



KEY KLIX

Amateur Radio Club of Savannah

July 2007

Volume 3

Issue 7

The next meeting of the Amateur Radio Club of Savannah will be held, Tuesday, July 10, 2007, 7:30pm, at Memorial Health University Center, in the Hoskins Building Classroom "5." The Hoskins building is on the South Side of the hospital near Parking Garage "C." Enter the Hoskins Building on the side that faces the Parking Garage "C." There will be a short program following the business portion of the meeting.

2007 ARCS FIELD DAY SUMMARY

The 2007 ARCS FIELD DAY was a big success!!!!

Set-up began around 9:30am, Saturday, June 23.



Photo Credit WD4AFY



Photo Credit KA4NCE

Antennas were assembled and installed on masts or tied-off to trees.



Photo Credit KA4NCE



Photo Credit WD4AFY



Photo Credit WD4AFY



While there were folks outside setting up the antennas, work was also being done inside the pavilion.



Along with the Kenwood's, Icom's, and Yaesu's, there were some other cool transceivers



Several HF and VHF radio stations were set up inside the pavilion with batteries being used for emergency power. A very welcomed sandwich tray was brought out to feed the Field Day set-up crew. W4HBB went on the air promptly at 2pm with the designator of "3A GA."



There was a pause in operations around 6:45pm when supper was served. It was nice "spread," with fried turkey (prepared by Doug Rowland) being one of the main meats. Desserts followed. There was plenty to eat. After supper, Beth Ann Blackburn conducted the half and half drawing. There was also a mini sell-and-swap table. Proceeds benefited the ARCS.



After supper, the crowds thinned.



A curious armadillo strolled by to see what we were doing.



A small group of dedicated hams continued to operate throughout the night.

Daybreak arrived and other "hams" that got some sleep arrived to take over the operations.

A tasty breakfast casserole, baked by Beth Ann Blackburn was served. Leftovers from the previous evening were also consumed.

Operations continued throughout the morning. Just, as we were about to disassemble the station, WTOC-TV arrived to do a story on our Field Day. (The news story aired on the 6:30pm Sunday News.) By 2:30pm Sunday, the Field Day station was disassembled, and

everyone went home for a well-deserved rest.

Well over 50 people attended this year's Field Day. Thanks go to everyone who participated and made this a very successful event!!!!

SCANNER REVIEW: UNIDEN BCD396T

Mac McCormick, KF4LMT

This month, I'm reviewing what has become one of my favorite scanners: the Uniden BCD396T (or BC396 for short). It is a compact yet powerful radio that is not only the best, but also the most versatile handheld scanner I've ever used. I wouldn't go so far as to say it is a revolution in scanning, but it requires a change in thought to understand the radio and use it effectively. It is P25 digital capable and will track Motorola 3600 and 9600 baud control channel systems in the VHF, UHF, 700 MHz, 800 MHz, and 900 MHz bands as well as EDACS and LTR trunking systems.

Those who are familiar with many of the newer amateur radio handheld transceivers probably wouldn't have any trouble with the operating functions of the 396. Just like many of the newer amateur radio HT's, it is primarily menu driven. It also makes use of a Function key to assign multiple uses to a single key or knob. As I mentioned, this is a small radio, especially when compared to previous Uniden handheld scanners. It measures 2.40 inches wide by 1.22 inches deep by 5.35 inches high, making it shorter and thinner than previous scanners. The front of the radio features

a four-line LCD display at the top and a speaker at the bottom, with a sixteen-button keypad between (the usual 0-9 keys along with Hold, Scan, Lockout, and On/Off button). The backlight for the keypad and display is blue and can be set to an infinite time setting or a variety of time delays. A single knob acts the volume knob, channel/VFO knob, and squelch knob through the use of the side mounted function button. A side mounted menu button accesses the menus used to adjust many of the radio's settings. Both the function and menu buttons are found where you would expect the PTT button to be if the radio was a transceiver.

As I mentioned above, using the BC396 requires a change in thought. You have to forget about the concept of banks and think in terms of systems and groups. The easiest way to explain the system and group concept is that a BC396 system is a flexible bank in which you can program either a trunking system or a conventional system. A BC396 group is a subset of a system. In the case of a trunking system, the groups are where you store talkgroup IDs. In the case of a conventional system, the groups allow you to break the frequencies down into subsets. Just as you could turn off banks in an older scanner, you can turn systems in the BC396 on and off. In the BC396's case, you assign "quick keys" to the systems that you use to turn them on and off. You can also turn the groups within a BC396 system on and off. The memory capacity of the 396 is incredible. Depending upon how you have programmed the radio, you can have 3000-6000 channels and up to 400 systems. After programming everything I had in my BC250 plus more into my

BC396, I am only using 25% of the BC396's memory!

You can program the BC396 by hand, but it would be a very lengthy, and to be perfectly honest, a somewhat confusing process. Due to the number of possible channels, plus alphanumeric tags for frequencies and trunking talkgroups, it isn't hard to imagine how long it would take. This is a radio that is most easily programmed by computer. There are several software packages available, but my favorite is the ARC 396 software by Butel. In addition to simplifying the programming process, you can also use ARC 396 to program the radio by connecting to Radioreference.com's database.

The most important question, though, pertains to how well the radio performs. It performs extremely well. It covers 25-956 MHz with a few gaps as well as 1240-1300 MHz. I have not experimented the 900 MHz or 1240-1300 MHz reception, but I have been unable to find an area of poor performance with the exception of the lower 25-88 Mhz range (although this is probably more a product of using a portable antenna and not the receiver itself). The BC396 makes for a wonderful general public safety scanner using the stock antenna. Most stock portable scanner antennas are poor performers, but the 396's does quite well. It is worth noting here that the BC396 antenna uses an SMA connector, probably not surprising to those who have been following the antenna connector trend in amateur radio HTs (it also comes with an SMA to BNC adapter). Using a Diamond SRH77CA antenna, I have found the BC396 to be a

terrific airband and military UHF airband scanner.

The BC396 has several features that make it attractive. First, it automatically adjusts P25 digital levels on most systems to provide the best performance. On previous Uniden P25 scanners, you had to manually set P25 digital levels to get the best audio performance. In a similar vein, the BC396 has AGC (Automatic Gain Control) for both analog and digital signals. The BC396 also has the newer frequency steps such as 6.25 kHz, 7.5 kHz, and 8.33 kHz in addition the usual 5 kHz, 10 kHz, 12.5 kHz, 15 kHz, 25 kHz, 50 kHz, and 100 kHz settings. These new step settings will allow the programming of new narrowband channels. Uniden has also looked forward to the re-banding of 800 MHz trunking systems; once rebanding begins, the radio will be able to be "re-flashed" to accommodate and scan rebanded systems. For an explanation of rebanding, I would suggest reading "Whatever Happened to Rebanding?" by Dan Veeneman in the July 2007 issue of Monitoring Times, on newsstands now.

Another useful feature of the BC396 is "Close Call." When activated, the Close Call feature allows the scanner to function somewhat like a frequency counter. It can detect transmissions within a close distance of the radio (depending upon antenna height and the power of the transmitter), then display the frequency and tune the scanner to that frequency. This is very useful for event scanning, such as races, airshows, festivals, etc. It came in quite handy at Field Day this year. If you recall the old Midland radio that was on the "For Sale" table, we were able to use Close Call to identify what frequencies it transmitted

on and therefore what type of radio it was. After connecting the Midland to a battery and antenna, each channel was keyed and the transmit frequency was found by the BC396 (they happened to be 155.265 and 154.190).

Links:

Butel Software: www.butel.nl

Radio Reference: www.radioreference.com

Uniden: www.uniden.com

WHAT'S GOING TO HAPPEN TO KENWOOD IN 2008?

A consumer electronic magazine, This Week in Consumer Electronics (TWICE), reports that Kenwood has agreed to merge in 2008 with Victor Company of Japan (JVC) under a holding company. JVC is owned by Matsushita Electric Industrial Company. Japan's Nikkei business newspaper reports that the final details should be worked out by the end of the month, and that under the plan, Kenwood will buy 20 billion yen (\$161,469,466) in JVC shares as early as this summer, raising its stake to 13 percent. Matsushita will also sell part of its 52.7 percent of JVC to Kenwood's top shareholder, the Sparx Group. When JVC and Kenwood integrate operations under the holding company in 2008, Matsushita will sell the rest of its JVC shares to the holding company to complete the transaction. The holding company's stock will be listed instead of Kenwood and JVC, according to Nikkei. Combined, Kenwood's and JVC's sales are \$7.3 billion dollars annually for their fiscal year that ended March 31.

--ARRL Letter

HAM TRIVIA

Question:

What, in ham lingo, is a "lid?"

- A. A bad or inconsiderate operator
- B. Light Intensifying Diode.
- C. An antenna made out of bottle caps.
- D. A Limited Incline Dipole

Answer at bottom of this page!!!

STRAYS

WANTED: Articles for the Key Klix

WANTED: ARCS Net Control Operators and Check-ins... The Amateur Radio Club of Savannah holds a weekly net on the 146.37/97 repeater every Thursday night at 9pm. The purpose of the net is to handle traffic, keep amateurs informed, and promote friendship among fellow Hams. This also provides a training experience to help amateur radio operators learn how to conduct nets. Please volunteer to do a net session every now and then. A net script can be found on the ARCS Web Site.

http://www.qsl.net/arcs/net_script.txt

73, de Andy Blackburn, WD4AFY, Key Klix Editor
andy@g-net.net

Trivia Answer: A. A bad or inconsiderate operator



AMATEUR RADIO CLUB OF SAVANNAH



ARCS Elected Officers for 2007:

President: Doug Rowland, KF4EFP, (912) 826-7299, jdrowland@windstream.net

Vice President: Mac McCormick III, KF4LMT, kf4lmt@comcast.net

Secretary: Andy Blackburn, WD4AFY, (912) 238-4676, andy@g-net.net

Treasurer: David Delamater, K4DJD, k4djd@comcast.net

Activities Manager: Philip Neidlinger, KA4KOE, ka4koe@arrl.net

Trustee: Kurt Hoffman, N4CVF, n4cvf@arrl.net

The Amateur Radio Club of Savannah, was founded in 1938, and is a non-profit 501(c)(3)(a) organization dedicated to:

- (a) Recognition and enhancement of the value of the amateur service to the public as a voluntary noncommercial communication service, particularly with respect to providing emergency communications.
- (b) Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- (c) Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- (d) Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- (e) Continuation and extension of the amateur's unique ability to enhance international goodwill.