



KEY KLIX

AMATEUR RADIO CLUB OF SAVANNAH

MAY 2009 VOLUME 5 ISSUE 5

This edition of the *Key Klix* is dedicated to Mr. Edgar F. Bigbie, W4MMQ, for reasons so numerous, they could not possibly all be listed here. Andy Blackburn, WD4AFY, starts this issue off with his tribute to Mr. Ed.

REMEMBERING ED BIGBIE, W4MMQ

Edgar F. Bigbie, W4MMQ, of Richmond Hill, became a "Silent Key," April 15, 2009. He was 83 years old.

Ed was born in Columbus, GA. He married his wife Lucille in 1942. He and his wife moved to Savannah around 1944.

Ed became interested in "ham radio," during WWII. Unfortunately, during wartime, he was unable to get his ham license. Wartime restrictions on "ham radio" were lifted in 1946, and Ed easily passed his ham test. The FCC assigned him the call sign "W4MMQ." Shortly after receiving his amateur license, he joined the ARRL.

In 1947, Ed participated in the Amateur Radio Club of Savannah's first Field Day, located at the German Country Club, on Jasmine Avenue, in Savannah, GA. That first Field Day yielded a whopping 30 points.



Ed Bigbie, W4MMQ...SK

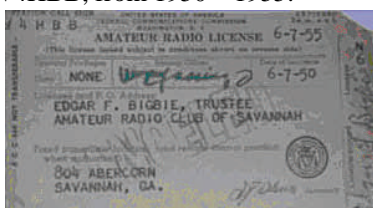


The Amateur Radio Club of Savannah's 1ST Field Day



Around the mid 1950's, Ed was the first HAM in the Savannah area to operate a HF SSB station. Previously, AM and CW were the predominant modes used.

Ed was the Trustee of the Amateur Radio Club of Savannah callsign, W4HBB, from 1950 – 1955.



Ed was Electronics Administrator for the City of Savannah for 20 years. He installed the first radios for the Fire Department, the Department of Public Works, and the first UHF radio system and dispatch consoles for the Police Department in 1960.

Ed became a Registered Professional Engineer (PE) in the State of Georgia in 1965 and a member of the Quarter Century Wireless Association (QCWA) in 1972.

From 1970 to 1978, Ed was Vice-President of Engineering of Lewis Broadcasting. WJCL Station owner, Curtis Lewis, W4LHS, was a "ham" and a close friend of Ed's. Ed and Curtis were instrumental in the installation of the 37/97 repeater at the WJCL transmitter site in 1977. Both were also instrumental in getting our repeater in the WJCL atomic bunker later on. (Many thanks go to both Ed Bigbie and Curtis Lewis!)



During 1978, Ed purchased Savannah Communications in Garden City. In 1980, Ed hired a promising, young, electronics technician named Andy Blackburn to his staff. Currently, Savannah Communications has branches in Statesboro, GA, Beaufort and Bluffton, SC, and is quickly becoming one of the largest MSS's in the Southeast.

Ed was also the President of T-B Com, Inc. and Vice-President of Advance Communication and Electronics, Inc.

In 1991, Ed retired as President of Bigbie Electronics, Inc., and his son, Don Bigbie, took over the everyday business.

Ed and Lucy moved to Cleveland, GA, after Ed's retirement. While there, Ed was very active in the White County amateur community. He also was a consultant to the White County EMA's top-notch Communications Center.

In 1996, Ed became an ARRL Tech Specialist.

In 1999, Ed and Lucy moved back to the area. They eventually settled in Richmond Hill.

Ed had met numerous "Who's Who" in electronics throughout the years. These include Art Collins of Collins Radio, Bill Hallagen of Hallicrafters, engineer Walt Maxwell of RCA, and Louis Varney, the creator of the G5RV antenna.

**“He installed the first radios for the Fire Department,
The Department of Public Works, and the first
UHF radio system and dispatch consoles for the
Police Department in 1960.”**

SAVING GRACE

Ed was always there to help the ham community. The ARCS repeater site was in jeopardy when a digital TV broadcast antenna had to be installed on the WJCL tower. The additional weight meant that our repeater antenna had to be removed from the 520' height. With Ed's engineering intervention, the ARCS antenna was removed from the 520' level down to the 350' level. The 37/97 repeater site was saved thanks to Ed.

Several months later, a similar thing happened to the CARS repeater site. Once again, Ed saved the day.

Within the past year, Don Bigbie, Ed's son, asked Ed if he would oversee the erection of a new tower project in the Richmond Hill area. Ed took on the task.

However, sadly on January 29, 2009, Ed's wife, Lucy Bigbie, passed away. They had been married for 67 years.

Shortly thereafter, on April 15, 2009, Ed Bigbie, W4MMQ, became a Silent Key.

Ed was a member of the First Baptist Church of Richmond Hill. He was a devout Christian, a dedicated family man, a thoughtful and caring employer, an avid Amateur Radio enthusiast and a great friend. Ed will be missed by all.

~SUBMITTED BY ANDY BLACKBURN, WD4AFY

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SOME HUMOROUS TALES OF ED BIGBIE

FLUORESCENT ROOF LIGHTS

One night, Ed went on the roof of his home (then located near downtown) and started lighting fluorescent light tubes from the transmitted R.F. from his ham radio antenna. An audience gathered and watched in awe at this feat. The local Police were not as impressed and asked Ed to come down off the roof. He obliged and did not get into any trouble.

KIDS, DON'T USE WIRE FOR BALLOONS

Ed and his friend, Gene Rhodes, decided to go on the 160 meter band. A dipole, 292ft.long, is too long for small city lots, but a ¼ wave vertical antenna would be only 146ft. No problem. They acquired a helium balloon and sent the wire antenna aloft. It worked great...for awhile until they noticed that the SWR went sky-high. You guessed it. The antenna wire broke loose from the station and the balloon/antenna wire went up, up, and away. Several days later, Ed and Gene read an article in the Savannah Morning News about a balloon attached to a wire that was found at Isle of Hope. The news article mentioned that the wire/balloon was found near power lines and warned kids not to use wire for balloons, because "It could be dangerous or deadly!" (No one got hurt.)

~SUBMITTED BY ANDY BLACKBURN, WD4AFY

2009 ARCS ELECTED OFFICIALS:

President: Andy Blackburn, WD4AFY, (912) 238-4676, andy@g-net.net
Vice President: Douglas Rowland, KF4EFP, (912) 826-7199, jdrowland@windstream.net
Secretary: Brandy Davis, KI4PZW, (912) 313-7546, ki4pzw@yahoo.com
Treasurer: Kayton Smith, W4KTN, (912) 238-3030, kayton3@comcast.net
Activities Manager: Beth Ann Blackburn, KI4ZDN, (912) 238-4676, bethann@g-net.net
Trustee: Kurt Hoffman, N4CVF, (912) 356-8581, n4cvf@arrl.net

THE Other Side OF AN ARCS MEMBER

~SUBMITTED BY BETH ANN BLACKBURN, KI4ZDN

This month's featured member is Kurt Hoffman, N4CVF, ARCS Trustee.

Full-time, Kurt is an Engineer for AT&T. On occasions, he is also a pyrotechnician for Falcon Fireworks.

Kurt enjoys camping, hiking, swimming, running, lifting weights, shooting, and reading. He also enjoys flying, although it's been awhile. (He hopes to start flying again soon.)

Kurt's favorite vacation area is "almost anywhere" out west. He also enjoys the North Georgia Mountains and has vacationed in South Africa, Israel, Jordan, England, and Wales. Kurt is very busy these days and travels throughout Georgia a lot. He also travels to Wisconsin and Illinois about every 5 to 6 weeks.

Kurt enjoys Mexican food. He also likes to try different types of beer.

Kurt mostly operates 2 meter mobile and occasionally 70m mobile. He has a VX-150 2 meter HT. His "inactive" HF station consists of a FT-840 and a FT-897D. He has no HF antenna for transmitting, but uses a 3' wire stuck in the back of a radio to monitor. He would like to know what equipment other ARCS members have in their stations.

Kurt is interested in emergency communications preparations and he believes that we are in for some interesting times in the near future.

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APRIL MEETING AND MINUTES

We had another great turnout for the meeting last month. Fifteen people were in attendance, and seven folks joined us for the pre-meeting dinner at Barnes Restaurant. Following are the minutes from the meeting:

ARCS President, Andy Blackburn, called the meeting to order.

The minutes for the March meeting, published in *Key Klix*, were approved.

No treasury report was given, as Kayton Smith could not be in attendance.

The corporation renewal fee (\$30) and insurance (\$320) were paid by Andy and he submitted the receipts for reimbursement.

Guy McDonald gave an ARES update and said that participation has been great. He also said that for those who are wanting to be Front Line Responders for emergencies must complete 2 on-line training classes.

Field day is June 27-28. Radios and power supplies are needed. Please contact the club if you have any equipment that can be used.

The business meeting was adjourned. Andy showed a home video from the 1991 Dayton Ham Festival and then an interactive video on RF Interference and correcting issues.

~SUBMITTED BY BRANDY DAVIS, KI4PZW, ARCS SECRETARY

ARCS 2009 FIELD DAY JUNE 27-28

That's right boys and girls. Field day is fast upon us. We will once again take refuge at the Air National Guard Pavilion (where the screen porch shields us from those hungry gnats) and try to rack up some contacts.

Lunch will be provided for all those folks who help set up, so come out and support the club. Can't make it for the set-up? No worries. Come on by, play with some radios, and do what you love to do....hamming it up!

Dinner will be a "bring-a-dish" style buffet, and a list will go around to get an idea of what everyone would like to bring. More details to come....so stay tuned!

IT'S TIME TO RENEW YOUR ARCS MEMBERSHIP

If you have not paid your 2009 dues, this is a reminder that dues are now past due. Please send in \$30 for an individual membership or \$40 for a family membership.

For those that have already paid their dues for this year, thank you very much for your support!!!

If you wish to mail in your dues, please send it to:

Amateur Radio Club of Savannah
PO Box 13342
Savannah, GA 31416

Monthly Morse Code

For the last three months,
you have practiced and tested
your code skills.

Below is the test from
last month's new letters.

Then get ready for the
free-for-all test next month
by reviewing A.G Reinhold's chart.

Good luck everyone!

Now's your time to shine.
Match the letters to the sounds
and check your answers below.

S, T, U, V, W, X, Y, and Z

- | | |
|-------------------|-----------------|
| 1. dah-di-di-dah | 5. di-di-dah |
| 2. dah-di-dah-dah | 6. dah |
| 3. di-dah-dah | 7. di-di-di-dah |
| 4. dah-dah-di-dit | 8. di-di-dit |

A B C D E F G
di-dah dah-di-di-dit dah-di-dah-dit dah-di-dit dit di-di-dah-dit dah-dah-dit

H I J K L M N
di-di-di-dit di-dit di-dah-dah-dah dah-di-dah di-dah-di-dit dah-dah dah-dit

O P Q R S T
dah-dah-dah di-dah-dah-dit dah-dah-di-dah di-dah-dit di-di-dit dah

U V W X Y Z
di-di-dah di-di-di-dah di-dah-dah dah-di-di-dah dah-di-dah-dah

- | | | | |
|------|------|------|------|
| 1. X | 2. Y | 3. W | 4. Z |
| 5. U | 6. T | 7. V | 8. S |

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THE TUBE IS DEAD. LONG LIVE THE TUBE.

~BY MARK WOLVERTON

~SUBMITTED BY PHILLIP NEIDLINGER, KA4KOE

Then you look over at the nightstand, and see the orange glow behind the Atwater Kent giving the only light in the room, and even under the sheets you can feel the reassuring warmth of the radio's tubes, and you know Shepherd is right. Your mom's new transistor set doesn't sound nearly as good as the Atwater Kent, or a real hi-fi with tubes. How could some dinky little gadget that doesn't even light up replace all that?

What you didn't know at the time, of course, was that the writing was already on the wall. Even while the vacuum tube was still the undisputed king of the electronics world, in the 1950s and early 1960s, engineers were diligently experimenting, learning how to build solid-state circuits with the recently invented transistor. As the sixties dissolved into the seventies, transistors and integrated circuits pushed tubes aside in all sorts of consumer electronics, from stereo systems to radios to television sets, until by 1980, you would be hard pressed to find a tube in any device in your home—except for the single, huge picture tube in the TV. Yet the vacuum tube remains on the scene, stubbornly hanging on almost a century after its invention. Is this mere nostalgia? Perhaps, or at least in part. But nostalgia or not, there are still some jobs for which the obsolete vacuum tube is the better choice.

Like so many other inventions, the vacuum tube can be traced back to Thomas Edison. In a sense, Edison invented the very first tube, one that you use every day, the ordinary light bulb. In electronics, however, the term *vacuum tube* (also called, in the United Kingdom, a valve) describes a device that controls the flow of electrons through a vacuum. Edison discovered in 1883 that if he placed another electrode, in addition to the filament, inside one of his light bulbs, electricity would mysteriously flow through the vacuum from the filament to that second electrode. With an uncharacteristic lack of foresight that he later regretted, he found the phenomenon interesting but useless, and he did no more than make it be known as the “Edison effect.”

The Edison effect remained nothing but an oddity until the British scientist John Ambrose Fleming began experimenting with it early in the twentieth century. By 1904 he had developed the Fleming diode, which used the Edison effect in a vacuum tube containing two electrodes, called the cathode (or filament) and the anode (or plate). Applying electricity to the cathode, heating it, caused current to flow to the anode. Because only the hot cathode, and not the cool anode, gave off electrons, current could flow in only one direction. Fleming had invented a rectifier, a device to convert alternating current into direct current. The Fleming diode found immediate application in the detection of weak radiotelegraph signals.

“What you
didn't know...
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on the wall.”

USEFUL AS IT WAS, HOWEVER, Fleming's diode could only pick up signals, not amplify them. That came soon after, when the American engineer Lee de Forest inserted a third electrode between the cathode and anode, thus creating a “triode.” When applying a current to this third electrode, called a grid, de Forest discovered that he had created the world's first device capable of actually amplifying a signal. He patented his Audion tube in 1907, giving birth to the science of electronics. In the following decades thousands of tube types were devised for radio, radar, television, and audio: tetrodes (with two grids between the cathode and anode), pentodes (three grids), and various other multiple-grid designs. All were variations of de Forest's basic Audion concept.

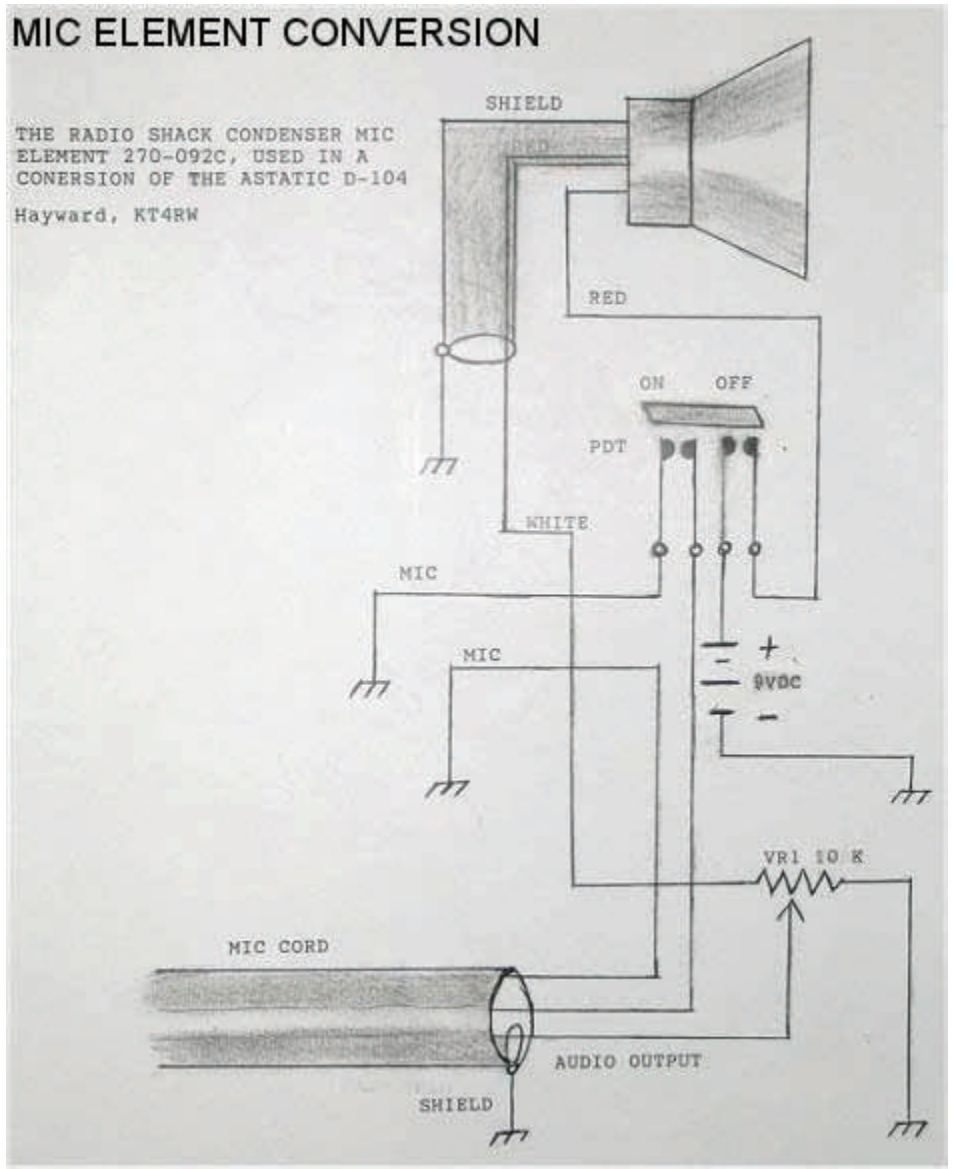
Despite the great ingenuity of their designs, though, tubes had problems. They were fragile. Drop one and break its glass envelope, and just like a light bulb, it was dead. They were expensive to manufacture, because of the difficulty of achieving a sufficient vacuum. Tube equipment was physically bulky and heavy. Tubes needed big, heavy transformers to manage the high voltages they required, and the transformers not only could be unwieldy and expensive but also could affect the signals the devices handled. Most troublesome was the heat problem. By their very nature, vacuum tubes reach temperatures of hundreds or even thousands of degrees. Pack a lot of them into a small space, and the resulting heat can adversely affect other components and pose a hazard for anyone who happens to touch the equipment in the wrong place. Finally, tubes have a finite lifespan. Inevitably they burn out and need replacement.

But wait...there's more! Check back next month for part two of Mark Wolverton's article.

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CONVERT THIS!

~SUBMITTED BY HAYWARD, KT4RW



*Come connect with us! Visit the Amateur Radio Club of Savannah's Website:
<http://www.qsl.net/arcs>*



ARES NOTES

~GUY McDONALD, K4GTM, CHATHAM COUNTY ARES EMERGENCY COORDINATOR

TRAINING ACTIVITIES:

There will not be a monthly Served Agency Station Testing and Familiarization Training session for the month of May. Next test will be on Jun 13 at 0900. Location to be determined.

QUARTERLY ARES MEETING:

The Quarterly Chatham County ARES Meeting was held on Monday, April 13th at 6:30pm at the Memorial Medical Center Hoskins Building. We took photos for ARES badges and had a presentation on our Served Agency Stations and discussed some upcoming activities. The next Quarterly ARES Meeting will be on July 13.

HURRICANE EXERCISE:

May 5 Regional Hospital Hurricane Exercise - We have been asked to participate in the upcoming Regional Hospital Hurricane Exercise on May 5th. Steve-K4SDJ and Susie-W4SWJ will be operating at the CEMA EOC station N4CEM and I will be operating at the Memorial Hospital station K4MUM. The exercise will begin at 0800 and run for about four hours. I could use some company at the hospital station so if anyone is available let me know.

FLOOD RELIEF EFFORTS:



Savannah Red Cross Activation - On Thursday night, April 2nd we received a request from one of our local served agencies, Savannah Red Cross, to assist them with communications in support of the flood relief efforts across South Georgia. Steve, K4SDJ, and I manned the Red Cross amateur radio station, K3SRC, all day Friday and then again on Saturday. We tested all of the radios and got good comm checks on all of our designated frequencies. The affected areas span about 20 counties and the Red Cross asked us to prepare a plan to provide comm from the field back to the Disaster Operations Center in Savannah. Not knowing exactly how many operators we might need and which methods of communications we might use, we began to develop some ideas. As we discovered, most of the affected area is covered nicely by a linked 2 meter repeater system called "Tall Pines InterTie." We thought this might be an ideal system to leverage. Only problem is that the closest repeater to us, that is in this system, is in Waycross. So we thought if we could just figure out a way to get into the Waycross repeater we might be golden. So on Saturday, Dan, KF4MND, volunteered to take his "go kit" and drive a little ways south from his Long County QTH to see if he could "link" us in. He set up a radio to crossband from his home between the Savannah repeater and a simplex frequency which he would talk to from his mobile "go kit." Once in Screven, GA, Dan set up his kit and an antenna on a 25 foot mast. He was able to successfully get back into a Savannah repeater to his northeast and into the Tall Pines InterTie system to his southwest. Although we didn't need to provide the movement of any traffic today, we proved that it was possible for us to build a link down to Waycross if needed for future operations. Dan was able to work with a couple of local HAMs in the area including Bobby, KJ4BVS, to gather some valuable information and assistance. Bobby set up an Echolink connection from his station into the W4SGA link in Savannah and connected the Waycross repeater which allowed us to become part of the Tall Pines linked repeater system. As HAMs usually are, these guys were very accommodating and willing to assist. I sure appreciate Dan's time and effort today. This will give us a short term solution should we need it. And we are already talking about how we might be able to construct a permanent link from Savannah down to Waycross.

CHATHAM COUNTY ARES 2 METER NET:

Weekly ARES net held at 8:00pm each Thursday evening on the 146.970 repeater. Great participation.

Want more ARES news? Visit Guy's website for blogs, pictures, and more! <http://k4gtm.blogspot.com>
And don't forget to check your May CQ Magazine, page 40, to read about Guy's blog and the February ARCS Fox Hunt! Congratulations Guy!

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ARCS APRIL 2009 2 METER NET REPORT

146.37 / 97 REPEATER

April 2 22 check-ins April 9 21 check-ins April 16 21 check-ins
 April 23 19 check-ins April 30 15 check-ins

*Thanks to all of you who checked into the nets! We look forward to hearing from you next Thursday!
 We are always looking for net control operators. If you would like to become a net control operator or a backup operator, please download the ARCS net script at, <http://www.qsl.net/arcs>, and let us know.*

37/97 Thursday Night Net Controls

May 7, 2009 Andy Blackburn, WD4AFY
 May 14, 2009 Robert Owen, KJ4HAL
 May 21, 2009 Brandy Davis, KI4PZW
 May 28, 2009 Mark Zeigler, KD4PDX
 June 4, 2009 Andy Blackburn, WD4AFY

May 2009 Net Schedule

Sun	Mon	Tue	Wed	Thu	Fri	Sat
5pm- Georgia State ARES- 3.975 LSB 9pm- Coastal Amateur Radio Society- 147.330 (CTCSS 203.5)	1pm- GA Traffic Net- 3987.5 9pm- Southeast GA 6-Meter Ragchew- 50.200 USB	1pm- GA Traffic Net- 3987.5 8pm- Statesboro Amateur Radio Society- 147.105+	1pm- GA Traffic Net- 3987.5	1pm- GA Traffic Net- 3987.5 8pm- Chatham County ARES 146.970- 8:45pm- Savannah Simplex Net- 146.520 9pm- Amateur Radio Club of Savannah- 146.970-	1pm- GA Traffic Net- 3987.5	1pm- GA Traffic Net- 3987.5

*Comments, Questions, Ideas, or Submissions??
 Email the Editor at ki4pzw@yahoo.com*