



August 2017



The Newsletter of the Alford Memorial Radio Club

Emergency Communications



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2017 Solar Eclipse



August 2017 President's Notes

Solar Eclipse. In February 1979, Americans had the rare experience of a total eclipse of the sun. Monday August 20th we will once again have this chance to experience this phenomenon. While it starts at 1pm, the total eclipse time is approximately 2:30pm- 2:38pm. Take that time to go outside, and experience with all your senses, the shadow effect, bird behavior, and other ways the eclipse will change everyday life in a short window of time.

I plead with you to not settle seeing it other ways than in the first person. Other people's pictures, explanations, and TV broadcasts will cheat you out of witnessing an amazing event. Something so rare that occurs once or twice in a lifetime, involving heavenly body alignment can only be fully enjoyed one way- with the observer present. Get outside and enjoy. Don't be left out. Then after the event, watch the pictures on TV and join in on conversations of others who are talking about their experiences.

W4BOC/P Special Event Station. Vogel State Park, in Blairsville,,GA. Sunday Aug 20th from 9am to 9pm. Several club members will be operating on HF. If you can make contact with us at Vogel you will receive a special events QSL card. If you make contact with the Special Event station, we would appreciate you spotting us.

Stone Mountain Hamfest Nov 3rd-5th. The ticket booth is open! Click [here](http://stonemountainhamfest.com) to purchase tickets or go to <http://stonemountainhamfest.com>. By purchasing your tickets now, you help the club fund our hamfest. We are thrilled as this year promises to be our best year in a very long time. The weather man says sunny skies and cool temperatures. Our 2017 Stone Mountain Hamfest theme is Emergency Communications and Preparedness. Michael Cory, K1IU, is the ARRL Emergency Preparedness and Response Manager and will be our guest speaker. Corey's major responsibilities include addressing the development and implementation of an organizational disaster response plan as well as an operational continuity plan, complete with supporting procedures and training. Corey has his Extra Class License and is a lifetime ARRL member. Licensed since 1988 he has almost 20 years experience in emergency communications. He has been involved with SKYWARN since 1991, and he has attended basic and advanced SKYWARN training. He is the author of the ARRL Storm Spotter's Handbook. We are excited to have such an experienced amateur radio operator at this

year's Hamfest.

EmComm Ragchew Net. Steve Wisenburg has the W4BOC repeater buzzing on Tuesday evenings. His Emergency Communications Net and has been very informative and successful. On the second week of Steve hosting the Emcomm Rag Chew Net, there were 30 check-ins, with 9 of these check-ins on Echolink. The topic was batteries. It lived up to the name Ragchew with the discussion lasting longer than the Net's hour allotted time. This net isn't affiliated with ARES/ RACES or any emergency organization or radio club. Read more about this Ragchew net in this month's TOTR.

Home Brew Show and Tell. (November 2017 AMRC monthly meeting). Our November meeting will include our annual Show and Tell so you can show off your projects you have been working on. Get them ready! I'm building a raspberry pi to run our field day software and fldigi.

If you're not signed up to receive messages through the Alford Memorial Radio Club Yahoo Group or Facebook page, 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 Smith, KK4KHS



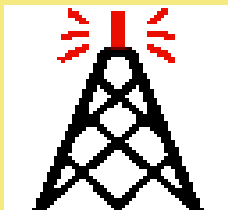
AMRC August Meeting Program

Thursday, August 10, 2017 7:00pm

Beginner's Guide to The SDR

Greg Mann KM4RKT (Rocket Mann)

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



Since February of 2015 Kenwood commercial grade repeater equipment has been located at Exchange Park.



SEPTEMBER 2017

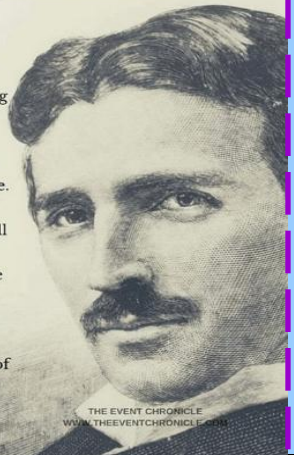
PROGRAM:

TBD

Nikola Tesla Describing a Cell Phone in 1926

"When wireless is perfectly applied the whole earth will be converted into a huge brain, which in fact it is, all things being particles of a real and rhythmic whole. We shall be able to communicate with one another instantly, irrespective of distance. Not only this, but through television and telephony we shall see and hear one another as perfectly as though we were face to face, despite intervening distances of thousands of miles, and the instruments through which we shall be able to do all of this, will fit in our vest pockets."

Nikola Tesla, 1926



AMRC Membership

**As of August 1, 2017
Total Memberships= 153
Welcome Stephen King,
KN4DNT**

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

Why Virgo Makes a Good HAM

Virgo
♍

As a Virgo, they are often good at keeping things going and moving along. They are good at paying attention to the smaller things, and they usually have a systematical way of organizing and maintaing order. They also like to be in the know and they like to be informed of the latest things.

HAPPY BIRTHDAY!!

From All of Us at AMRC

Birthdays by, N4TTY

| | | |
|---------|--------|--------------------|
| Aug 1- | KB4UVV | Dave McWhirter |
| Aug 2- | KA4IAO | Wes Akins |
| Aug 3- | KI4VWG | Janice Smith |
| Aug 6- | | Margaret McWhirter |
| Aug 7- | KM4HZP | Ron Koon |
| Aug 8- | KM4OXD | Raul Perez |
| Aug 9- | K4GZZ | Karl Phillips |
| Aug 10- | KM4HJ | Peggy Vaughn |
| Aug 11- | KK4NZE | Mike Ford |
| Aug 14- | K4MEM | Kim Smith |
| Aug 15- | KI4SBY | Katie WcWhirter |
| Aug 21- | KM4KAC | Juanita Koon |
| Aug 22- | KQ4LE | Kevin Wood |
| | KC4TOW | Doris Price |
| | KK4WOD | Ray Elliot |
| Aug 23- | AB4NX | Larry Whited |
| | | Vanessa Wood |
| Aug 24- | KE4QCM | Tom Fuller |
| Aug 29- | W4WRD | Richard Dickson |
| | KE4PPF | Jenni Bolton |
| | KK4ZIH | Allen Smith |

Why Leo Makes a Good HAM

LEO

THE LION - THE BOSS

©ZodiacLeoTheLion

- Very Organized
- Likes being in control
- Likes to help others
- Faithful • Loving • Caring
- Laid Back
- Warm hearted
- Sensitive
- Creative
- Always tries to do the right thing

Famous HAM - Art Collins, W0CXX

Born in Oklahoma in 1909, Arthur Collins, W0CXX, was raised in Cedar Rapids, IA. Art grew up on a farm and tinkered from a young age in radio and sending voice. He obtained his radio license at the age of 14. The local department stores, Woolworth's and Kresge's hired him to build and sell crystal radio sets.

At the age of 15, he was the only ham radio operator who could communicate by Morse code with Donald B. MacMillan during the explorer's expedition to Greenland. The US Naval Radio Station in Washington, D.C., due to atmospheric conditions could not reach the explorer and relied on Art to relay the expedition's messages daily.

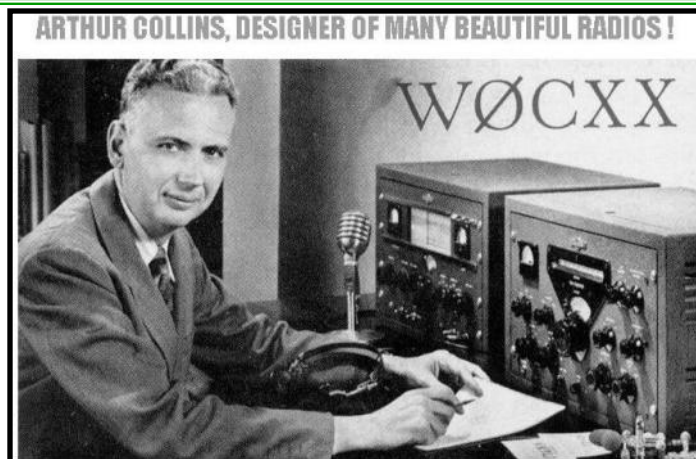
After graduating high school in 1927, Art along with his best friend and poet, Paul Engle, took a cross country road trip. Art stuffed their car with radio equipment so he could communicate with other amateur's on the trip. He attended Amherst College but never finished and never had a degree. He married twice. He was a father. In the thirties he started the Arthur Collins Radio Labs, where he began to build thousands of the first radio transmitters.

In 1933, backed by CBS Radio and Admiral Richard Byrd, he obtained a store front and hired eight employees. The company grew from there. They made Admiral Byrd's equipment for his expedition to Antarctica. After this they produced for many, including the Navy, who spent \$534 million dollars from 1940 to 1961 on his products.

In 1971, in trouble due to slow sales, the North America Rockwell Corporation bought Collins Radio for \$35 million. He finished his career with a research firm in Dallas, TX that studied telecommunications and computers.

He passed away in Dallas at the age of 77.

The Totr thanks Kim Smith, K4MEM, for his suggestion for this month's Famous Ham of the Month.



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

Join us for Special Event Station
**W4BOC/P August 19th and 20th at
Vogel State Park, contact Mike
Smith, KK4KHS for more details.**

Vintage QSL Card 1956



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.

If you are interested in being the AMRC's new apparel manager please contact Mike Smith, KK4KHS. Richard has agreed to stay on to train a new manager. Please consider. Richard has done a wonderful job over the last three years, Thank you Richard!

2017 AMRC Officers, Committee Chairs

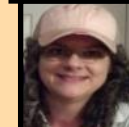
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Vice President
patdeloe@gmail.com



Allison Lynch, AB4YL
Secretary
allison48fan@yahoo.com



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



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



Jim Penland, N4RAR
DeKalb ARES EC

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



Jim Penland, N4RAR
Counsel

Al Hughes, NZ4A
Field Day Chair

Frank Haynes, KV4SP
VE Team Chair

Gretchen Mann, W1MKW
TOTR Editor
gretchelby@gmail.com



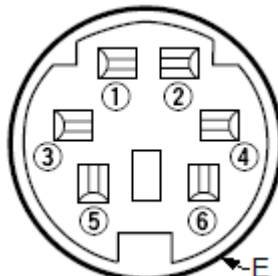
AMRC TIP OF THE MONTH

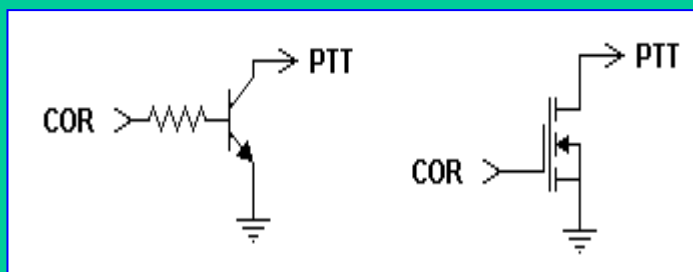
Tip of the Month

Not Just for Data

The mini DIN data jack on the back of newer Ham Radios is not just for data and can handle voice audio with no problem. When the data jack is set up for 1200 bps, the input will be at microphone level and the output at line level. Pulling PTT input low will place the radio in transmit mode. The COR output is high with valid receive signal. Do NOT use 9600 baud setting as this will bypass the pre-emphasis and de-emphasis circuits and cause the audio to sound tinny.

VOIP Apps such as EchoLink or audio to and from another radio or device can be connected through the data jack. Audio signals will usually need to be attenuated going into the input at pin 1.

| Data Jack (packet) | | | | |
|--|------------|-----|--|---------------|
|  <p>View looking into female connector on back of radio</p> | Pin | I/O | Function | Color |
| | 1 | I | TX Audio input | Black |
| | 2 | I/O | Signal Ground | Brown |
| | 3 | I | PTT ground to transmit | Red |
| | 4 | O | 9600 bps data output | Orange |
| | 5 | O | 1200 bps data (audio) output | Yellow |
| | 6 | O | Squelch - High when squelch open | Green |
| | E | I/O | Common Ground | Bare / Black |
| Signal Levels | Pin 1 | | 40 mVpp for 1200 bps, 2 Vpp for 9600 bps | |
| | Pins 4 & 5 | | 300 mVrms Output | Audio Imp 10K |

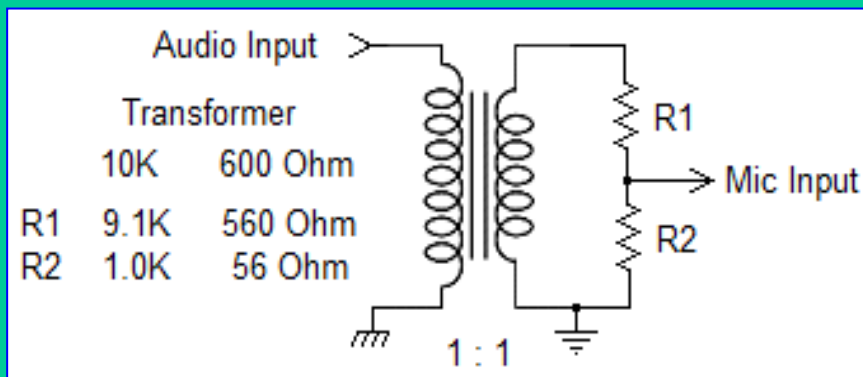


Simple Transistor COR (pin 6) to PTT circuit

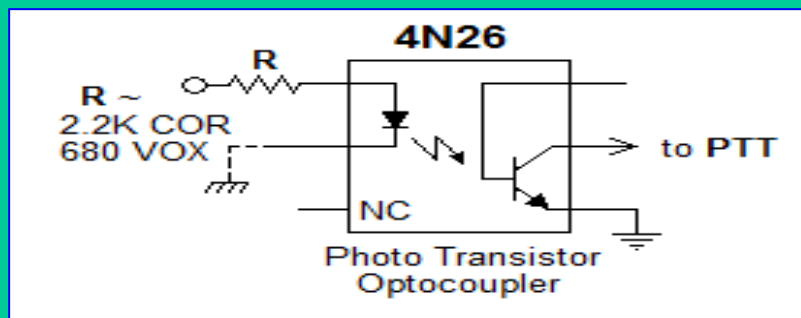
Isolation:

High power radios and devices powered from separate 120Vac outlets may need ground isolation to prevent the possibility of shock, ground loops and RF feed back.

Audio isolation – 10K transformer should be used when driven from a line output; a 600 Ohm transformer can be used when the output source can drive a headset or speaker.



PTT isolation



Tip by Pat Deloe , N4MPC

Member Spotlight

Allison Lynch, AB4YL

The person I remember most from my first visit to the AMRC meeting was Allison, AB4YL. Allison was supportive of my studying for my license and joining the group. I remember how welcoming she was to me. She has her Extra Class and I remember she told me if she passed her Technician, I could too. She remembered me when I came back, and now she is one of my favorite people in the AMRC. The YL in her call sign stands for Young Lady, which is a common suffix in the vanity call signs many women Amateur Radio Operators choose. Allison is our Club Secretary and I enjoy seeing her each month. She is very active in the Alford Club. She organizes the Totr Explosion contest in the Spring, and she ran a voice station at Field Day this year. She is a great role model for women and girls in radio or wishing to be. If you doubt her dedication to radio, please know her dog's name is Watts. Allison loves to travel and do radio. on the road.

She resides in Lawrenceville with her husband, Dale, AE8DL. Please visit Allison's QRZ page by clicking [here](#). If you need support, help with your radio, or just a genuinely kind friend please seek her out on the air or at meetings. Thanks for all you do for the club, Allison, and the interest you take in our members.



By Gretchen Mann, W1MKW

Solar Eclipse 2017 and W4BOC/P

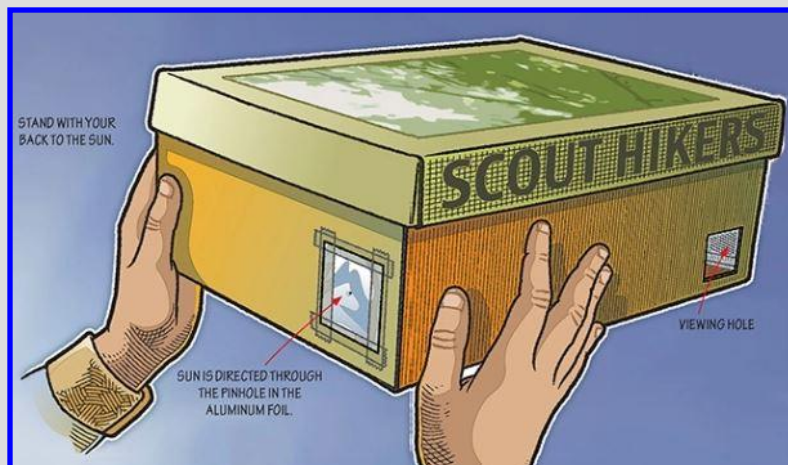
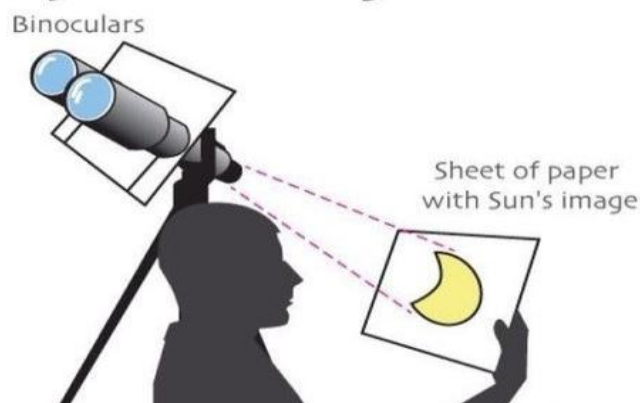
On 21 August 2017, a total solar eclipse will cause the shadow of the moon to move over the United States from Oregon to South Carolina all in just a little more than 90 minutes. This will be the one of most significant solar eclipses in the continental United States for 100 years. While solar eclipses are perhaps best known for their stunning visual display, the shadow of an eclipse can also cause changes to the ionosphere which effect radio wave propagation.

On the 19th and 20th, the Alford Memorial Radio Club will be in Blairsville, GA at Vogel State Park running a special events station ,W4BOC/P. Headed up by Mike Smith, KK4KHS, club president, a good time is expected by all. Those who are fortunate enough to make a QSO will receive a special event QSL card. If you are not at Vogel and make contact with the club, please spot us in return. All are invited to join the club at Vogel Park.

HF bands will be worked on Monday for the Solar Eclipse QSO Party. There will be club members at Vogel State Park. If you attend Monday, you need to be there extremely early, as there will be limited amount of people allowed into the park., and they are expecting record numbers. Remember to get out and enjoy the eclipse, but use proper equipment to view it. Glasses should be approved by NASA.

To visit Vogel State Park's website, click [here](#). There is a \$5 parking fee. The Park hours are 7am-10pm. The address is 405 Vogel State Park Road Blairsville, GA 30512, Union County . The GPS coordinates are N 34.765883 | W -083.925416.

Projector using binoculars



Historical List of Total Eclipses

These are the only total solar eclipses that have touched U.S. soil in the last hundred years, and the general locations you would've had to have been in to see totality:

| | |
|------------------|--|
| 6/8/1918 | A nationwide band of totality stretching from the SW corner of Washington, through Denver, the Tulsa/OKC area, Jackson MS, the panhandle of FL, and Orlando. |
| 9/10/1923 | Only visible from the far SW beaches and a couple of the offshore islands in California. |
| 1/24/1925 | Northern MN, WI, and MI, and about half of NY (NYC was split in two by the path!), plus pieces of PA, NJ, and CT. Read the New York Times articles about the 1925 eclipse , courtesy of Michael Zeiler! |
| 8/31/1932 | Maine, NH, VT, and the far eastern coast of MA. |
| 2/4/1943 | Alaska only |
| 7/9/1945 | Our "Victory Eclipse" was visible in ID and MT only, in the early morning. |
| 6/30/1954 | From northern NE, through the western tip of Michigan's UP. Minneapolis was in the path. Early morning. |
| 10/2/1959 | Massachusetts only, just at sunrise. |
| 7/20/1963 | Alaska got a good show, and Maine was the only other state to see totality. |
| 3/7/1970 | From central Florida, the path hugged the eastern coast of the US up through Virginia's Eastern Shore. This may have been the eclipse that Carly Simon was referring to in her 1972 song " You're so vain ". ("You flew your Lear jet up to Nova Scotia - to see the total eclipse of the sun.") |
| 7/10/1972 | Northern Alaska only. This might also have been the eclipse that Carly Simon was referring to in her 1972 song " You're so vain ". (see above) They were both visible from Nova Scotia! (The song came out in December of 72, so it's unlikely that it was this one, but hey - you never know! |
| 2/26/1979 | WA, OR, ID, MT, and ND were the only states to see totality, in the mid-morning. It was cold and dreary, and unfortunately many people did not see the eclipse due to rain. |
| 7/22/1990 | This one only touched four small islands in the Aleutians, in the late afternoon: Atka, Adliia, Seguam, and Amukta. From reports we've read, the day was rainy, and unfortunately no one saw the eclipse from US soil. |
| 7/11/1991 | Hawaii only, and lots of people were clouded out. (Many people went to Mexico to see this one, and were not disappointed there!) |

*That's it for total eclipses seen from the U.S.! Anything else you may have seen was **not** a total eclipse!*



Interview with Net Control for the Em Comm RagChew Net, Steven Wisenburg, KM4CVU,



The Em Comm Ragchew Net has been popular. The Totr gets the info straight from Net Control (NC), Steven Wisenburg

Totr : What does EMCOM stand for and what is the purpose of the EMCOM Ragchew NET?

Steve Wisenburg (NC)- EmComm is short for Emergency Communications. The purpose of the net is to share helpful information that can be used by emergency communicators in emergency communications events. We can share tidbits on equipment, deployment techniques, and other useful information. Through the interaction of all involved, we can learn from each other and become better emergency communicators. We know that there are a lot of people that rely on emergency communications, ARES, MARS, CERT, SHARES (DHS program for commercial businesses), churches, and many more. They don't always have access to information on emergency communications, and this net is there to help spread the knowledge and encourage information exchange.

Totr- How is it different from Ares and other Emergency Run Nets?

NC- ARES and other Emergency practice nets are designed to pass traffic and ensure equipment and methods are working. The Rag Chew is an information exchange on topics of interest to Emergency communicators. For example, we discussed some of the most common battery types and some of their advantages and disadvantages. During that conversation, Elmer's supplied additional information as to how temperature effects batteries and some helpful recharging ideas.

Totr- When and where can we be a part of this Net?

NC-We hold the net on Tuesday nights at 20:00 hrs Eastern on 146.760 - PL 107.2

Totr- What topics have been covered so far?

NC- We have had two Nets thus far. The first net I introduced a real world event where emergency communications was used. The Grenada Invasion, students at the university were able to pass communications stateside to let families know everyone was doing well. It ended up being the first word to the news media that an invasion has occurred. Click [here](#) . During that same night we took suggestions for future topics, including batteries and recharging methods, antennas, digital communications, Go-boxes, served agency types (hospitals, GEMA, local, etc) and several other potential topics. The second net we discussed the basic battery types used by Hams and the pro's and con's of those choices.

Totr- What is something you learned from the NET, that you did not know before?

NC- During our battery discussion that the Tesla electric car is run off basic 18650 3.6 volt Lithium batteries run in series and parallel to get the necessary volts and Amps.

Totr- What are some possible future topics for the NET?

NC-Besides the ones already mentioned, useful battery accessories (power gate, discharge monitors, etc), solar for recharging, packing for deployments, generators, etc. Anything that an emergency radio operator would need to know before a deployment so they know how to respond would be excellent. Camping foods they might want to pack in a go bag for deployments, and possible shelters when you have less than 4 star accommodations is another idea. I also want to discuss real life deployments, especially when there are valuable lessons learned. Besides Grenada, hurricane, wild fires, red cross, police communications failure, and other events where Ham radio operators became part of the emergency response are important topics.

Totr- The NET has had quite the number of check-ins, what do you think it is about this particular NET that makes it so popular?

NC-I think the popularity is based on a general desire to learn and share information on emergency communications information. The location of the W4BOC repeater means we cover several areas in the State that don't have access to this information on a regular basis.

Totr- Tell the Totr readers a little about yourself.

NC- I am originally from a town called Rock Island, Illinois but currently live in Lawrenceville, GA. I have been an amateur radio operator for 3 years now. I also enjoy amateur radio, wood working, camping, hiking, and target shooting.

Totr-What is the best thing about being a net control station?

NC- I really enjoy being able to facilitate the sharing of information. Its great to hear when people find things out that they didn't know, and when people can share what they know with others. That makes me feel good.

Totr- Anything else you would like us to know?

NC- I am not a subject matter expert on all things related to Emergency Communications. I am relatively a newbie myself. I really hope to engage with some elmers on various topics and help to get them involved in presenting on topics. Please reach out to me if you have interest on presenting on a topic. wiseguy2470@gmail.com. Please join the facebook page <https://www.facebook.com/groups/1837783883217639/> We will post links and supporting documents related to anything we discuss. I will also try to post what topics we will be presenting before the net.

EXTRA! EXTRA!

Classes:

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

Georgia ARES Web Site, Check it out!!!

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



CERT
COMMUNITY EMERGENCY
RESPONSE TEAM

DeKalb County
GEORGIA

Conducted by DeKalb County Emergency Management Agency



**ARE YOU
PREPARED
FOR A
DISASTER?**



Learn what to do before, during and after a disaster occurs.
Community Emergency Response Team (CERT) Course
This 9 week course will train you to care for your family, classmates, colleagues and neighbors.

Classes are held once a week:
Fire Rescue Headquarters
1950 W. Exchange Place
Tucker, GA 30084

Course Topics:

- DISASTER PREPAREDNESS
- BASIC FIRE SUPPRESSION
- DISASTER PSYCHOLOGY
- DISASTER MEDICAL OPERATIONS
- LIGHT SEARCH & RESCUE OPERATIONS
- TEAM ORGANIZATION
- TERRORISM AWARENESS
- AUTISM AWARENESS

For more information and to register:
bit.ly/DeKalbCERT
Thomas Paige, Emergency Management Specialist
678-406-7858 | tpaige@dekalbcountyga.gov

- ♦ 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



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

To buy or inquire about any of the items for sell this month,
Please email Allison at allison48fan@yahoo.com



MPJ Deluxe Versa Tuner II model 949E

\$50.00



TDK Lambda HWS 150-12/HD, 12V Never Used \$35.00



**Daiwa cross needle
SWR/ wattmeter
Model CN-801 1.8-
200Mhz**

In the original box

**with everything
Included Only \$70.00.**

Building a Box on a Budget

When thinking of how to build a shack-in-the-box, you might begin your plans by trying to add too many features. This is quite typical as we all want to have as many bells and whistles or rather, ham toys and watts, as possible. Simplicity is key!

There are inexpensive ways to build a go-box. For this article, I am listing the parts used to build a budget friendly shack-in-the-box for AB4YL. Most items were purchased at Lowes for roughly \$100 total.

The first thing recommended is to have a square or rectangle box rather than the tapered shape I used, in order to make measuring and cutting the shelves much easier.

Begin by deciding how many shelves you need and the distance between them. Use a Sharpie pen to mark the location of the rails. Cut the U channel rails to length using a hack saw, drill the screw holes where you want them, and attach them using the screws, washers and lock washers.

Next, cut the plexiglass to size using a router, leaving room for the shelves to slide freely and allowing for the screw heads in the channel. Drill 1/4 inch holes every two inches in a grid pattern for air flow/heat dissipation. Optionally, holes can be drilled at the ends of the rails utilizing locking pins in order to keep the shelves from moving.

Cut a hole in the top of the box for installation of the fan. Tape, or otherwise affix, the wiring so that it will stay out of the way and be protected. Solder on alligator clips and attach them to the battery when in

Use. Add a switch if you like.

Slide the shelves into the U channel rails, add equipment and wire it up! Use tie wraps to hold each piece in place. Cut a hole in the back of the box, if needed, to allow easy access to your cables and wires.

Shopping List

- Tote with snap lock lid: \$7
- 2 sheets of 1/4 inch plexiglass 18x24 for shelves: \$30
- 2 1/4 inch aluminum U channel rails 4 feet long, for shelf supports: \$14
- Machine screws/nuts to fit in U channel: \$6
- Washers: \$2
- Lock Washers: \$2
- Computer Fan from computer store: \$15
- Wire: \$4
- Alligator Clips to attach to battery terminals: \$1
- 12 volt Battery from Academy: \$25

Happy portable rag chewing!

73,
Dale Lynch AE8DL



July NETS REPORT

| AMRC | | DeKalb ARES | | | Turnip Truck | |
|------------------|----|-------------|----|---------------|--------------|----|
| Sunday Night Net | | | RF | Winlink/DRats | | |
| July 2 | 34 | July 2 | 16 | 11/7 | July 1 | 22 |
| July 9 | 20 | July 9 | 15 | 10/7 | July 8 | 20 |
| July 16 | 33 | July 16 | 16 | 9/6 | July 16 | 26 |
| July 23 | 31 | July 23 | 15 | 10/8 | July 22 | 25 |
| July 30 | 22 | July 30 | 16 | 9/6 | July 30 | 19 |

AMRC CALENDAR OF EVENTS FOR AUG 2017

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

16 August 2017 TOTR

Activities

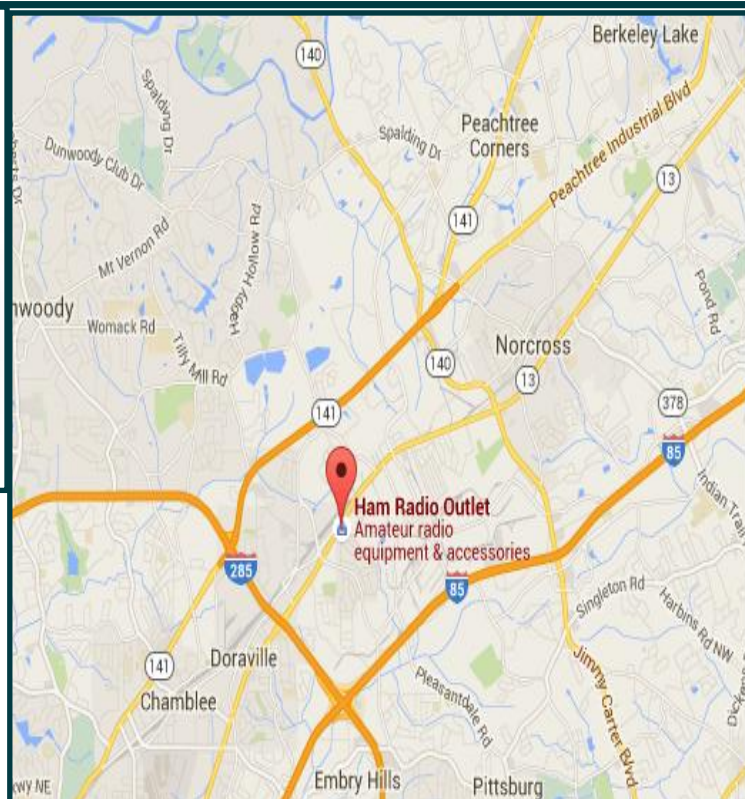
| Date | Event | Website | Location / Notes |
|------------------------------|---------------------------|---|---|
| Monthly | Club Meetings | First Thursday of Month → Atlanta Radio Club www.atlantaradioclub.org (Atlanta) Second Tuesday of Month → Gwinnett Amateur Radio Society www.gars.org (Lawrenceville) Second Thursday of Month → Alford Memorial Radio Club www.totr-radio.org (Stone Mountain) Third Tuesday of Month → North Fulton Amateur Radio League www.nfarl.org (Alpharetta) | |
| Second Saturday of the month | North GA QRP Club meeting | www.nogaqrp.org | This small, but growing, group of amateur radio enthusiasts, most of whom are within 90 miles (and more) of Atlanta, are interested in promoting the development of low power amateur radio known as QRP. Meetings are normally held at the Shepherd Center , 2020 Peachtree Rd., NW Atlanta, GA 30309 |
| Second Sunday of the month | Sunday Tech | SecondSunday.tech | 2:00 – 5:00 PM at the DeKalb Peachtree Airport . This is a monthly hands-on technical session for hams and people interested in Amateur Radio activities. Check website for any changes in location. |

Word Box

| | | | | |
|-----------|------------|------------|--------------|----------|
| frequency | megahertz | call sign | voltmeter | QSL card |
| radio | hobby | worldwide | transmitter | receiver |
| antenna | Morse code | keyer | power supply | filter |
| repeater | modulation | microphone | signal | operator |
| station | tuner | ham | | |

q p e h m e g a h e r t z n w e b f
 w s v k i r e c e i e v e r o d a r
 p i l g e i r l e a v n n i r o s e
 v g n c s y t t n r h o b b y c o p
 h n o l a m e y e k e i h a d e x e
 l a i a e r e r e v c t p t w s d a
 v l d t p t d n o i t a t s o r y t
 o e a e n i e z l q r l r h r o t e
 l r r a f r f e n u t u c y l m o r
 t r a n s m i t t e r d i c d c p n
 m n j t z n l r p s d o m n w t e g
 e h a e r v t t a h a m g e i n r i
 t p d n m l e q d d c y l u d j a s
 e r e n u t r i g p i c v q e c t l
 r l p a u s r e w o p o b e p o o l
 k e n o h p o r c i m j b r j k r a
 g a z w k a w w x n a s k f c q f c
 p o w e r s u p p l y h x d b k p i





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Special Thanks from the Editor to:

1. Kim K4MEM (Famous HAM suggestion)
2. Pat Deloe- Tip of the Month N4NPC
3. Mike KK4KHS- Notes, Solar Eclipse Info
4. Steve N3TTY- Membership/ Net #s/Bdays
5. Dale Lynch- Building Box on your Budget
6. Steven Wisenburg,- Net Control Interview

The Alford Memorial Club would like to thank **Pat Deloe, N4MPC**, for presenting in July on Cross Band Repeating. Thanks for everything you do for the club.

ARRL Contest Calendar

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

August 2017

10-12- 222Mhx and up Distance Contests

19-20 10 GHz and up- Round One

20- Rookie Round-up RTTY

September 2017

9-10 EME - 2.3 GHz and Up

9-11 September VHF QSO Party

16-17 10 GHz and Up - Round 2

Hamtoons
CARTOON QSLs
-- AND MORE!

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