



THE REPEATER

- /

DECEMBER 2017

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.

Mike Crowe AJ4GU Receives the Jack Hobbs

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"QRM"



Mike Crowe (AJ4GU) receives the Jack Hobbs Amateur Radio Award from Emergency Management Association of Georgia presented by president Don Graham.

Jack Hobbs Award for Amateur Radio requirements

- Be a licensed Amateur Radio Operator in good standing with the FCC.
- Benefits the profession of Emergency Management or a specific emergency management organization.
- Demonstrates willingness to help others acquire their radio license.



Butts County

348 Patrick Circle
Jenkinsburg, Georgia
30234

770-957-0779
wx4bca@arrl.net



December

07 Family Christmas Dinner (7th Anniversary) – Buckner's Restaurant 18:30

16—TECH SATURDAY - (subject to change) D-Star with ID-5100 and ID-880h to be held at Fire Station #7 beginning at 0900.



JANUARY

8— Monthly Club Meeting (rescheduled due to New Year's Day) Exchange Club,

13— Georgia ARES Meeting (GPSTC 09:30 AM)

20—Hungry Hams—Lunch Box Restaurant, 7:30 AM

GARS Tech Fest and Chili Cook-Off Lawrenceville.

27—Tech License Class (Station 7)



FEBRUARY

3 — Tech License Class and Special VE Session (Station 7)

5— Monthly Training

17— Tech Saturday



MARCH

5— Monthly Training:

17— VE Session

****Hungry Hams meet on the 3rd Saturday at the Lunchbox restaurant in Jackson (07:30)****

MEMBER BEACON



The November Repeater features our on Darlene Ragon, KK4BKF. Let's get to know Darlene better through her personal perspective of the diverse hobby of HAM radio.

Thank you Darlene for your contributions to our club and The Repeater

Darlene Ragon KK4BKF

In which year were you first licensed? April 2011

What aspect of HAM radio first interested you in the hobby? Emergency communications in case of a disaster or long term grid down.

What type of radio was your first radio? Yaesu FT-7900 and Yaesu FT-450

What is your favorite radio? I am most comfortable with my Yaesu FT-450 although I have a Kenwood TS-590 as well.

Which aspect of HAM radio interests you most now. Back- up power for long term use of my radios and laptop as digital comms are used more commonly.

What future area of HAM radio would you consider learning more about?

Propagation theory, how antennas work and Morse Code.

Are any of your relatives licensed HAMs ? Not at present.

What is your most interesting contact? I don't rag chew or contest on the air. I mostly participate in a Patriot Prepper Communication group called "American Redout Radio Operators Network".

Are there any licensing and/or operating regulations that you would like to be changed? More monitoring of Hams that are rude on the air waves; disrupting nets drives me nuts!

Where is your station located? I have one room that I use for my 'shack' as well as scrapbooking and needlework supplies/activities. It is one crowded room, ha ha!

What kind of antennas do you use? I have a 2m J-pole I made during a Tech Saturday and a well installed G5RV antenna.

How could amateur radio attract more young members? I am not sure how best to approach that. It takes a real dedication to get licensed and purchase equipment. Unless the youth have parental support it could be hard. Perhaps reach out to Science Clubs and support Boy Scout Ham Radio efforts.

Which club activity do you enjoy most? The Tech activities such as the solder class, antenna building and races if they are not too far from home. The activity I like the least...Field Day, ha ha, but don't say that Mark. It is just too darn hot to be outside in June in the South.

What advice would you give to new HAMs? Find an active club to affiliate with like out Club. Great sharing, teaching fellows!

Is there any information about you or comments that you would like to add? I hasn't been too long since Ed did an issue of the Repeater where he interviewed me so make me the last one to publish about.

NOTES FROM THE BACKACRE – K3GWK



Freida and I traveled back to our hometown (York, PA) for the Thanksgiving holiday. I think that Thanksgiving is our family's favorite holiday, the one time each year when we can gather as a family to "eat, drink and be merry." The tradition in my family goes back to midnight trips to New Jersey when I was a kid. We don't leave at midnight anymore though. The trip to York is also an opportunity for me to visit the Keystone VHF Club and catch up on their exploits. This year's big project has been the installation of a twelve foot diameter dish antenna system for Moon Bounce (EME) on 1.2 GHz. When I visited the club's hilltop site, they were in the process of calibrating the positioning drives so the dish would automatically track the Moon. When it is on the air (supposed to be tested today at reduced power) it will, with 600 Watts of drive, have an "Effective Radiated Power" of over One Million Watts. Quite an expensive undertaking and something that has been on their To-Do list for many years.



It is always great to go back to Pennsylvania and Maryland to visit family and friends but it is also great to get back home to Georgia.

Rudy and I have been spending a lot of air time on FT8, one of the Joe Taylor weak signal digital modes. I'm not sure about Rudy's QSO count but I have worked all of the US states, with all but Louisiana confirmed. Those of you with HF capabilities and a Digital Interface should give this mode a try. It is sort of like *Candy Crush* for hams, very addictive. In the JT modes I am familiar with

the station address used is the Maiden Head Grid Square. The 2018 ARRL Grid Square contest is going to be big on these modes.

ARES ACTIVITY FOR OCTOBER:

NETS: 12 (4 Voice, 4 WL2K and 4 NBEMS) – Remember our FM nets have moved to Tuesdays at 19:30*

Public Service: 1 Events (12 Hours) – VE Session
Drills, Tests and Training: 7 Events (73 Hours)
Emergency Operations: 0
Miscellaneous: 0
Total Hours: 85 (Value Added \$2,073.15)

MEMBERSHIP:

Deployable: 11
Active: 16 (All Basic ARES Requirements Complete 1)
Pending: 6
Total: 33 (-3 from October)

***The WINLINK 2000 test has not moved to Tuesday evening.** Continue to send your WL2K messages, using the ICS-213 form, to WX4BCA and WX4GMA on Sunday afternoons. Include your

weekly *Digital Activity Report* in that message.

That's about it from Jenkinsburg Station. (Weather Underground ID: KGAJENKI2)

Thanks again for all you do for ARES and for Amateur Radio.

73, Buzz (K3GWK)



WHIT'S WISDOM

Whit Smith—WA4VBX



WATTAGE

How much load does your appliance use?

Have you ever wondered how much load one of your appliance uses? Most of them have a power usage listed on them, (either watts or volt-amperes), but not all of them. There is a simple device that can be used to measure usage.

You can find someone that has a device to measure usage or you can make one. To make one, take an extension cord and strip about 3 inches of the outer insulation off so that you can get to the black wire. Be careful not to nick the insulation around the conductors. You are now ready to make measurements. Put a clamp-on ammeter around the black lead and put the cord in line with the appliance you wish to measure the usage.

If you are measuring a device with a motor, like a refrigerator, when you first connect the cord the current will spike and then settle down to the running current. Most motors have a spike, or inrush, of 2 to 6 times the running current. You have to be sure that the appliance is still in its run cycle when you measure the current or you won't get a accurate reading.

When you get an ampere (AC) reading, multiply it by 120 volts and you get volt-amperes. As an example, if you read 3.0 amperes (AC) and multiple it by 120 you get 360 volt-amperes. The wattage is generally a little less than the volt-amperes. For rough calculations you can use 324 watts which is $90\% \times 360$ volt-amperes (90% is an approximation of the real conversion factor). Volts X amperes =

volt-amperes (AC). When you look at some commercial and industrial loads, the conversion factor or power factor can be quite different from 90%. Wattage and volt-amperes are related but are not the same. This discussion is for AC only. In DC, volts X amperes = watts.

For regular duplex receptacles, some homes have branch circuits with # 14 wire rated at 15 amperes and other branch circuits with # 12 wire rated at 20 amperes. You should not load a branch circuit more than 80 % of the wire rating. For #14 wire, $15 \text{ amps} \times 80\% = 12 \text{ amps}$. 12 amps times 120 volts equals 1440 volt-amperes. For # 12 wire, $20 \text{ amps} \times 80\% = 16 \text{ amps}$. 16 amps times 120 volts equals 1920 volt-amperes.

In one of my previous owned homes, my kitchen had a receptacle that I wanted to plug the coffee pot and the fry skillet into and when I did the breaker would trip. After that, I checked the usage of each and found that it was too much for the circuit. I also found that when the coffee pot finished its brew cycle, it only took a small amount of power to keep the coffee warm and then I could use the fry skillet.

Below is a picture of a device that was made to measure ampere usage. If you are interested in measuring the usage of your A/C unit, dryer, or some other 240 volt appliance, a similar device could be made, however, most of these appliances are hard wired in and will require more effort than a plug-in the device.

CLAMP-ON AMMETER



PRESIDENT'S PONDERINGS— DR. ED HOARD / WX4ED

When you get my age you realize the truthfulness of the Latin phrase, *tempus fugit*! Time flies! And the older I get, the faster *tempus* seems to *fugit*. Someone has said that life is like a roll of toilet paper---the nearer you get to the end, the faster it goes! It can't be December, can it?! Wasn't the Fourth of July just a few weeks ago?

All this points up the fact that time is of the essence and what we intend to do, we had better do it now or lose the opportunity. The ancient Greeks had a god named Kairos, the god of opportunity. A statue of this god was discovered by archeologists. It is an interesting icon. The statue is of a young man who has long flowing locks on the front but is completely bald on the back of his head. It's believed that Kairos' strange hair style is the perfect picture of an opportunity. When an opportunity is coming toward you, there is plenty of hair to reach out and grab hold of. But once opportunity has passed, there is nothing to grab. The Greek word *Kairos* is the English word "time." Time and opportunity are synonymous. We're almost at the end of another year. What opportunities have you failed to reach out and grasp?

December is a rather quiet month for Club activities. Our Christmas Party takes the place of a monthly training meeting. Gigi and I hope to see all of you at the Dinner at Buckner's Restaurant Thursday night, December 7 at 6:30 PM. It's always a lot of fun and the food is always fantastic — someone please pass the stewed tomatoes!

We will have our regularly scheduled Tech Saturday on December 16. The activity will be to better understand DStar. I asked Santa for a DStar radio and UPS brought it last week. Can't wait to get started in a new ham radio platform. It's amazing that such an old technology seems always to be updating itself. That's what's so cool about our avocation. There is always something new coming along to test our interest and intellect.

This year is the 44th Christmas I have celebrated as a minister. Advent is the busiest month of the year for a minister. There are parties to attend, special services to officiate, sermons to write, shut-ins to visit, family reunions and gatherings to attend, and sadly, always funerals to conduct. But I wouldn't trade my last 44 years with anybody. There have been struggles, certainly; heartbreaks, oh, yes; difficult days, yep. But those years have been filled with wonderful opportunities to "be Jesus' to a lot of people.

The Christmas angel announced to the Bethlehem shepherds, "*I bring you good news of great joy which shall be to all the people. For unto you this day in the City of David a Savior has been born. He is Christ, the Lord.*"

That's the best news I've ever heard and I pray that it's good news to you. May you and your family experience Christmas joy this year. I pray for a successful 2018 for you, your family and for our Club. Merry Christmas!

Dr. Ed Hoard
Pastor, First Baptist Church, Zebulon, GA
WX4ED



BCARES PLACES FIRST IN GEORGIA

Displaying entries for **Category=2A** and **Section=GA**

Entries 1 to 6 of 6 listed

#	Call	Score	Category	QSOs	Power Mult	GOTA Call	Section	Participants	Club
1	WX4BCA	3,414	2A	851	2	K3GWK	GA	54	Butts Co EmComm Auxiliary
2	K4PAR	2,548	2A	451	2	K4P	GA	15	Piedmont ARES
3	AA4P	1,894	2A	151	2	KC4RAG	GA	15	
4	W4BTI	1,698	2A	274	2		GA	20	Kennehoochie ARC
5	KM4MAD	662	2A	131	2	KK4NTE	GA	14	Fannin Co ARG
6	W4MM	424	2A	187	2		GA	5	

Preparation and participation paid off in 2017 for BCARES. Five months after a weekend at the Kersey Pavillion the 2017 Field Day results were published in QST. BCARES placed first in the 2A category in Georgia.. The score was nearly 900 points above second place Piedmont ARES. Total participants were nearly triple of the next placing group and QSOs were nearly double the second placing call sign.

The Butts County Amateur Radio Emergency Service (BCARES) has been officially notified that it won a first-place status in Georgia during the ARRL Field Day emergency exercise and contest. The team placed first in the 2A division. BCARES was the top scoring group among similar sized Georgia teams. It placed fifth among 2A competitors in the Southeast.

BCARES concluded the event with a comfortable point margin for the state of Georgia and ranked 5th among peers in the Southeast.

The ARRL Field Day is the largest event of the year sanctioned by the Amateur Radio Relay League. Field Day event is described by the ARRL: “Every June, more than 40,000 hams throughout North America set up temporary transmitting stations in public places to demonstrate ham radio’s science, skill and service to our communities and our nation. It combines public service, emergency preparedness, community outreach, and technical skills all in a single event. Field Day has been an annual event since 1933, and remains the most popular event in ham radio.” Started in 1914, the ARRL is the largest and oldest organization for HAMs, as amateur radio operators are nicknamed.

Local radio amateurs assembled Friday, June 23 began the setup process on site at the Kersey Pavilion on the grounds of the Butts County Recreation Center. Antennas, radios, generator, lights, cables, lights, safety equipment and all the equipment needed to complete the outdoor event were assembled and installed. The actual competition started at noon June 24 and ended noon June 25. The radios were manned by local volunteers for 24-hour coverage. New this year was the inclusion of digital radio technology which helped add to the total score. A covered dish dinner and gathering of family and friends was a highlight of the event. A heavy rain briefly suspended operation due to the lightning risk. The stations were back on the air as soon as the storms passed.

A HAMNET-MESH Network was set up on site for the first time. With this technology both stations were linked by a local intranet that used secure amateur licensed radio frequencies.

Ken Wallis (KM4HOS), Rudy Williams (KA8LAD), and Elaine Stachowiak (KW4AQ) served as Radio Band Captains to ensure that the radios and schedules were operating around the clock. Buzz Kutcher (K3GWK) staffed the GOTA (Get on the Air Station) which afforded visitors a chance to operate and communicate with the shortwave radio equipment. Mark Clark (NI2Y) directed the Field Day preparations and organization meetings during the six months that led up to the actual event.



REPORTS

Please send reports to NI2Y@arrl.net in advance of the publication of the Repeater.

REPEATER REPORT

The UHF repeater went down with blown finals. The backup repeater was put into operation with reduced power and on the lower antenna. We are looking into replacing the UHF Duplexer. With the backup in place we do not have DSTAR capabilities.

The UHF repeater has been repaired under warranty and should be put back into operation this coming week or next. We are still trying to get the internet we need for the DSTAR. The Stone Mountain DSTAR repeater seems to have a receive problem causing us an issue checking into the Health Dept. and Hospital nets. That issue will be resolved once we get the internet to our DSTAR repeater.

VE Report

VE session was held on Nov 18. We had one candidate take the exam and he passed the Tech Exam.

Hospital Report

Monthly Hospital net was held on Dec 3. In attendance was Darlene KK4BKF, Ken KM4HOS, Mark NI2Y and Dan W4DED. IC-213 was sent by WINMOR and DStar contact made. HF Band conditions prevent contact on HF 40 or 80 Meters.

73,
Dan W4DED

ARES EC Report: See the Backacre Report

Membership Report - Dec 4 2017

We have 38 regular members, 2 Special members, and 1 Life Member, for a total of **41**.

Nancy Phillips, chair/K4NEP

Net Manager's Report Digi net chk-ins down 20%, 119 in Nov. from a high of 150 in July. voice chk-ins are down as well. Gonna need some net controllers in Jan, Darlene did the net 2 wks ago, good job for 1st time out. Participation is droppin' off, not sure if it's the Holiday or just lack of interest. Like I've said before, we gotta be comfortable and know what we're doin' Digitally on our OWN equipment by practicing and havin' to troubleshoot our own gear each week before we can think about SUCCESSFULLY operating diff equipment at one of our Response Team sites. Nuf sed, Ken

BCARES REPORT – Please refer to the Notes from the Backacre

Visit our website: www.bcgaares.org

Butts County Emergency
Communications Auxiliary

348 Patrick Circle
Jenkinsburg, Georgia
30234
770-957-0779
wx4bca@arrl.net

Net Control Station Roster

September

Darlene KK4RBKF

October

Elaine KW4AQ

November

BUTTS COUNTY AMATEUR COMMUNICATIONS AUXILIARY

President

Ed Hoard WX4ED
edhoard@yahoo.com

Vice-president

Elaine Stachowiak
KW4AQ
ubudogems@hotmail.com

Secretary

Darlene Ragon KK4BKF
ragon@aol.com

Treasurer

John Lipscomb IV
KA3SME
john.lipscomb@delta.com

Public Information Officer

Mark Clark NI2Y
NI2Y@arrl.net

Emergency Coordinator / E.C.

Buzz Kutcher K3GWK
k3gwk@arrl.net

A.E.C. / V.E. Team Admin.

Dan Darsey W4DED
w4ded@arrl.com

A.E.C. / CERT Team Liaison

David Ridgeway
KK4SUO
dpridgeway@bellsouth.net

A.E.C. / Sheriff's Dept. Liaison / PIO

Mark Clark NI2Y
NI2Y@arrl.net

A.E.C.

David Burnham
AK4EM

Weekly Training Net:

FM Tuesday 7:30 PM

BUTTS COUNTY/SOUTHERN CRESCENT HF/VHF/ UHF NETS

Sunday (4:30 PM) GA ARES Digital Net — September: Program: D-RATS - send ICS-213 to port: gaares.ratflector.com:9000 RMS Express/Winlink - send ICS-213 to WX4GMA (WX4GMA@Winlink.org) RF WINMOOR preferred over Telnet

Sunday afternoon BCARES WL2K ICS-213, Include a weekly Digital Report to the attention of the Net Manager, KM4HOS RF WINMOOR preferred over Telnet

Sunday (5:30 PM) GA ARES D-RATS - send ICS-213 to port: gaares.ratflector.com:9000

Tuesday (7:30 PM) Butts CO FM Training Net and Digital Training — 147.285 MHz (131.8 PL) Net begins with voice check-ins followed by an NBEMS Digital Practice Net. WL2K test messages using an ICS-213 form will be accepted. Winlink: WX4BCA, RF WINMOOR preferred over Telnet

Sunday (22:00Z) GA ARES SSB Net — 3975 KHz (LSB)

Sunday (9:00 PM) SE Weather Net on D-Rats

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

Monday (8:30 PM) Central GA District Digital Net — 3583 KHz (PSK-63/125) Center 1000 Hz

Tuesday (7:30 pm) NW GA Digital Net — 3853 KHz (USB) or 7042 (PSK-125) Center 1000 Hz

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

Wednesday (9:00 pm) SE Metro 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)



Editor's Ramblings—NI2Y

2017- A GOOD YEAR

The year has been rather busy with HAM activity on the part of BCECA and BCARES. Members have deservedly received special recognition for their contributions to emergency preparedness and the HAM hobby.

It is important to recognize that our organization is truly the sum of the parts.

Our daily lives will always compete with our interest in amateur radio. Despite the voluntary nature of organization, members donate time, participate willingly in community events, provide programs at the monthly club meetings and yes, even the good ole Field Day.

We can always have "done it better" or "differently", but think about this, we are volunteers. For a volunteer organization we should look back over the year 2017 and appreciate a job well done. Not too shabby for herding cats?

Our group is diverse and not just for the purpose of being diverse. Each member brings their own expertise and life experiences to the table. Some even bring a good bit of hardware and supplies. I distinctly remember hearing things at breakfast, for example, that solved a perplexing problem in my own shack. Often these gems come out of no where, but are spot on. Yes there is much on the net with forums, YouTube, Google and so forth. Sometimes connecting with an "Elmer" is much more helpful and meaningful.

So as I look back on 2017 may I thank everyone for who and what they are and what they have done. A special thank you goes to the founding members who supply much of the momentum for the rest of us to keep on carrying on. For 2018 my wish is that we grow as a club, more can become ARES deployable, more will volunteer for net manager positions and that each team will have more backup for the weekly and monthly commitments.

I sincerely wish everyone a Merry Christmas, a healthy, safe holiday, and a prosperous New Year,

See you at the Christmas dinner.....

73,

Mark/NI2Y/Editor