



BUTTS COUNTY EMERGENCY COMMUNICATIONS AUXILIARY

Dedicated to serving the communities in and surrounding Butts County, working hand-in-hand with local and state governments, the Red Cross, and other non-profit community-service organizations.

THE REPEATER

JULY 2016



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FIELD DAY 2016 WAS HOTTER THAN A PEPPER SPROUT!

Johnny and June Carter Cash sang, "We got married in a fever; hotter than a pepper sprout. We been talking 'bout Jackson, ever since the fire went out..." Well, it was hotter than a pepper sprout in Jackson and it



degrees making it a record high for the date.

There were several visitors to our QTH including **Chief Glen Goens KJ4TVO**, director of Butts County Homeland Security and **Ken Rivers**, County Commissioner-elect. Ken brought his son along who was able to "get on the air" at our GOTA station.

The day began with a pretty good turn-out for breakfast at Hunter's Restaurant. Then off we went to the Butts County Recreation Park and the Tim Kersey pavilion for set-up and operation. This year we operated again in the 3A category—three radios



seemed like the fire never went out at Field Day 2016!

Our BCECA members, however, showed up in good numbers and withstood the heat while erecting 5 radio stations, 3 wire dipole antennas, a hex beam antenna, two 2m antennas and a 40m directional dipole. By the time 2:00 PM (start time) came around Saturday afternoon, many of us were already pooped!

But Field Day is about making contacts and we fired up the radios and called, "CQ Field Day!"

Temperatures reached an official 101

operating simultaneously manned by a club. Last year was our first attempt in this category but we managed second place.

The bands were not in good shape but we managed to make more than 400 contacts. A number of our new Generals received their "baptism under fire!"

See Buzz's K3GWK article (p. 3) for a full report on Field Day 2016.

See page 9 for some great pics taken by J.D. KM4DHS.

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SAVE THE DATES

Sundays @ 5:30 PM

Weekly Butts County
FM Training Net
147.285- PL131.8

July 11

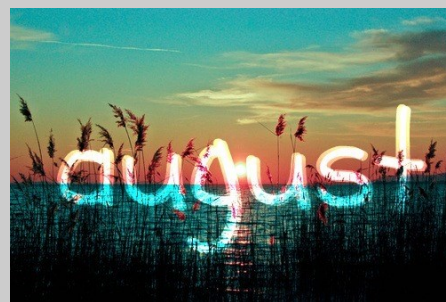
Monthly BCECA
Meeting, Fire Station
#7, 7:00 PM

July 16

Hungry Hams
Lunch Box, 7:00 AM
HamCram, Fire
Station #7, 8:30 AM
V.E. Session, 4:00 PM



UPCOMING EVENTS CALENDAR

July**July 4** -- Independence Day**July 11** — Pre-meeting dinner and fellowship. Mesquite Grill, 5:30
Monthly Club Meeting & Training. 7:00 PM. Fire Station #7**July 16** — Hungry Hams, Lunchbox Restaurant, 7:00 AM
HamCram, Fire Station #7, 8:30 AM
V.E. Session, 4:00 PM**July 19** — Newton County Club Meeting.
NC Law Enforcement Center, 7:00 PM.August**August 1** — Pre-meeting dinner and fellowship. Mesquite Grill, 5:30
Monthly Club Meeting & Training. 7:00 PM. Fire Station #7**August 20** — Hungry Hams, Lunchbox Restaurant, 7:00 AM**August 16** — Newton County Club Meeting.
NC Law Enforcement Center, 7:00 PM.**Congratulations!!!**A big “thumbs up” to those who went
through V.E. Testing in May:**Mark Clark KW4VB (Extra)****Richard McCarthy KM4UJB (General)****Lance McCullough KM4JC (Technician)**

Thumbs up to our two new V.E.s:

Mark Clark KW4VB**Anthony Strite KM4DHZ****Spalding County**Saturday,
July 9

9:00 AM

Spalding Regional
Hospital601 South 8th Street
Griffin, GA**Butts County**Saturday,
July 16

4:00 PM

Fire Station #7
Colwell Road
Jackson, GA



FROM THE BACKACRE — BUZZ (K3GWK) Butts County Emergency Coordinator

Can't start this installment without mentioning Field Day. First, thanks to everyone who helped out this year. In spite of the heat, the turnout Saturday and Sunday was outstanding; twenty-six on Saturday and sixteen on Sunday. The Family Picnic was excellent. It was great to see all of our family folks who braved the heat and joined us for the dinner. Darlene really had it under control. Many of our YLs jumped in to help with set-up and "Mark, the Burger Meister" had those hamburgers and hot dogs flying off the grill. Ohhh, char-broiled. We had plenty to eat and plenty of cold water to drink. Even that "Yankee Lemonade"...

Between the lack of propagation and the extreme heat, we were off our usual game this year. We still made 406 contacts and the good news is that we had a lot of folks logging and getting behind the mic. According to the logger there were seventeen different operators. We worked sixty-two ARRL Sections and made a couple of DX contacts.

As the self-appointed Safety Officer (100 points), I'd like to thank everyone for being especially safety conscious; we hydrated, ladders were used properly, we had plenty of help when lifting and the generator was always shut down for re-fueling. Ed Hoard, our PIO, made good use of Social Media and generated several well liked posts on Facebook (100 points). He was also interviewed live from the site on WJGA. We were visited by two (2) Commissioners and several members of the fire department and EMA (200 points!). As is said in the Coast Guard – Bravo Zulu (well done) to all!

SOAPBOX TIME: Two things bothered me though. First, we ALL (*me included!*) need to become more familiar with our equipment. Whether it is programming our HTs on the fly, making sure WIRES is turned off J, or operating our HF equipment on a mode other than SSB; we need to know how. In my case, I have two D-Star radios and really have no

idea how to program and use that mode. I know my HF gear pretty well but I still need a "cheat sheet" to get the old Baofeng set on a VFO frequency and the correct tone set without a PC. It is that lack of familiarity that could become an issue during an "actual emergency." Get those manuals back out and read them. Nifty Guides can be a big help, too. The second thing is that no matter how much we train and practice with WL2K and NBEMS as a group, we are still not using it much in our day to day operations. Again, using me as an example – I am not skilled in digital QSOing. I need to put the mic away once in a while and actually get some PSK contacts in my log. Digital Nets (HF and FM) are a great way to practice also. Even Elmers need Elmers... What do you need to work on?



Time to tie the ribbon on this month's report. Our ARES membership remains at 24 with 8 PENDING. We just need ARES/RACES registrations completed to get those folks on the ACTIVE roster. We

had seven training events in June (625 Hours) and one miscellaneous activity (9 Hours). A total of eight nets: four FM Phone and four WL2K tests (26 Hours). Ken asks that your WL2K test message use the ICS-213 form. Remember we have a HamCram scheduled for July 16th. It begins at 8:30 AM with a VE session to follow at 4 PM. Contact Dan for info. We have added several more VEs to our team and hopefully they will get a work-out.

If you have a couple of free hours on the morning of July 4th, consider helping out with communications at the Peachtree Road Race next year. This is one of the most rewarding ham radio events in the Atlanta Metro area. Check with Dan, Mike or me to get more information. It takes a lot of ham operators to pull this off. It is good PR and good practice.

Thanks for all you do.

73, Buzz Kutcher K3GWK

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BCECA CLUB FEATURED IN JULY 2016 QST MAGAZINE

2015 Simulated Emergency Test Results

In 2015, this annual exercise was conducted using a variety of scenarios.

Steve Ewald, WV1X, wv1x@arrrl.org

The following stories, statistical reports, and exercise summaries are representative of the outstanding efforts by many radio amateurs and members and leaders of ARES®, RACES, SKYWARN, National Traffic System™, the ARRL Field Organization, and other allied groups. Thank you for your continued hard work!

A Plague Scenario in Butts County, Georgia

Dr Ed Hoard, WX4ED

Public Information Officer, Butts County Emergency Communications Auxiliary.

Consider this scenario: The plague has broken out in Butts County, Georgia. Sylvan Grove Hospital is being inundated with infected people. The county Health Department has been distributing preventive antibiotics, but has run out of medicine. As if this weren't enough, a tornado has touched down in downtown Jackson, disrupting landline and cellular telephone service.

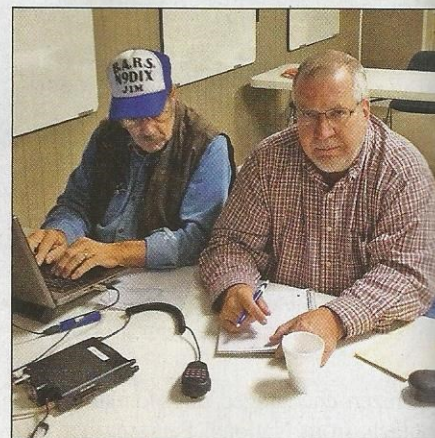
Each year the Amateur Radio Emergency Service® (ARES) poses just such a scenario to test the readiness of its members. In Butts County, the ARES group is the Butts County Emergency Communications Auxiliary. These Amateur Radio operators volunteer their time and equipment to be ready for manmade or natural disasters.

The 2015 Simulated Emergency Test (SET) was held in cooperation with the Butts County Health Department. These hams brought radios, antennas, batteries — everything needed to erect a remote emergency Amateur Radio station at Sylvan Grove Hospital.

The ARES team was tasked with providing emergency communications between the Butts County Health Department, Sylvan Grove Hospital, Region 4 Georgia Public Health Department headquarters in LaGrange, the Georgia ARES Emergency Net, and the Georgia Emergency Management Agency (GEMA) State Operations Center in Atlanta.

The task would have been completed by a simple phone call or two if telephone services were available, but (according to the simulated emergency scenario) the tornado disrupted normal communications channels. ARES team members were required to effectively communicate (pass message traffic) across several different radio frequencies, in voice mode as well as digital modes.

By the end of the Simulated Emergency Test, operators at the Butts County Health Department had successfully communicated with the station at Sylvan Grove with both digital and voice messages reporting status and requesting traffic control assistance. The station at Sylvan Grove accurately passed this traffic by digital mode and voice mode to the regional DPH



During the 2015 SET, Jim Jones, N9DIX, (left) Assistant Emergency Coordinator and the Humphreys County RACES Director, and John Ethridge, K4IYN, (right) Humphreys County Emergency Coordinator and District Emergency Coordinator for District 11, activated the Humphreys County Emergency Management Office in Waverly, Tennessee.

headquarters in LaGrange and GEMA headquarters in Atlanta.

The simulated test began at 9:00 AM and was finished by noon. Buzz Kutcher, K3GWK, ARES Emergency Coordinator for Butts County said, "I am very proud of our local ARES team. We have 27 active members in our club. To have 11 ham radio operators give a majority of their Saturday to this test means they are serious about volunteer emergency communication."

Kutcher expressed his thanks to Sylvan Grove for purchasing needed radio equipment for the hospital to make emergency communication easier and more reliable. "Before we had radio equipment installed at the hospital, we had to bring our own equipment and hook it up, which was time-consuming," Kutcher pointed out.

Operation Bright Star

Perry Lundquist, W6AUN
Colorado Assistant SEC for

2015 SET Top Ten

Section	Points
ARES Activity	
Alabama	8833
Mississippi	4450
Ohio	4317
Georgia	4300
Connecticut	3167
Eastern New York	1779



Section	Points
Section/Local Nets	
Mississippi	6693
Connecticut	3029
Alabama	2766
Georgia	1795
Ohio	1573
Wisconsin	1260



MONICA LADSON KK4KUF WINS ARRL SCHOLARSHIP

Monica Ladson is not your typical high school senior/graduate. While most teenagers seem to be permanently bent at a 45-degree angle staring incessantly at their cell phones, Monica enjoys communicating with a much older technology. Monica is a licensed amateur radio operator.

"I got interested in ham radio because my



grandfather is a ham," explains Monica. She studied for her Technician exam and passed the test becoming a ham radio operator at the ripe old age of 14.

"I enjoy going with my grandfather to the events his amateur radio club provides communications for," explained Monica. "We are the emergency communications link for 5K road races, the Peachtree Road Race and other charity events. I enjoy the opportunity of meeting people and the fellowship among other hams."

At age 16, Monica decided to upgrade her amateur radio license and so she studied for and received the General Amateur license which allows her to communicate with other hams all over the world. Each year on the last weekend of June, amateurs participate in Field Day. They go out into a remote area, set up radio stations using solar, battery or other back-up power and for two days make contact with other hams.

Monica's club, the Butts County Emergency

Communications Auxiliary, took first place in the Field Day contest two years ago and were second place in a much more competitive category last year. Monica stated, "I really enjoy field day—not only making contacts with other states and countries, but the fellowship we have at the family picnic." Ham radio operators are a "family." Monica's club has monthly meetings preceded by dinner at a local restaurant. They also meet for breakfast once a month for fellowship and to talk about how to be better at their hobby.



Each year the Amateur Radio Relay League (ARRL), the national organization for amateur radio operators, gives scholarships to young deserving hams who are planning to attend college.

Monica was this year's recipient of the Eugene (Gene) Sallee Memorial scholarship.

Monica, a graduate of Ola High School, will attend Georgia State University this fall and plans to study business. "I would like to be an accountant," explained Monica, "but with a business degree you can do lots of things. I don't want to get a degree in something that won't fit whatever profession I choose."

Whatever career Monica does decide to pursue, it's for certain that she will take her amateur radio transceiver, antenna and other equipment and she'll use an older technology that, in reality, was the very first social media.



MAYOR AND COUNTY COMMISSION DECLARE AMATEUR RADIO WEEK



Butts County Georgia Emergency Coordinator, Buzz Kutcher K3GWK, accepts a proclamation designating June 20 through 26 as "Amateur Radio Week" in the City of Jackson Georgia from Mayor Kay Pippin.

Joining in the presentation ceremony were members of the Jackson City Council and five members of the Butts County Emergency Communications Auxiliary.

Mayor Pippin and the members of the City Council expressed their appreciation for the services of the volunteers. Mayor Pippin pointed out that ham radio operators are highly skilled volunteers who receive no compensation for their efforts on the public's behalf.

A week later several members of the club were present at the County Commission meeting to receive a proclamation from the County.



PROCLAMATION

WHEREAS, Amateur Radio Operators are celebrating over a century of the miracle of human voice broadcast over the airwaves; and

WHEREAS, Amateur Radio has continued to provide a bridge between people, societies, and countries by creating friendships and the sharing of ideas; and

WHEREAS, Amateur Radio operators have also provided countless hours of community service both in emergencies and to other organizations throughout these decades; and

WHEREAS, Amateur Radio services are provided wholly uncompensated; and

WHEREAS, the State also recognizes the services Amateur Radio's also provide to our many Emergency Response organizations; and

WHEREAS, Amateur Radio operators serve as weather spotters in the "Sky Warn" program of the National Weather Service; and

WHEREAS, the Butts County Emergency Communications Auxiliary is a designated local Amateur Radio Emergency Service Team;

NOW, THEREFORE, I, Kay Pippin, Mayor of the City of Jackson, do hereby proclaim June 20-26, 2016 as Amateur Radio Week in The City of Jackson.

AND IN WITNESS WHEREOF, I have hereunto set my hand and caused the Seal of the City to be affixed this seventh day of June of the year of our Lord two thousand sixteen.



Kay Pippin
KAY PIPPIN, MAYOR
Jeanette Riley
JEANETTE RILEY, CITY CLERK



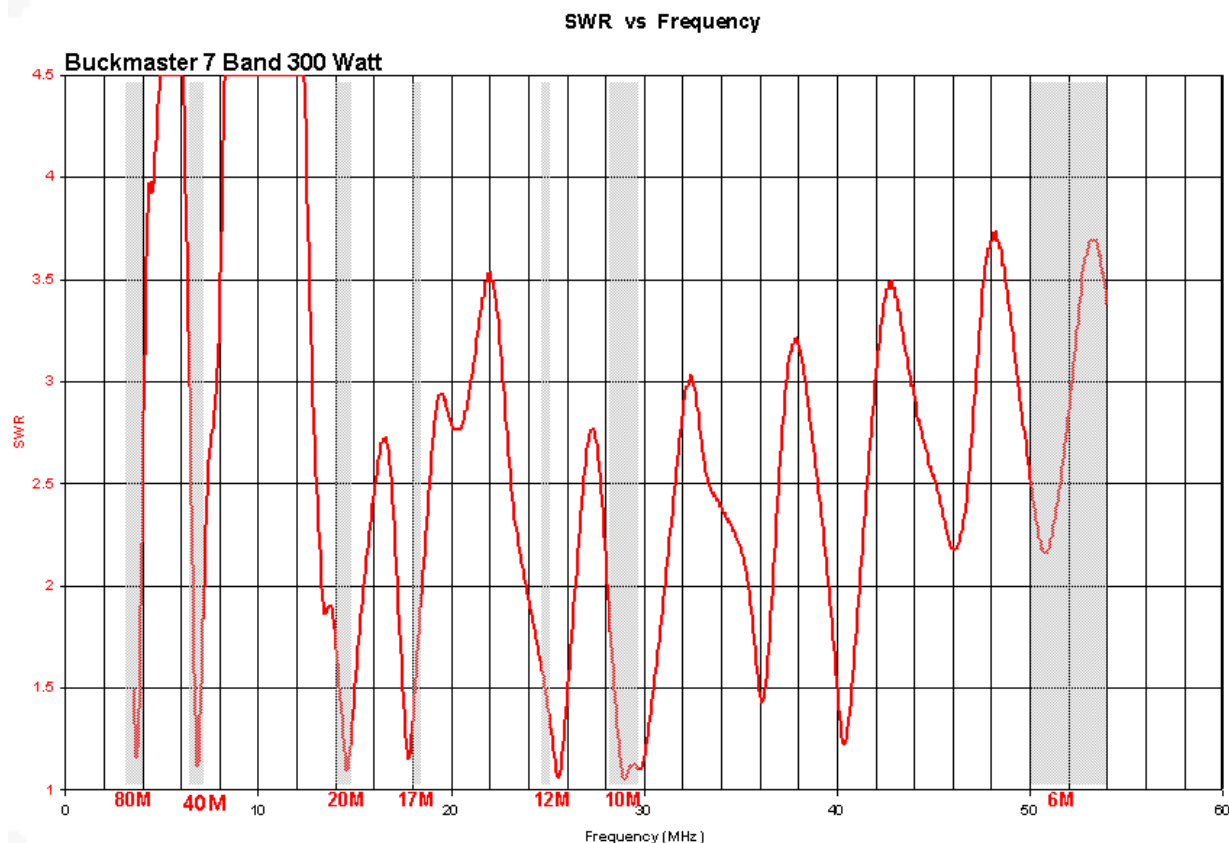
Tech Notes

Home Brew OCF 7-Band Dipole Antenna

By Ed Hoard WX4ED

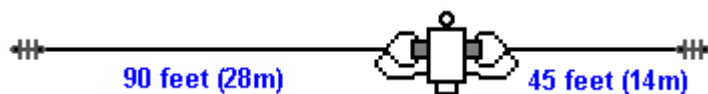
An early summer storm blew down both my dipole antennas. One was a mono-band 80/75 meter dipole. The other was an OCF multi-band (40,20,10,6m) dipole. I really didn't want to put *two* antennas back up, but wasn't sure I could get a multi-band antenna that included 40, 20, 10 *and* 75 meters.

After doing some research on the net, I discovered that *Buckmaster* manufactures a 7- band OCF dipole. The below chart indicates that the SWR on the antenna shows acceptable ratios on all 7 bands.



This antenna would ideally replace the two antennas that had fallen prey to the storm. The retail price for this 300 watt-rated OCF dipole is \$230. I decided to home brew the antenna and surmised that I could save a bit of cash by doing so.

Fortunately, the *Buckmaster* company had listed the lengths of the two antenna legs (see below).



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Armed with this information, I made a trip to Lowe's to buy some wire. 150 feet of 14-gauge stranded insulated wire set me back around \$31. Since I already had a balun, I was going to get a new multi-band antenna for a very meager sum.

I measured the wire for the two legs, cut and attached them and the feed line to my old balun.



*BuxComm 6:1 balun
at Left.*

*Dipole shown at Right.
Attached to the mast
supporting my 2m Yagi.
Elevation is approximately
35 feet.*



I was

to get the feed point about 35 feet in the air (the height that was suggested by *Buckmaster*).

With my external tuner off, I activated my radio (Yaesu FT-450D)'s internal tuner. No luck. Not on any of the bands! Good grief! I could tune the bands with my external tuner, but the literature (and the SWR graph) promised NO TUNER needed.

I went back and re-read the specifications on the *Buckmaster* antenna. I was looking particularly for the type of balun that came with the antenna. I finally found a site that mentioned in the very small print that the antenna came with a 6:1 balun. The balun I was using was the previous antenna's 1:1 current balun.

I had never heard of a 6:1 balun. 1:1, 2:1 and 4:1 baluns are fairly common. You can get them from HRO, DX Engineering, Cheap Ham and many other suppliers. But no 6:1s! Finally, I found a supplier that I had never heard of—*BuxComm* in Evington, VA. I ordered their 6:1 current balun (\$34.95 + \$6.05 shipping).

When the new balun arrived, I swapped it out with the 1:1. Jiminy Cricket, it worked! No external tuner needed! The SWR was well under 2.5:1 on all bands and a little tweaking from the internal tuner made the SWR virtually 1:1 on all bands!

Enquiring minds wanted to know why the 6:1 balun works whereas the 1:1 didn't. Literature on baluns can be pretty intimidating but I persevered in my reading. Bottom line is baluns keep RF current from flowing on the outside of the coax and running back into your shack. That's important from a safety standpoint. But another characteristic of a balun is that it *changes the feed point impedance*. The ratio (6:1) means the balun has a balanced-side impedance ratio of 6 times the unbalanced side.

Every HF transmitter wants to "see" 50 ohms at the feed point. Feed point impedance is relative to a number of variables including antenna configuration (flat top vs. inverted "V"), feed point height, and *balun ratio*! Evidently this OCF antenna in an inverted "V" configuration and 30-35 feet of height needs some help getting the feed point impedance to 50 ohms—a 6:1 balun!

So, I now have *one* HF antenna that is resonant on 7 HF bands! NO TUNER NEEDED! And since I "home brewed" it, I saved myself a nice chunk of cash.

Buckmaster, 7-band, 300 watt antenna = **\$230**

Home Brew, 7-band, 300 watt antenna = **\$72**

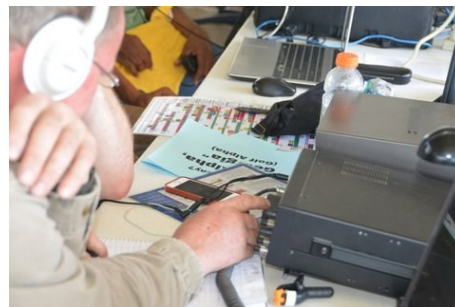
Savings = **\$158**

Satisfaction of home brewing = **Priceless**

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FIELD DAY 2016 PICS — J.D. KM4DHS, CLUB PHOTOGRAPHER

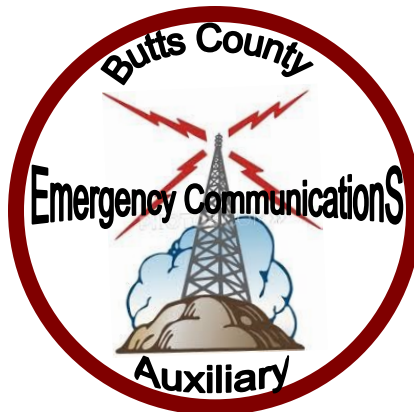


And a good time was had by all!

Visit our website: www.bcgaares.org

**BUTTS COUNTY EMERGENCY
COMMUNICATIONS AUXILIARY**

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**Net Control Station
Roster**

July
Mark KM4NRP

August
Darlene KK4BKF

If you'd like to serve as NCS, please
email Ken (KM4HOS), Net Manager:
kawallis@charter.net

Weekly Training Net:

Sunday 21:30 GMT

4:30 EST 5:30 EDT

WX4BCA Repeater 147.285- PL131.8

Jackson, GA

BUTTS COUNTY / SOUTHERN CRESCENT AREA NETS — HF, VHF & UHF

Sunday (4:30 pm) GA ARES Digital Net — 3583 KHz (USB) or 7042 (PSK-31) Center 1000 Hz

Sunday (4:30 pm) Butts CO FM Training Net — 147.285 MHz (131.8 PL) Winlink: WX4BCA

Sunday (5:00 pm) GA ARES SSB Net — 3975 KHz (LSB) Winlink: WX4GMA

Monday (9:00 pm) Southern Crescent FM Net — 145.170 MHz (146.2 PL) & 444.875 MHz (123.0 PL)

Monday (9:00 PM) Rockdale Co. ARES Net — 147.21 MHz (162.2 PL)

Tuesday (7:30 pm) GA CERT Digital Net — 3585 KHz (USB) or 7042 (PSK-31) Center 1000 Hz

Tuesday (8:00 pm) GA CERT FM Net — 146.805 MHz (100.0 PL)

Wednesday (8:00 pm) Newton Co Digital Net — 146.925 MHz (88.5 PL) (MT63-2KL) Center 1500 Hz

Thursday (8:00 pm) NCRC/ARES/RACES FM Net — 146.925 & 444.800 MHz (88.5 PL) Winlink: K4NCR

Thursday (9:00 PM) Barnesville/Lamar County W8JI Repeater Net — 147.225 (no tone)

Saturday (11:00 am) *SATERN Net (Southern Section) — 7262 KHz

METRO ARES FM NET

1st Sunday (4:00 pm) Metro ARES FM Net — 145.430 MHz (107.2 PL)

Also on EchoLink at WB4NWS-R (Node: 593209)

Newsletter Submissions

Please submit all articles and/or suggestions to **Ed Hoard** (WX4ED)
edhoard@yahoo.com