

The Repeater

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WX4BCA

147.285 / 147.885

Jackson, GA

Amateur Radio Club of Butts County



We have a new name and a new logo!

In an effort to more align the club's intentions and name toward amateur radio operations, instead of an emergency services club, we decided to change the name and simply have an additional focus group of emergency services members within the club. Our main focus is the enlightenment of others to the multitude of fields of interest in amateur radio operations.

To do so, we offer interesting monthly programs, twice a year a 2-day Tech class is taught, and in the fall, we have an 8-week General course. Testing sessions are available for advancement on the third Saturday of odd months, and Tech Saturdays are the third Saturday of even months.

We also hold 'net' on Tuesday evenings at 1930, in which we start off with voice call-in, and then go to

digital sends, to keep our abilities and equipment in top shape. For anyone who is interested in the emergency service end of radio ops, we operate a station at Sylvan Grove Hospital, the 911 Center, and the Health Dept out on Biles Drive. More are welcome to train for those posts, as they are vital to our community's health in cases of emergencies or disasters.

And, it looks like a code course is on the horizon for those who want to try their hand at keying Morse Code. *Stay tuned for that announcement!*

We meet the first Monday night of each month, first at Mesquite Grill at 1730 for dinner, then at the Exchange Club at the Fairgrounds (near the football field) for our meeting at 1900. Feel free to join us! We'd love to have you!

Buzz Kutcher

Information Officer

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Whit's Wisdom

Whit Smith - WA4VBX

Circuit Breakers

Standard circuit breakers, GFPE, GFCI, or AFCI, which is needed?

STANDARD CIRCUIT BREAKERS They are better at protecting wiring and equipment than protecting people and preventing fires. Some examples are a circuit to a range, water heater, some lighting circuits, or air conditioner. Refer to applicable codes for breaker requirements.

GFPE A (ground fault protection of equipment) breaker can be set to 1200 amperes with a time delay up to 1 second for ground fault current of 3000 amperes or greater. A GFPE is required for a 1000 ampere breaker with a voltage to ground of 277 volts or more. Unless you have an unusually large house or an unusually large service, you do not need to be concerned about a GPFE, which are generally used in large commercial or industrial services. Generally houses have a 400 ampere or less panel which is operated at a voltage of less than 250 volts to ground.

GFCI A (ground fault circuit interrupter) is designed to protect against shocks. Normally, all of the current flows from the hot wire to the neutral. When a small amount of current does not flow from the hot wire to the neutral, and it reaches 5 ma. (milliamperes) + or - 1 ma., in 1/40 th of a second, the GFCI trips. A GFCI can be in a breaker in the panel or it can be in a GFCI receptacle. A GFCI breaker is required in a bathroom, kitchen, and outdoors, and it must be readily accessible. Refer to applicable codes for GFCI requirements.

AFCI (arc fault circuit interrupter) When a switch is operated, an arc occurs. Unintentional arcs can occur at loose connections or where wire insulation has been damaged. These arcs can lead to high temperatures and sparking, and possibly igniting combustible materials. An AFCI continuously monitoring the electrical current in a circuit and shutting off the circuit when unintended arcing occurs. AFCIs are designed to discriminate between unintentional arcing and the type of arcing that occurs when a switch is operated. An AFCI can be installed as a circuit breaker in a panel or as a receptacle outlet.

It is possible to get an AFCI & a GFCI in a single breaker package. Some people say that having both the devices together makes trouble shooting difficult. There doesn't seem to be a real advantage to having both of these in one unit. I chose the units to be separate. AFCi and GCFI are available in 15 amp & 20 amp sizes. This is not for the first time project. If you are not familiar with these devices, get some help. ♦



MEMBERSHIP REPORT - Nancy Phillips, Chair

As of July 9th, we have 36 regular members and 2 special members, bringing our membership to 38.

Welcome to New Member -- *Dana Persells* - WJ4Z

Welcome to New Member -- *Winford Barnes* - W8XC

VE REPORT - Dan Darcy, VE Administrator

Tech Class for July has been cancelled, therefore the VE Session will be held at 0900, Saturday, July 21st, at Fire Station #7.

NOTES FROM THE BACK ACRE

_ Buzz Kutcher, K3GWK



This installment will be a brief review of our 2018 Field Day results. We did very well. In spite of poor propagation, a high noise local level and troublesome QRM we scored, as a 4A class station, 4388 points. The addition of CW helped our overall QSO score, adding 960 points. CW and Digital contacts have a score multiplier of two; SSB contacts have a multiplier of one. There were 480 CW QSOs, 381 SSB QSOs and 14 Digital QSOs; total QSO points 1369. Our club runs under 150 watts so we get a power multiplier of two and so a "Claimed QSO Score" of 2738. This number may change due to undiscovered log errors (duplicates or bad call signs). Bonus Points are extra credits a group can add to their score by completing certain requirements. We missed three bonus categories; A Satellite QSO completed, an Educational Activity completed during Field Day and the bonus points for GOTA operations (20 QSOs per operator). We had three visitors operate the GOTA station (Thanks: Celeste, Denver and Lina) but no one made the required 20 QSOs. We did have fun though. Our claimed bonus score is 1650. Adding 1650 and 2738 gives us the 4388 point total. Again, this is subject to change. If we received bonus points for working under extreme conditions (heat and a minor flash flood) we would have easily qualified for those. The CLUB FAMILY PICNIC was great; lots of BBQ, side dishes, drinks, salads and desserts. Attendance was down this year though. I need to thank my YL Freida who supplied the pulled pork BBQ and also all the members and guests who attended and brought everything else. It was all good!

Here is our Band/Mode/QSO breakdown:

BAND	CW QSO	DIGITAL QSO	SSB QSO
80 METERS	188	14	0
40 METERS	207	0	210
20 METERS	78	0	171
15 METERS	7	0	0
TOTAL	480	14	381

Our July Technician class was cancelled due to a lack of student registrations. The next class planned for January 2019.

No update on the WX4BCA UHF D-Star repeater's connection to the Internet and the worldwide D-Star network.

ARES* MEMBERSHIP (07/01/2018):

Deployable: 10

Active: 12 (-1)

Pending: 7 (Need to complete Basic ARES, IS-100, IS-700 and IS-802)

Total: 29 (If you are not an ARES member and want to get involved, contact me at k3gwk@arrl.net)

Perhaps you are wondering why ARES members are required to complete the basic NIMS courses. To find out, review Homeland Security document HSPD-5. (<https://www.dhs.gov/sites/default/files/publications/Homeland%20Security%20Presidential%20Directive%205.pdf>) Changes are coming to ARES and NIMS and completing Basic ARES, IS-100, 200, 700 and 800 may become a requirement for the Level Two (ACTIVE) designation. Take a look at the latest issue of the "GA on My Mind" Georgia ARRL e-Letter for more information. (www.arrl-ga.org)

**ARES membership is NOT REQUIRED to participate fully in our radio club's activities.*

That's about it from Jenkinsburg Station.
(Weather Underground ID: KGAJENK12)

Condolences to our team member Nancy Phillips, K4NEP; Nancy's father passed away on Friday morning.

Thanks again for all you do for Amateur Radio.

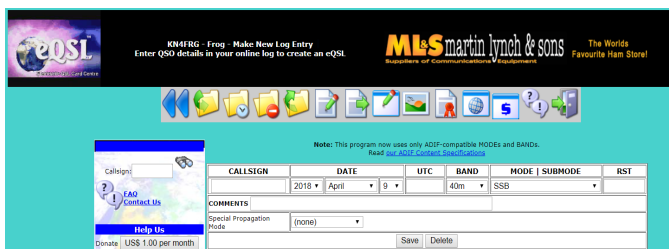
73, Buzz (K3GWK)

Update on FD score:
Bonus 1650, QSO 2786 = Total FD points: **4436**

LOGGING THOSE CONTACTS, PART II - EQSL

_ Jeff Phillips, KN4FRG

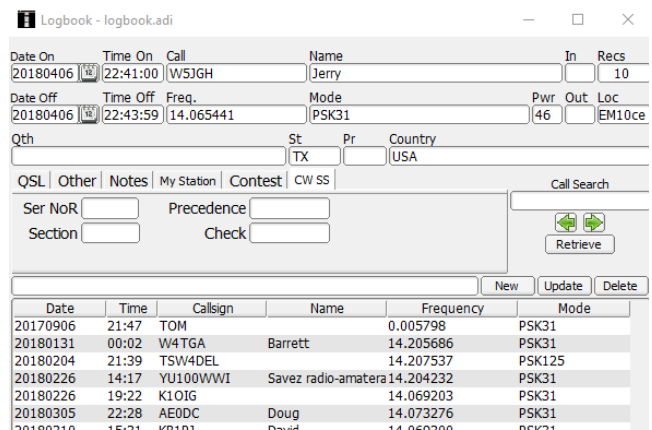
EQSL is a free online service for radio amateurs to exchange electronic QSL cards with other associated HAM operators that one made contact. Several operators prefer paper QSL cards, but EQSL offers the means to confirm QSO's via the Web with other EQSL account holders via an electronic QSL card. The EQSL service does offer the means to maintain a log within the website, see below.



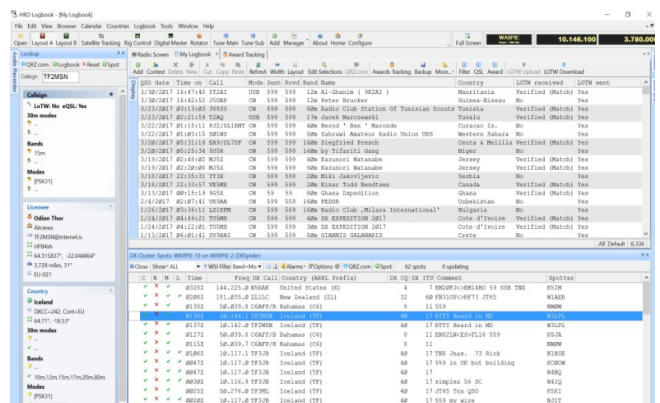
Much like QRZ, EQSL is not a quick logging process and one might look to alternate means for contest logging purposes. One thing to remember with either QRZ or EQSL, if you have access to the internet, you will always have your log available. More information regarding EQSL is available via the web at www.eqsl.cc. Next up are a few examples of free software suites.

Fldigi, the Fast Light Digital modem application, is a free and open-source program allowing the ordinary computer's sound card for use as a simple two-way data modem or through other methods to interface the software program with the operator's transceiver. Fldigi offers a multitude of services free of an amateur operator, but this focuses only on its logging capability. Fldigi offers an integrated logging process that interfaces with its services.

Fldigi allows the operator to operate multi-modes all the while integrating the logging into the process. Detailed information for Fldigi is on the Web at <http://www.w1hki.com/beginners.html>. A like program that does offer a free version is Ham Radio Deluxe. An example is below.



Ham Radio Deluxe (free) is a software suite of tools including HRD logbook that is a feature rich logging program with several features. The suite of tools also includes awards tracking, DX cluster, QSL card printing, integrated rig control, and other features. A sample is below.



There are a multitude of other features offered in the paid version, but either way HRD is free to download and anyone can try it out. The link to the program is www.ham-radio-deluxe.com. What do some feel is the world's most popular ham radio contest logging software?

Well, many amateur radio operators would probably agree, if you are a contester and need an excellent free logging program - turn to N1MM. N1MM software offers multi-mode integration along with rig control. The software suite offers many

EQSL, continued on page 5

NETS

SUNDAY:

Metro ARES FM Net - 1st Sunday ONLY at 1600L,
WA4ASI repeater, Covington, 146.925-, 88.5 PL
KK4GQ repeater, Fayetteville, 145.210 -, 131.8 PL
KC4AQS repeater, Paulding Co, 145.805 +, 100.0 PL

GA ARES/BCECA WL Express Net - Send an ICS-213 to
WX4GMA and WX4BCA by 2200Z. [1700L EST,
winter/1800L, EDT, summer.] Please use a Win
link RF gateway; Winmore packet, if capable;
otherwise, use Telnet.

GA ARES Digital Net - 210Z [1600 EST, winter/1700
EDT, summer.] 3.583 MHz USB.

GA ARES PSK 'Traffic' Net - send an ICS-213 to
WX4GMA NCS, centered on 1500 MHz.

GA ARES PSK 'check-in' Net - Even numbered months,
center on 1000Hz, 'text' check-ins only and will
run concurrently with the PSK 'Traffic' Net.

GA ARES D-RATS Net - 2130Z [1630 EST/1800 EDT].
Odd months, port: gaares.ratflector.com.

GA Section HF Net - 2200Z [1700 EST/1800 EDT], 3.975
MHz LSB, voice, by callsign prefix.

SE Weather Net - 2100L, D-Rats/D-Star, on
sewx.ratflector.com. D-Star Voice on REF004A.

TUESDAY:

Butts County Emergency Comm Training Net - 1930L,
WX4BCA repeater, 147.285 MHz, + offset,
131.8 PL, begins with voice check-ins, followed
by an NBEMS Digital Net. WL Express message
accepted if not sent the previous Sunday. Send
to WX4BCA with name, callsign, location, and
whether you are on mobile or aux power.

WEDNESDAY:

SE Metro Digital Net - 2100L, WX4ASI repeater,
146.925 - & 444.800 -, 88.5 PL. MT63L, center
on 1500 Hz. WL - ICS-213 to K4NCR, D-Rats on
gaares.ratflector.com.

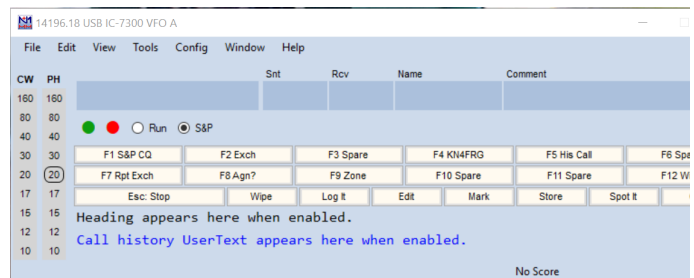
THURSDAY:

NCRC/ARES/ACRES FM Net - 2000L, WA4ASI repeater,
146.925 - & 444.800 -, 88.5 PL. WL - K4NCR.

EQSL, continued from page 4

features including rotator control, grayline window, spectrum, Telnet cluster support, beam heading, and many more. The software allows the operator to configure the log to support each individual contest - a must for those folks who like to contest. Below is a snapshot of N1MM's logging process.

The N1MM software package offers digital support for most RTTY and digital contests. A good link to gain more information is www.n1mm.hamdocs.com. The last example is Amateur Contact (AC) Log.



AC log is a very easy and intuitive logging process designed for the beginner or seasoned vet. The logging process will track award achievement, includes a database of counties and countries, full support for Amateur Data Interchange Format (ADIF) - the others listed offer similar support. AC log allows easy management and upload to LOTW, EQSL, and others. The software supports several manufacturers for rig control.

AC Log offers a free trial, but it is a for-purchase software package. AC log does offer several like versions designed for individual contests. For more information, check out the software at www.n3fjp.com.

As an operator, it is essential to log your contacts, legally, operationally, and for personal reasons. A log generally contains essential information, i.e time and date, and non-essential information including type of rig, antenna, and signal report. Since we have reasons to log our contacts, then what method do we use? Well, there are paper and electronic means. Several vendors offer, for a price, many paper versions designed for your use. The operator could design their own via Word

EQSL, continued on page 6

EVENTS of 2018



His 1st QSO!
Bluebirds & Blue Grass
Festival 4/21/2018



Elaine Stachowiak, KW4AQ, on 40 M.
Ken Wallis, KM4HOS, on Digital.
Field Day 6/23/2018



Buzz Kutcher, K3GWK and
Dan Darcey, W4DED, at the
Peachtree Race 7/4/2018

Photos by Buzz Kutcher

Various Websites --

- https://groups.yahoo.com/neo/groups/BC_ARES/info
- bcgaares.org
- www.georgiaskywarn.com

EQSL, continued from page 5

N3FJP's Amateur Contact Log 6.2 www.n3fjp.com

File Edit Settings Clear CallBook List Search Awards eLogs Recall Net View Help

Recent Contacts Last 50 All 50 Listed Items

Ref#	Call	Date / Time	Bnd	Mode	Power	Snt	Rec	Off	Country	ST	County	Name	Other	S	R	Comm
5300	NY9X	2018/04/08 19:14	40	SSB		59	59		USA	IL				Y	N	MOQI
5299	KBRQX	2018/04/08 19:11	40	SSB		59	59		USA	MI				Y	N	MOQI
5298	W9OTO	2018/04/08 19:10	40	SSB		59	59		USA	IL				Y	N	MOQI
5297	KB8ERA	2018/04/08 19:09	40	SSB		59	59		USA	WV				Y	N	MOQI
5296	K5SDB	2018/04/08 19:09	40	SSB		59	59		USA	MS				Y	N	MOQI
5295	W5LDR	2018/04/08 19:08	40	SSB		59	59		USA	TX				Y	N	MOQI
5294	W8JVV	2018/04/08 19:07	40	SSB		59	59		USA	OH				Y	N	MOQI
5293	W8OTT	2018/04/08 19:06	40	SSB		59	59		USA	MI				Y	N	MOQI
5292	KB1HY	2018/04/08 19:04	40	SSB		59	59		USA	CT				Y	N	MOQI
5291	WA4KIT	2018/04/08 19:03	40	SSB		59	59		USA	GA				Y	N	MOQI
5290	KE8EAS	2018/04/08 19:02	40	SSB		59	59		USA	OH				Y	N	MOQI
5289	W8JR	2018/04/08 19:02	40	SSB		59	59		USA	OH				Y	N	MOQI
5288	K8EJ	2018/04/08 19:01	40	SSB		59	59		USA	TN				Y	N	MOQI
5287	W4PRH	2018/04/08 19:00	40	SSB		59	59		USA	GA				Y	N	MOQI
5286	K95UKB	2018/04/08 18:59	40	SSB		59	59		USA	MS				Y	N	MOQI
5285	K98KMU	2018/04/08 18:52	20	PSK31		599	599		USA	CA				Y	N	MOQI

Ready to begin!

Call Date Band Mode Power Time On Sent Rec Country

Name State County Frequency Other

Bearing: _____

Miles: _____

Cont: _____

Comments

☐ QSL Sent ☐ QSL Rcvd 7:07:16 PM 00:07:16 UTC Log Contact

☒ Current time if blank Time Off

Call	Frequency	QTH	Bnd	Mode	Status	Comments	Ptx	Time	Cont	Bearing	Distan	On Line
W3IP	144.2304	USA	2	SSB	Confirmed	de: W3RFC: FM19 USB	W	0006Z	NA	NA	0	
VA3CTX	3.5740	Canada	80	CW	Confirmed	de: VE3PY: FT-8, Cheers Scott	VA3	0005Z	NA	52	785	
K1RZ	144.2103	USA	2	SSB	Confirmed	de: W3RFC: USB	K	0005Z	NA	NA	0	

LogData.mdb

7.0100 E16JK
7.0150 FYSPY
7.0176 407TC
7.0750 I2SMXA
7.0763 UR8GM

or Excel template and print them out for use later or maintain it virtually via your computer. There are a few sites offering a web-based logging process allowing the user to take their log anywhere as long as they have access to the Internet. The Web offers many free and paid versions of logging software.

Some of the suites of tools offer many more features than just a logging capability and these suites offer minimal features just for logging or advanced features designed for the contester. If you are just a novice, leisurely, advanced, or the contester there are several logging programs available for your use offered free or for a minimal cost. ●

CALENDAR

JULY

14 & 21 - TECH CLASS CANCELLED

21 - VE Session - 9 AM, FS #7. [Lunch Box 0730]

AUGUST

6 - Monthly Meeting - 7 PM, Fairgrounds.

Ham Radio 102 - How Repeaters Work

TBA - Tech Saturday, 9 AM, FS #7.

Soldering, Coax, & Connectors - Mike Crowe, AJ4GU

SEPTEMBER

10 - Monthly Meeting, 7 PM, Fairgrounds.

(Moved due to Labor Day.)

DRATS

15 - VE Session, 9 AM, FS #7.

OCTOBER

1 - Monthly Meeting, 7 PM, Fairgrounds.

Grounding - Mike Crowe, AJ4GU

6 - Simulated Emergency Test (SET)

20 - Tech Saturday, 9 AM, FS #7.

Satellite Operations -John Kludt

NOVEMBER

5 - Monthly Meeting, 7 PM, Fairgrounds.

Flu Shots, EMA Update - Glen Goens, KJ4TVO

17 - VE Session, 9 AM, FS #7.

DECEMBER

6 - 8th Anniv Family Christmas Dinner.

Buckner's Family Restaurant, 6:30 PM

15 - Tech Saturday, 9 AM, FS #7

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