using. Also if there is something your looking for it can be listed here also. Please send me an email by the 25th of the month. KK4KHS@arrl.net

Generators For Sale, Carter Bennett

EX350 Honda 2-stroke engine and inverter. Super light weight. 150 and 300 watt selection. Nice and quiet for camping. Used to operate test equipment in the field. In good working condition. \$225

EX800 Easily portable unit. Has 12V charging cable. Easy to start and runs well. Has easy-open lid for access to circuit breakers and spark plug wrench. \$400

Honda EX350, 2-stroke engine and inverter. Super light weight. 150 and 300 watt selection. Nice and quiet for camping. Used to operate test equipment in the field. In good working condition. \$225

Honda EX800 Easily portable unit. Has 12V charging cable. Easy to start and runs well. Has easy-open lid for access to circuit breakers and spark plug wrench. \$400.

Honda EX1000 The generator with a full KW of power. Has an easy-open lid to expose spark plug wrench, circuit breakers, etc. Very nice unit. Includes 12V charging cable. \$475

EU1000i, Still in the original box and has never been run. Includes storage cover. \$650

EU200i Everyone seems to appreciate the 2KW inverter-powered generator. It has been started but only for testing. Then the fuel has been drained out. Very nice unit. \$790 Contact: Carter Bennett. carterebennett@bellsouth.net

An update on Ham Happenings in the Atlanta Area this Fall/Winter

Please share with your organizations membership if appropriate.

1. Stone Mountain Hamfest November 7 and 8, 2015

<http://stonemountainhamfest.com>

Forums

Saturday

Dr. Eugene Clark/W4AYK, ARRL Section Manager
--Review ARRL activities in the Southeastern Division
Dave Benoist/AG4ZR, SEC Georgia ARES
--Georgia ARES Mission, When Disaster Strikes
Bob Heil/K9EID, via Skype
-- Audio in the Modern Ham Station
John Davis/WB4QDX
-- DSTAR
Catherine Todd/KK4UBQ Ladies in Amateur Radio
--Nets, HF, and Contesting
Megan Brown/KM4HFY & Martha Muir/W4MSA,
-- Mill Springs Academy Amateur Radio Class 'Advancing Youth in Radio'
MARS
-- Military Auxiliary Radio System and how you can help

Sunday

AMSAT
-- Working Fox-1A & Fox-1C Ham Radio Satellites
Steve Garrison/N4TTY
-- Mesh Networking for Beginners

Youth Lounge and Special Event Station - W4Y at Stone Mountain Hamfest.

Look for the announcement in QST November issue. The bulk of the activities will be focused on the period from 10AM to 3PM Saturday with a specific frequency on 40M SSB and 20M digital. Of course, contacts will be made throughout the operation of the youth lounge but to garner a lot of QSOs (somewhat contest style), we are attempting focus attention during the 5 hour period. Youth operators will make contacts much the way that GOTA stations operate at FD. The digital station will be against a wall, nearby. Special QSL cards would be handed out to passersby and available with an SASE to the Mill Springs club. We plan to have teens using portable FT 817s on 40M SSB frequency as they roam the boneyard and Hamfest soliciting QSOs from young and old alike, especially youngsters. They will be pointed to the youth lounge to pick up their special event QSL card! The Mill Springs hams will be studying Arduino this fall and we plan to have some of their work on display. The oscilloscope exhibit will be available for hands on manipulation by youth. Likewise the CW setup. Younger folks will be filling out and adding color to the QSL cards for sending out or handing out at the booth! Look for additional announcements on the youth lounge.

2. Youth Net - <http://nfarl.org/nets.html#YouthNet>

Please encourage young hams and young people interested in amateur radio to join in Youth Net. Young people will have the opportunity to chat with their peers across the metro Atlanta area, across Georgia, and perhaps across the country via this net. Youth 18 and under are invited to participate. The net will meet on Wednesdays, starting on August 19, beginning at 7PM EDT. It will be held on the NFARL 145.47 Sweat Mountain repeater. Echolink participation is encouraged. Connect to node NF4GA-R (number 560686). The Youth Net is a project of the Mill Springs Academy RC. Questions? Contact Martha W4MSA See QRZ.COM for her email or to inquire.

--Setting up for Youth Net Here's how to get set up to participate in the net: Tune your radio to 145.47 (-) PL 100.0Hz or log into 145.47 repeater Echolink node 560686 (NF4GA-R). For more on Echolink, visit the Echolink Overview page.

(Continued on page 16)

(Continued from page 15)

When the net opens, we will ask for check-ins. Please check-in with your name, call-sign, and location. Optionally, Open a web browser (i.e. Internet Explorer, Google Chrome, Mozilla Firefox, etc.) to the NFARL chat room hosted at <http://nfarl.dodropin.org> if possible. Sign into the chat room by entering your callsign-yourname (i.e. W4MSA-Martha).

3. AMRC Amateur Radio Public Service Event. Downtown Stone Mountain. September 19th 1pm-7pm

Several of our club members will be doing a small public awareness event, to be located in the grassy areas, near the walking trail behind the welcome center, on Sept 19th in the afternoon. We're going to have three or four radio stations going, a GOTA station, which stands for "Get On The Air". We'll have a Morse code station and a phone station, which is voice, as well as digital demonstrations. GOTA allows anyone from the public to participate by talking on a ham radio. What makes Amateur Radio unique is its ability to communicate with one another anywhere in the world--and even in orbit--without having to rely on any outside infrastructure whatsoever. Hams can even do this without being plugged into a the wall socket. Experienced radio amateurs take this capability for granted, but the general public is far less aware of it. So, an Emergency Power Operating Event (EPOE) on Saturday, September 19th, where the Alford Memorial Radio Club will be celebrating it's Amateur Radio Awareness Day by highlighting Amateur Radio's ability to communicate worldwide without commercial mains, the Internet or a cellular telephone system. **Send an email to KK4KHS@arrl.net to help operate a station, hand out information, or assist in refreshments.**

4. Maker Faire October 3-4th

Maker Faire - October 2-3 Decatur, GA <http://makerfaireatl.com/> Atlanta area hams will again join forces to put on their award winning Maker Faire exhibit which will provide a variety of exciting hands on exhibits such as Tuning Electrical waves, sending Morse Code, building an electric circuit, and talking on ham radio - Social Networking for over 100 years! Access www.atlantahams.com for info on ham clubs throughout the North GA area. Maker Faire is a free event held in Downtown Decatur.

5. HamJam - November 14 <http://hamjam.info/>

The North Fulton ARL will again host the annual HamJam event in Alpharetta GA on Saturday. Not a hamfest, but presentation of 3 world class speakers for the enjoyment of the North Georgia ham community. Past speakers have included Kay Craigie, N3KN, president of ARRL; Nobel Laureate Joe Taylor, W1JT; and Steve Galchutt, wG0AT, of QRP and mountain climbing fame with his goats! Headlining this year's event is Jamie Dupree, Cox Radio news reporter stationed in Washington, DC who has agreed to speak at HamJam. You can hear Jamie everyday on the Herman Cain show on WSB radio <http://www.wsbradio.com/s/dupree/>. Besides being a famous journalist, Jamie is also an Extra Class Amateur Radio Operator, NS3T. He loves contesting. After being inundated daily with politics in the news, it will be interesting to see what Jamie has to say about the world of amateur radio. For a review of past speakers, go to <http://hamjam.info/about.html>. A key feature of this event is the HamJam raffle ticket. Prizes have not been announced but they typically are worth thousands of dollars. The purchase of tickets offsets expenses to bring in outside speakers. Plus, and this is the motivation for everyone... the proceeds go to the youth education effort spearheaded by the NFARL YESA (Youth Education, Scholarship and Activities) group.

Join this FREE admission event at the Metropolitan Club, 5895 Windward Pkwy, Alpharetta, GA at 9AM to 1 PM, November 14.

6. TechFest <http://techfest.info> January 9, 2016

The Gwinnett Amateur Radio Society (GARS) will be hosting our annual TechFest in January. In recent years we have invited regional radio groups to participate by setting up a table with information about their activities and to demonstrate some type of amateur radio mode, method, technology or experience. This is an opportunity for the community to become aware of the many modes of operation of Radio Amateurs and view some of the preparations taking place by public service volunteers in the Ham radio community. Unlike Field day, or the typical swap meet, this is not a contest or race. It is a chance to experience modes of our hobby that you might have never seen. Or to show your friends and family what Amateur Radio is about. We want to thank all the exhibitors and guests for great participation over the past 17 years.

"AMRC SEPTEMBER NETS REPORT"

AMRC		DeKalb ARES			Turnip Truck	
Sunday Night Net			RF	Winlink	1-Aug	11
2-Aug	22	2-Aug	13	8	8-Aug	7
9-Aug	25	9-Aug	12	9	15-Aug	14
16-Aug	31	16-Aug	13	7	22-Aug	12
23-Aug	30	23-Aug	22	10	29-Aug	13
30-Aug	35	30-Aug	20	9		

AMRC CALENDAR OF EVENTS FOR SEPTEMBER

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
		1 September	2	3	4	5 7:00– 8:30 am Breakfast at Metro Café Diner Turnip Truck 10:30pm
6 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET	7	8	9	10 5:00 - 6:30 PM Dinner at Shane Rib Shack 7:00-9:30pm ARMC Meeting	11	12 7:00– 8:30 am Breakfast at Metro Café Diner Turnip Truck 10:30pm
13 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET	14	15	16	17	18	19 7:00– 8:30 am Breakfast at Metro Café Diner <i>Stone Mtn. Public Service Awareness Event Downtown 1pm till 5pm</i> Turnip Truck 10:30pm
20 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET	21	22	23	24	25	26 7:00– 8:30 am Breakfast at Metro Café Diner Turnip Truck 10:30pm
27 7pm AMRC Sunday Night Net 8pm DeKalb ARES NET	28	29	30	1 October	2	3 7:00– 8:30 am Breakfast at Metro Café Diner Maker Fair Turnip Truck Ne

Metro Testing Sessions	Ham Exam Results	Metro Club Meetings
<p><i>AMRC publishes Metro Atlanta VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at http://www.arrl-ga.org.</i></p> <p>First Sunday, ODD Months 2 pm (Jan, Mar, May, Jul, Sep, & Nov) VEC: WCARS Braselton Public Utility Building 4986 Highway 53, Braselton, GA Roger Gibson, WB4T (770) 271-4210 or (770) 712-9560 w4rlg@bellsouth.net</p> <p>First Sunday, EVEN Months 2 pm (Feb, Apr, Jun, Aug, Oct, Dec) VEC: WCARS Hall County EOC 470 Crescent Dr. Gainesville, Ga. Perry Roper, KO4RD (770) 536-3056</p> <p>Second Saturday 10:00 AM Alpharetta North Park, Adult Activities Center 13450 Cogburn Rd, Alpharetta, GA 30004 Ian Kahn, KM4IK E-mail: km4ik.ian@gmail.com</p> <p>Second Saturday, ODD Months VEC: ARRL 8:30 a.m. GMC Community Ctr 5325 Leon St. Stone Mountain, GA Frank Haynes, KV4SP (678) 467-3712</p> <p>Second Sunday VEC: W5YI 2 pm Gwinnett County Fire Station #5 3001 Old Norcross Road Duluth, GA 30096 Contact: Dave Bruse, W4DTR Email: exams@gars.org</p> <p>Third Saturday VEC: W5YI 2 pm (Except December) Lifeway Church 1654 Atlanta Highway #109 Steve Donellan, N5SMD (404) 520-0368 Email: n5smd@comcast.net</p> <p>(continued in next column)</p>	<p><u>Thanks to the following VE's.</u></p> <p>Frank, KV4SP Jeff, KC4CKN Ed, WA4VFH Jere, K4FUM</p> <p>Thanks & 73, Steve. N4TTY</p> <p>We are always looking for operators for the various hospital stations. If you are interested in taking on a hospital assignment, please contact Barry Kanne (W4TGA) via email at w4tga@arrl.net for details. This will require your ability to operate the station for drills, exercises as well as real events. Barry Kanne, W4TGA, Assistant Section Emergency Coordinator - Public Health Georgia Amateur Radio Emergency Service.</p> <p>Fourth Tuesday ARRL VEC 7 pm @ United Way Service Center 6279 Fairburn Rd., Douglasville Jessie Clower, KB4WFK (770) 942-6466</p> <p>Fourth Sunday 2:30 pm Georgia Tech Van Leer Elec. Building Rm. W218, 777 Atlantic Dr. See www.w4aql.com Alexander G. Carver (404) 894-2936 acarver@ece.gatech.edu</p>	<p>First Tuesday Kennehoochee ARC Downtown Marietta Fire Station #1, Training Room 112 Haynes Street Marietta, Georgia 30060 Meeting begins at 7:00pm Talk In 146.880(-)</p> <p>First Thursday Atlanta Radio Club Georgia Red Cross HQ 1955 Monroe Dr., Atlanta Meeting is at 7:30pm Talk In -146.820(-) N.E. Georgia ARC Commerce Public Library Meeting is at 6:30pm Talk In - 147.225(+) PL 123.0</p> <p>Second Monday Georgia Tech ARC Room W218 Van Leer Electrical Engineering Bldg. Georgia Tech Campus Meeting at 7:00pm</p> <p>Second Tuesday Gwinnett Amateur Radio Society http://www.gars.org/w4gr/ EOA Building at Briscoe Field Lawrenceville, Ga. Just off Hi Hope Road Dinner at Flying Machine Restaurant at 5:30pm then meeting at 7pm.</p> <p>Second Thursday Alford Memorial Radio Club Annistown Road Baptist Church Intersection of Annistown Road & Spain Road, Snellville Dinner at 6:00pm Meeting at 7:30pm Talk In - 146.760(-)</p> <p>Second Saturday North GA QRP Club Board Room of The Shepherd Center at 2020 Peachtree Rd, NW, Atlanta at 10:00 AM</p> <p>Third Tuesday North Fulton Amateur Radio League Alpharetta Recreation & Parks Dept. Alpharetta Adult Activity Center 13450 Cogburn Road Alpharetta, GA 30004 meeting at 7:30pm Talk In - 145.47(-)</p>



ATLANTA, GA:

Store Hours:

10AM-5:30PM Mon - Sat

Telephone hours:

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

TOLL FREE: 800-444-7927

LOCAL: 770-263-0700

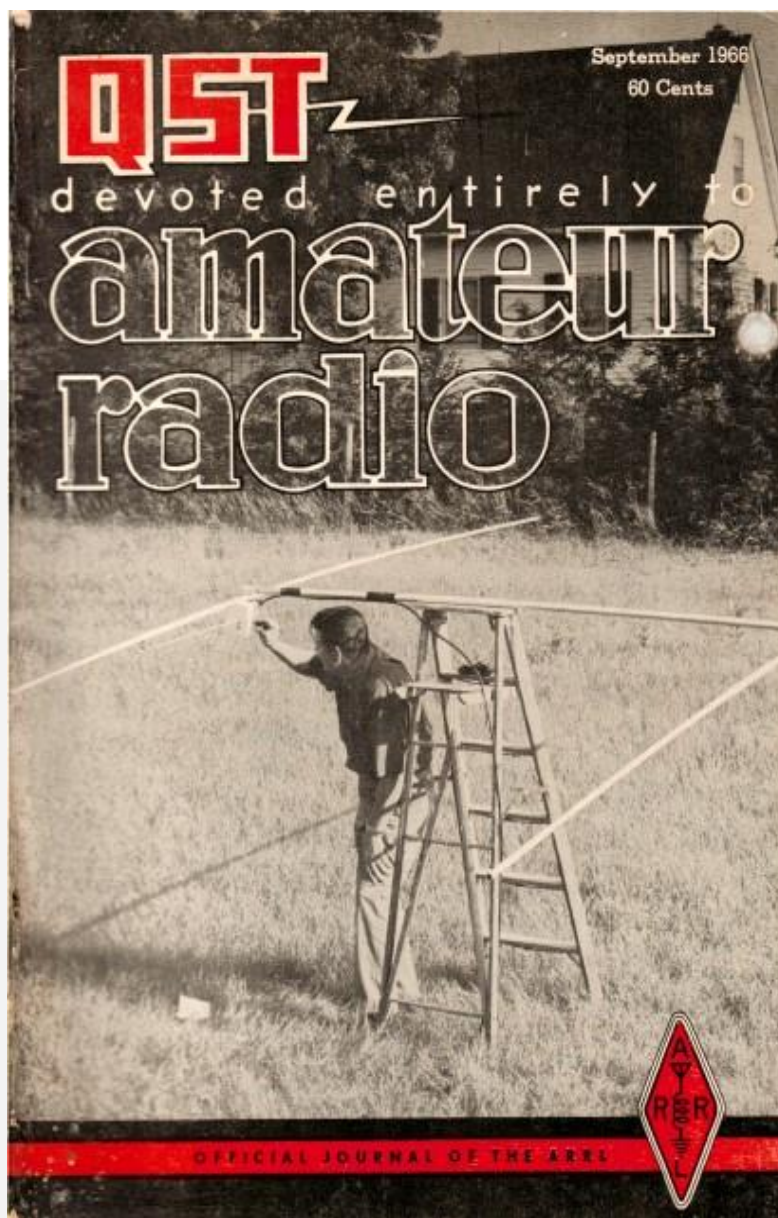
FAX: 770-263-9548

EMAIL: atlanta@hamradio.com

Store Mailing Address:

6071 Buford Hwy

Atlanta, GA 30340-1364



From QST September 1966

Paul Rockwell wrote a 4-part series on station design for long distance (DX) communications that covered antenna selection and siting ([Part I](#)), economics and construction([Part II](#)), station configuration and receiver topics ([Part III](#)), and propagation quirks and operating tips ([Part IV](#)). This first part goes into some of the gory detail of surrounding terrain considerations and necessary antenna launch angles, complete with equations. Most of the work is based on multi-element horizontal Yagi antennas. The term "forezone," of which a formal definition is not locatable in a Google search (no reference to it at all), is used throughout the series, and refers to the radiation area in the forward direction. <http://www.rfcafe.com/references/qst/station-design-dx-september-1966-qst.htm>

Mike KK4KHS

See you there.