

The Repeater

-/....//./-././-./-././-/-././-./

WX4BCA 147.285 + (131.8)

Amateur Radio Club of Butts County



Jackson, GA



USA

**WHAT WAS UNDER
YOUR TREE?**



Nancy Phillips
Editor
573-528-0697
K4NEP@arrl.net

2 - W1AW, ARES, HamCation
3 - ICOM 7100 Revisited- KN4FRG
4 - ARES Report - K3GWK
5 - Net Reports - KM4HOS

8 - Nets
8 - For SALE
9 - Hospital Net - W4DED
10 - Calendar & Contact Info

**January
2020
Vol 8, No 1**

W1AW WINTER SCHEDULE

Morning Schedule:

Time	Mode	Days
1400 UTC (9 AM EST)	CWs	Wed, Fri
1400 UTC (9 AM EST)	CWf	Tue, Thu

Daily Visitor Operating Hours:

1500 UTC to 1700 UTC - (10 AM to 12 PM EST)
 1800 UTC to 2045 UTC - (1 PM to 3:45 PM EST)

(Station closed 1700 -1800 UTC (12 PM to 1 PM EST))

Afternoon/Evening Schedule:

2100 UTC (4 PM EST)	CWf	Mon, Wed, Fri
2100 " (4 PM EST)	CWs	Tue, Thu
2200 " (5 PM EST)	CWb	Daily
2300 " (6 PM EST)	DIGITAL	Daily
0000 " (7 PM EST)	CWs	Mon, Wed, Fri
0000 " (7 PM EST)	CWf	Tue, Thu
0100 " (8 PM EST)	CWb	Daily
0200 " (9 PM EST)	DIGITAL	Daily
0245 " (9:45 PM EST)	VOICE	Daily
0300 " (10 PM EST)	CWf	Mon, Wed, Fri
0300 " (10 PM EST)	CWs	Tue, Thu
0400 " (11 PM EST)	CWb	Freq (MHz)

CW: 1.8025 3.5815 7.0475 14.0475 18.0975
 21.0675 28.0675 50.350 147.555
 DIGITAL: - 3.5975 7.095 14.095 18.1025
 21.095 28.095 50.350 147.555
 VOICE: 1.855 3.990 7.290 14.290 18.160
 21.390 28.590 50.350 147.555

CWs = Morse Code practice (slow) = 5, 7.5, 10, 13 and 15 WPM
 CWf = Morse Code practice (fast) = 35, 30, 25, 20, 15, 13 and 10 WPM
 CWb = Morse Code Bulletins = 18 WPM

CW frequencies include code practices, Qualifying Runs and CW bulletins.

DIGITAL = BAUDOT (45.45 baud), BPSK31 and MFSK16 in a revolving schedule.

Code practice texts are from QST, and the source of each practice is given at the beginning of each practice and at the beginning of alternate speeds.

On Tuesdays and Fridays at 2330 UTC (6:30 PM EST), Keplerian Elements for active amateur satellites are sent on the regular digital frequencies.

A DX bulletin replaces or is added to the regular bulletins between 0100 UTC (8 PM EST) Thursdays and 0100 UTC (8 PM EST) Fridays.

GEORGIA STATE ARES MEETING

JAN 11, 2020 0900 - 1630

FORSYTH, GA GPSTK

Some of the classes included are:

Digital Modes JS8CALL Intro_____KK4EHJ, Aaron
 Hospital Operations_____W4HBS, Bret
 ARES Connect_____KK4TLG, Bob
 Station Remote Control_____N4GYN, Ray
 ARES Situational Awareness and Repeater Update
 Initiative_____W8BYH, Brian
 SEC meeting with DECs_____K4SJR, Frank



4603 WEST COLONIAL DRIVE
 ORLANDO, FLORIDA 32808
 WWW.HAMCATION.COM

ICOM 7100 REVISITED

_JEFF PHILLIPS KN4FRG

ICOM had a few mobile portable radios in the past, the IC-706 series and the IC-7000. But, in 2012, ICOM introduced the IC-7100 and it became available in the U.S. in 2013. Recently, Nancy and I purchased a new IC-7100 as a portable station radio at our Ham Shack in Crocker, MO – definitely a great Christmas present from Nancy / K4NEP. The next series of paragraphs will provide a little background for the transceiver and provide a few likes and dislikes along with some recommendations after about a couple years of use.

The IC-7100 is the first touchscreen transceiver and comes with performance features on par with bigger rigs with its RF detachable “Brick / Clock “ slant-like head unit and base/controller unit. The ICOM thoughts were to build a rig for hams used in portable/mobile and space-challenged situations. The ease of operation with fingertip control utilizing the intuitive touch screen interface with the power of 32-bit IF DSP featuring output power of 100W HF/50MHz, 50W 144MHz, and 35W 430/440MHz. The IC-7100 is an all band and all mode transceiver that is D-STAR ready – even on the HF bands using the DV mode. ICOM also added an USB interface for audio and control (soundcard/Signalink) making digital setup and operations a one-cable operation for ease of integration with FLDIGI, WSJT-X, AC Log, and/or HRD software suites. The angled control head comes with a large screen allowing the operator to easily transverse through the series of functions and controls within the radio. Additional features include built-in SD card slot to save settings, voice storage and data cloning, RTTY demodulator

[illegible]

Figure 1. The screen is larger than its predecessors allowing the user to assess its functions.



Figure 2. The Base unit is familiar to ICOM users allowing the normal connections and interfaces.

After use, what are a few of the likes as a base station and for portable use?

NOTES FROM THE BACK ACRE

_ Buzz Kutcher, K3GWK



Georgia ARES Monthly Report December, 2019

Reported by: Butts County EC, No Call, Vacant
Report ID# 12023. Report submitted by: K3GWK,
Buzz Kutcher - AEC

Total number of ARES members in group is: 27
Change since last month: 0
Name of your Local ARES Net: Butts County FM
Training Net
Net Frequency: 147.285 PL 131.8
Day of the week: Tuesday
Time of the Net: 19:30 Local
Total of Nets this month: 9
NTS Liaison: GA ARES, GA SSB
Drills, Tests and Training sessions: 6
Drills, Tests and Training Man Hours: 69
Public Service Events: 1
Public Service Man Hours: 12
Emergency Operations: 0
Emergency Operations Man Hours: 0
Misc Activities: 0
Misc man hours: 0

TOTAL ARES OPERATIONS: 7

TOTAL ARES MAN HOURS: 81

Comments: Our group held its 9th annual dinner at
Buckner's Restaurant in Jackson.

The Sylvan Grove Hospital Team supported the
monthly State Hospital Net: K4NEP, KK4GNO,
KM4HOS, W4DED.

Our group continues to support the BC DPH office
and weekly DStar Net: KM4HOS, NI2Y, K3GWK,
KA8LAD and W8XC.

The Butts County EMA Director, KJ4TVO and
K3GWK attended the annual NWS IWT Workshop
at GA Tech.

KJ4TVO, KM4HOS and KN4KTZ inventoried the
BC DPH Response Trailers.

There were nine training nets held in December: 3
FM, 3 WL2K, 3 NBEMS (30 Ham Hours)

Total Ham Hours: 111 (Value \$2,791.65) -

K3GWK, AEC

200106 BC EC Survey Report

... brought to you this month by Palmolive
'Vanishing Cream', yeah it 'vanished' last
month cuz of all our Christmas & New Years
'doings'.

With the GA ARES mtg at GPSTC on the 11th,
and Dan's Ham Exam on the 18th, that leaves
us with the 25th. I'm gonna be at my grand-
daughter's Livestock Show down in Perry that
afternoon, but can work a Survey of Zone 5

into the schedule that morning if agreeable to
the rest of our county 'Adventurers'.

We'll talk about it at the mtg on the 6th. Hope
everybody had a VERY Merry Christmas and
a Happy New Year!!

.... until our next Adventure into WILD Butts
Co,

Ken, KM4HOS ARCBC
Recreational Adventure chairman

200106 Net Mgr Report

Nancy, K4NEP, held 3 ARCoBC Trng Nets in December, averaging 6 voice chk-in's, 1+ on digital, and 5+ on WL. We CNX'd the VHF radio Nets on Christmas & New Years 'Eve's' but still had a few WL chk-in's as the 'state' Nets were still active.

We still need NCS volunteers for the weekly Trng net each month. Anthony, N4TZY, is on the schedule for Jan '20, but we still need to cover fm Feb. on thru the New Year. If anybody wants to volunteer as a Net Controller, pls lemme know.

The 'Preamble' (script) is posted on the groups.io 'files' pages and I'll be more than happy to send you my macros for FLDigi and show you how to use 'em. Lemme know if yer interested.

Suggestion: fm yer local 'broken record' for a NEW YEAR'S RESOLUTION... as some (most) of our current ARES Response Team operators are over-booked (spell dat - 'assigned to more than 1 RT'), pls lemme know if you're interested in supporting either the Sylvan Grove Hosp, BC Health Dept, our 911 Ctr, or ol' Yeller as an ARES operator. FREE training is available and also the gratitude of our Butts Co ARES team and our served communities.

...and remember wut our Butts Co 'radio elf' sez:
" ...we gotta be able to DO what we SAY we can do."

and the former EC...

"ya cain't DO wut ya DON'T practice."

Appreciate all y'all's time & effort last month in support of Butts Co HAM radio,

Hope y'all had a Merry Christmas & Happy New Year!!

& 73,

Ken, KM4HOS, Butts Co Net Mgr

ICOM 7100 continued from page 3

The IC-7100 is a general replacement for the IC-706 series and IC-7000 destined for use as portable/mobile use, but this radio has the makings to be a very good base station system. It has good performance for both phone and digital operations and integrates well into the small space allocated for our amateur use with its separate control head - great for the space challenged Ham. The transceiver has many of the same features as its bigger brother like the IC-7300 offering great audio, full power, and one cable digital operations, but just in a compact system. After reading the manual, I mean reading the manual, the menu system was generally easy to understand and interpret making entering local frequencies and repeaters for 2m/440 use a breeze - does not require the use of software to program it. Using the purchased RT Systems software allowed easy downloading and setting the DStar repeaters a very easy process, though. The screen size allows easy viewing of all of the entered features (filters, functions, menus, frequency, etc.) and it displays all of the entered repeater information for 'at a glance' operation and choice. What are additional likes for the radio?

The IC-7100 might be physically small, but it offers ease of transition for one function to another, i.e. Phone/SSB to digital operations like PSK31, FT8/4, or RTTY. The selection of these features are easily obtainable through the use of the touchscreen or through the buttons physically available on the transceiver. After a good read-through or twice with the manual and/or watching the numerous available YouTube videos, the selection of the functions and features of the rig are readily available and easy to choose much like a bigger button enhanced rig. This can be a good or bad thing, some operators love the ability to choose a feature/function by the pressing of a button and not searching deep in a menu system to find the needed additional aspect. Even though the rig has some menu selections via a button press,

ICOM 7100 continued on page 6

ICOM 7100 continued from page 5

the operator must obtain several of its features via the menu, but most features are just a few touches away using the touchscreen feature not necessarily deep within the menu system. As a note, using the all band all mode rig, it is easy to switch from voice to data during our club's weekly net with a few touches on the screen and without a Signalink. What about portable operations?

ICOM generally created this configured rig for portable/mobile operations and it does offer a feature rich 100 watt radio for use in these situations. I set out to use this rig at a local park while working in Missouri to test out its ability for portable use using my configured battery system with portable mast and antenna. I was trying to determine if the IC-7100 could be a good system for Parks on the Air (POTA) operations or for use away from home. The base unit and control head fit into my pre-configured battery system (Lithium iron phosphate/Bioenna battery) container and was easy to transport to the local park. After arrival to the park, it took about 10 minutes to set up the mast and antenna with the rig/tuner. A very easy setup operation. The radio performed very well making phone (80w power), digital FT8/FT4, and PSK 31 (40w power) contacts during a three-hour period. I received very good audio and signal reports for phone operations and good clarity and signal reports for digital operations. All-in-all, the radio performed well, was easy to setup, and easily transportable to and from the site. It did have its quirks, we will talk about that later. Now for some of the dislikes.

The primary operating controls for the IC-7100 such as the volume control, filter settings, and squelch/RF are the same usual knobs. Some of the button-controlled functions work with the knobs, as well, or are OFF/ON toggles. The touchscreen can offer easy ac-

cess to menu selections, but will present certainly a significant learning curve for first learning the touchscreen/button functions and second using them to search and find the menu features and functions. For an operator first using a touchscreen and a menu-driven feature selection rig, it can present a challenge and can cause a few mistakes and miscues for using the radio. The IC-7100 is not a menu driven system like a hand-held, but it will require reading the manual and acquiring the knowledge for where the menu has the functions and features for the band and mode needed for your application. It will take time to be relatively proficient in choosing the right button and select touches on the screen to select your needed function for what mode of operation you are doing. For mobile operation it is a must to pre-define your operating band and mode before driving, it does require a few touches to different screens and will definitely present a hazard while driving. The operator can aid themselves in this by purchasing the HM-151 [(\$110) (shown in top picture)] providing remote operation of the radio through this handmike. What is my dislike for portable operation?

The IC-7100 does offer the operator a good portable system, but can be cumbersome and a battery hog to operate. When comparing the IC-7100 and the IC-706 or IC-7000, the rig contains two main components and the others are your typical mobile single system. A little harder to configure in a go-kit, but the operator can separate the two components for operation. Definitely not a backpack radio for Summits-on-the-Air (SOTA) operations, but a usable radio for POTA ops. Due to the rig's touchscreen and features, it will consume power from a battery rather quickly even with lower

ICOM 7100 continued on page 9

200106 BCHD Report

We got chk'd into 4 outta 4 Ga HD Nets last month, and the KW4BHD station is workin' jez FINE. Many thanks to the BCHD operators for a VERY successful year.

Anna & I will be attending another planning/training session at the county Health Dept office on Thurs, 9 Jan '20, for the Butts Co DPH POD Ex on 5 Mar '20. This session is OPEN to ANY of our club operators, and especially for any of y'all thinkin' about joining our BC ARES krew.

The BCFD, BCSO, Jackson Police, the EMA folks, Ga DPH District 4, state DPH, and other agencies will be in on the planning and also conducting this exercise. You might find it interesting to see how local agencies work together during an 'event' and how our ARES group is implemented into the plans & exercise. If you're interested in BC ARES and/or our BCHD

Response Team, pls contact Ken, KM4HOS, for more details.

BTW, Krystle (da BCHD Boss) is a little short-handed, sooo.... if any of you or your spouses have a medical (professional) bkgrnd, she'd be interested in talking to you. Think about it, it'd be a GREAT way to help out yer community if we had an 'event', many hands make light work.

If you like it, you might even wanna think about bein' a part of our Butts Co CERT (Community Emergency Response Team).

Remember, if you're D-Star equipped, ANY of you in the ARCoBC might wanna just listen in or chk-in fm home or your mobile station. Just tell 'em you're 'off site' and representing the Butts Co Health Dept in Jackson, GA, District 4. If you need help finding the D-star repeaterz we use, gimme a holler and I'll give you a list or the RT syst. file we use in our K4SGH or KW4BHD radios.

Remember, ALL the BCHD RT operators should make sure they have 'up to date' FLDigi/FL Msg, and WinLink Express (w/ UZ7HO's 'Sound Modem' program) on their laptops so we're able to go 'digital' if the Health Dept staff needs us to. The weekly Ga DPH Net chk-ins DON'T need a laptop, it's just a D-Star voice chk-in.

Don't fergit, this month has 5 Thursday's so 30 Jan '20 is up for grabs, and any of the regularly 'unscheduled' Health Dept operators may want to take that slot and get some time on the new IC-2820 radio and it's set-up/tear-down. I can be there to answer any questions



NETS

SUNDAY:

(rev. 190722)

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/ARCBC WL Express Net - Send an ICS-213 (or regular typed msg, if unable 213) to **KX4MAT** and WX4BCA by 2200Z. [1700L EST winter/1800L EDT summer.] Please use a Winlink RF gateway; Winmor packet, etc, if capable; otherwise, use Telnet.

GA ARES Digital Nets - 2100Z [1600 EST winter/1700 EDT summer] 3.583 MHz USB.

- **GA ARES 'Traffic' Net** - **EVERY** mo, FLDigi, MT-63 1KS, centered 2K MHz. called by GA ARES districts, send an 'I have traffic' msg when your district is called, wait til CFD'd, then ICS-213 to **KX4MAT** NCS.
- **GA ARES 'check-in' Net** - **Even** mos, FLDigi, MT-63, centered 1000Hz, just a 'text' check-ins only and runs concurrently with the 'Traffic' Net.
- **GA ARES D-RATS Net** - 2130Z [1630 EST/1730 EDT]. **Odd** months, port: gaares.ratflector.com, use 'chat' to ck-in; also under 'messages', send ICS-213, if able; runs concurrently with 'Traffic' net.

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 NBEMS Digital Net. WL Express msgs accepted if Not sent the previous Sunday, send to WX4BCA with name, callsign, location, whether on mobile or aux power.

THURSDAY:

NCRC/ARES/RACES FM Net - 2000L, WA4ASI repeater, 146.925 - & 444.800 -, 88.5 PL. WL - K4NCR. May have a 'follow on' Digital Net - MT63-2KL, centered 1500 Hz, D-Rats on gaares.ratflector.com.

*** For other training opportunities, see the ARCBC Group.io website, and/or the GA ARES website for other Nets w/ days, times, freqs, protocols, etc, for your training convenience. ***

ICOM IC-746 PRO

An excellent 100 Watt, 160-2M transceiver - all mode (FM, SSB, SSB-Data, RTTY, CW, AM.) (Auto tuner covers 160 - 6M.) One owner, non-smoking/non-pet environment. Has all documentation, HM-36 hand mic, all manuals, Anderson Power Pole cable, and original box. Factory 'Electro Static Discharge' protection modification and the over-size display heatsink installed. Matching ICOM PS-125 power supply. Data capable SignalLink connector on the back. Excellent Digital Signal Processing. Asking \$750.

Buzz Kutcher, K3GWK, 770-298-0451, k3gwk@arrl.net



ICOM 7100 continued from page 7

power selection, the radio uses about .6 amps when the system is turned-on just to operate and show the large screen. For portable use, the operator must plan ahead if planning to operate for longer periods of time. The rig requires a higher voltage for initial startup and continued operations when compared to the Yaesu FT-817/9 and/or the FT-857D. The operator can overcome these issues with the right setup and battery selection based upon the amount of time and power you plan to operate. The Bioenna Lithium Iron Phosphate 20AH or 30AH battery is a good choice for up to 6 hours or more of continuous operation. The rig's hand mike is not the best ICOM can offer and this household would recommend the SM-30 or better (desk mic) and/or the HM-151 hand mike as stated above for better audio and or features.

The IC-7100 is an outstanding transceiver for the smaller space constrained HAM or as a good portable system. The rig does present a learning curve for just about any new operator using a touchscreen for the first time. It will take time to learn how to use the buttons in concert with the menu to derive your band and mode of operation and to add-in those filters and other features. The digital / CAT control setup will take a little time for configuration with software suites, but on par with other HF rigs. The rig can replace both the HF and the 2/440 rigs offering the operator an all band and all mode transceiver for operating it as a base station and do not forget it provides DStar. The rig can offer a good selection for portable use, but with the understanding it does required more battery power for using its touchscreen and features. The performance and features are comparable to a bigger rig in a smaller frame and has a good price to boot. The rig's used price, at the time of the writing of this

K4SGH - Sylvan Grove Hospital Net

K4SGH, Sylvan Grove Hospital, was held on Sunday, Jan 5, 2020. The station was placed into operation at 1345, and was manned by Dan Darsey W4DED, Nancy Phillips K4NEP, and Glenn Wyatt KK4GNO.

Bands were poor and several tries were attempted before nets were accomplished.

The Winlink connection was made via an ICS 213 to W4HBS on 3.598.5. The D-Star check-in was sent to W4ASI-30B. The HF contact was made via 3.982.5.

The K4SGH station was secured at 1620.

article, is around \$675 to \$725 and right now new around \$735 after the ICOM mail-in rebate. Taking into account no need for a Signalink (\$120), this is a good cost effective rig for those price conscience operators. Nancy and I have found the IC-7100 is a good transceiver for our use here in the Ham Shack in Jackson, GA and now as a suitable portable rig at the residence in Crocker, MO allowing access to DStar and increased overall functionality over my other 2m/440 rigs. For the cost (new or used), a good versatile and feature-rich rig with the ability to operate portable or as your primary rig.

_JP

Is your ARRL membership up-to-date?

This is important for our club affiliation with ARRL.

Please update and inform the membership chairman.

CALENDAR

JANUARY 2020

6 - Monthly Meeting - 7PM, Jackson FGs
"Using an Antenna Tuner" - Winford Barnes
11 - GA ARES meeting - GPSTC, Forsyth, 0800
18 - Hungry Hams - 0730 Huddle House, 16 & I-75
18 - VE Session - 0900 - FS #7, 144 Colwell Rd
18 - TECHFEST & Chili Cookoff- 9-2, 665 Duluth Hwy (GA-120), Lawrenceville

FEBRUARY 2020

3 - Monthly Meeting - 7 PM, Jackson FGs
"DMR Radio Programming" - Chris Southerland
15 - Hungry Hams - 0730 Huddle House, 16 & I-75
15 - Tech Saturday - 0830, FS #7, 144 Colwell Rd

MARCH 2010

2 - Monthly Meeting - 7 PM, Jackson FGs
"Henry Co Library, part deux" - Michelle Burnham
21 - Hungry Hams - 0730 Huddle House, 16 & I-75
21 - VE Session - 0900, FS # 7, 144 Colwell Rd

APRIL 2020

6 - Monthly Meeting - 7 PM, Jackson FGs
"Battery Usage" - Melvin Mosier
18 - Hungry Hams - 0730 Huddle House, 16 & I-75
18 - Tech Saturday - 0830, FS #7, 144 Colwell Rd

MAY 2020

4 - Monthly Meeting - 7 PM, Jackson FGs
"Drones" - Pete Acevedo
9 - Hungry Hams - 0730 - Huddle House, 16 & I-75
9 - VE Session - 0900, FS #7, 144 Colwell Rd

CONTACT INFO

PRESIDENT - Elaine Stachowiak
KW4AQ, ubudogems@hotmail.com

VICE PRESIDENT, MEMBERSHIP - Nancy Phillips
& EDITOR **K4NEP, k4nep@arri.net**

SECRETARY - Darlene Ragon
KK4BKF, lragon@aol.com

TREASURER - John Lipscomb, IV
KA3SME, john.lipscomb@delta.com

PUBLIC INFORMATION OFFICER - Buzz Kutcher
K3GWK, k3gwk@arri.net

AEC for REPORTING - Buzz Kutcher
K3GWK - k3gwk@arri.net

AEC & VE TEAM ADMINISTRATOR - Dan Darsey
W4DED, w4ded@arri.net

AEC & CERT LIAISON - David Ridgeway
KK4SUO, dpridgeway@bellsouth.net

AEC & SHERIFF LIAISON - Mark Clark
NI2Y, NI2Y@arri.net

AEC & TECHNICAL ADVISOR - Mike Crowe
AJ4GU, aj4gu@bellsouth.net

AEC - David Burnham
AK4EM, burnham1078@gmail.com

SKYWARN COORDINATOR - Elaine Stachowiak
KW4AQ, ubudogems@hotmail.com

Tues Net NCS for January
Anthony N4TZY

