

# KEY KLIX

Volume 2, Issue 8

August 2006

## THE AMATEUR RADIO CLUB OF SAVANNAH

### Effingham County 800 MHz Update by Mac McCormick, KF4LMT

**Note:** *The information in this month's article comes from public sources including the Radio-reference.com website. Information for the article also comes from area scanner enthusiasts via the Scan Savannah Yahoo Group.*

In the March issue of Key Klux, I wrote about Effingham County moving public safety communications to an 800 MHz trunking system. Almost half a year later, Effingham agencies are using the system heavily. The Effingham County Sheriff's Office is using the system for their primary means of communications, moving away from their former system of two VHF repeaters. Effingham County Fire Departments are also using the system, especially the Chiefs and upper management of the agencies. Fire calls have also been dispatched over 800, although they are still using VHF to page out and dispatch calls. Slower to use 800, but using it more now, is Effingham EMS.

#### Effingham S.O. Talkgroups

24592	Channel 1	Dispatch
24624	Channel 2	
16752	Channel 2	P25 Digital
16784	Channel 3	P25 Digital

#### Effingham Fire/Rescue

24656	Dispatch
25104	Fireground 1
25136	Fireground 2?
25168	Fireground 3?
25200	Admin

#### Effingham EMS

24688	EMS Dispatch
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Note that two of the talkgroups being used by the Effingham S.O. are P25 Digital. The digital talkgroups can only be monitored using a P25 capable scanner such as the Uniden BC250, BC785, BC296, BC796, and BC396 or the Radio Shack PRO-96 and PRO-2096. Without the ability to decode the digital signal all you will hear is the raw digital noise.

A sample of what the raw P25 signal sounds like can be found at the URL:

<http://www.kb9ukd.com/digital/astro-imbe.wav>

City of Savannah Radio and Computer Technicians have also been using P25 Digital talkgroups. They have been using talkgroups 61488, 61520, 61616, and 61872.

Some of the traffic on these talkgroups has also been encrypted, proving that the Chat-ham-Effingham system is capable of encryption.

If anyone has any questions or ideas for scanning/monitoring articles, please send them to me at [kf4lmt@comcast.net](mailto:kf4lmt@comcast.net), I will do my best to answer them or write on the subject if it is something I'm familiar with. If I'm not, I'll try to find the answers for you.

### Club Announcement by Andy Blackburn, WD4AFY

The next meeting of the Amateur Radio Club of Savannah will be Tuesday, August 8, 2006, 7:30pm at Memorial Health University Medical Center in Conference Room "D"

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## AN INTRODUCTION TO THE SIX-METER BAND - PART I

By Andy Blackburn, WD4AFY

50 - 54 MHz is known as "Six Meters" in the amateur bands.

You can do almost anything on six-meters that can be done on HF. Hams have earned WAS, WAC and DXCC on six. What makes it so different from the HF bands is that you never know when this excitement will come. Silence can turn into a barrage of ear-blasting signals and then back to a completely dead band in only a few minutes. Sometimes, band openings last for hours. Some days you can only hear nearby stations or worse, no one at all.

Six-meters offers nearly every kind of propagation known. At the peak of a sunspot cycle, when the solar flux rises to between 150 and 200, the F-layer skip familiar to HF operators can provide worldwide contacts on six. If the flux goes significantly above 200, DX work on six can even get fairly reliable. Propagation modes more familiar to VHF operators, such as ground wave, sporadic-E, meteor-scatter, auroral, transequatorial and moonbounce, all have been used on six-meters.

Sporadic-E is the most com-

mon propagation for six-meter operators. Peaking around the June and December solstices, this mode of propagation can provide contacts over a few hundred miles or a couple of thousand miles or more with a "double-hop." It comes back every season, even during the sunspot minimum. The "E-skip season" runs from May to July, with another, shorter, peak in December and early January, but this propagation mode can appear at any time. A sporadic-E opening typically lasts several hours.

It's easy to get on six meters. Many of the newer HF rigs already come with six-meter capability built in. There also are transverters that will put your HF rig on six, and even single-band Six-Meter radios. If you are interested in domestic and more distant DX, then use CW and SSB at the lower end of six-meters. The FM portion of the band may also have enhanced propagation, but not with the quantity of stations as found in the lower CW/SSB band area. You don't need a lot of power. When six is open...it's open!!!!

Antennas for this band are easy to homebrew, and also readily available commercially. A dipole

for six meters is only a bit over nine feet long. At this length, it also is easy to make a rotatable dipole from aluminum tubing. A three-element Yagi will perform well. Ground-plane and J-Pole antennas also work fine for six meters. (This author uses a horizontally polarized Cushcraft A50-3 Yagi and also a quarter wave vertical ground-plane.) Commercially made horizontal and vertical antennas are available for mobile use as well.

While antenna polarization makes little difference for DX work, it is important if you also want to work other six-meter operators within ground-wave range. Most operators with Yagis or rotatable dipoles use horizontal polarization, so if you rely on a vertical ground-plane or J-Pole, you may miss out on local and regional six-meter nets, which can provide a nice way of keeping up with weak-signal VHF happenings.

In Part 2 of this article, we will discuss operating procedures on Six-Meters.

Until next month, 73  
Andy Blackburn, WD4AFY

### For Sale

#### RADIO SHACK HTX10 10 METER MOBILE TRANSCIVER

VERY GOOD SHAPE...WORKS FINE. RADIO COMES WITH MIC, POWER CORD, AND BOX. ASKING \$75

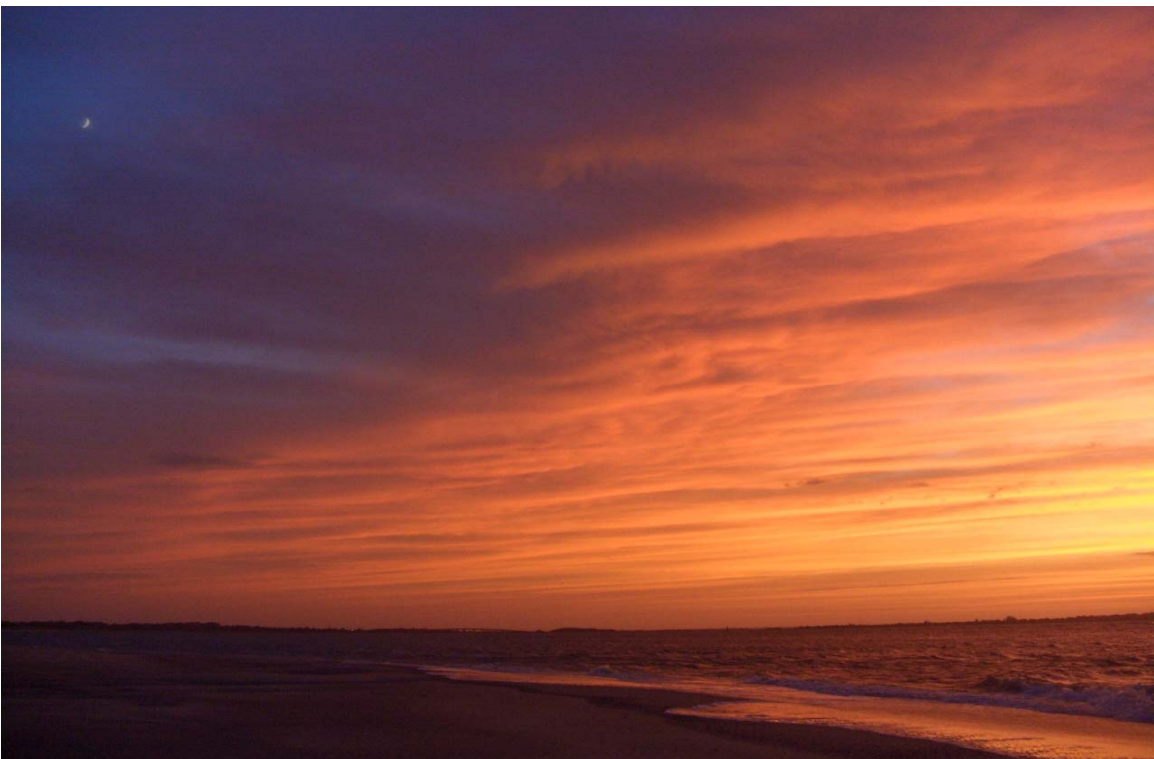
Contact: Andy Blackburn, WD4AFY (912) 238-4676 or andy@g-net.net



"Contact Andy for more items that were previously listed in a club notice sent by email earlier in the month!"

## Photos By Request by Brian Cave, AB4BC

I recently had a request that I post a couple of my photos of Tybee Island. So, here you go! 73, BC.



## Club Information



### **The Amateur Radio Club of Savannah**

PO Box 13342  
Savannah, GA 31416

#### **ARCS Elected Officers for 2006:**

President: Doug Rowland, KF4EFP, jdrowland@comcast.net  
Vice President: Kayton Smith, W4KTN, kayton3@comcast.net  
Secretary: Andy Blackburn, WD4AFY, (912) 238-4676, andy@g-net.net  
Treasurer: David Delamater, K4DJD, (912) 412-4109, k4djd@comcast.net  
Activities Manager: Philip Neidlinger, KA4KOE  
Trustee: Kurt Hoffman, N4CVF, (912) 356-8581, n4cvf@arrl.net

#### **Appointed Positions for 2006:**

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

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

- 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.
- Continuation and extension of the amateur's proven ability to contribute to the advancement of the radio art.
- Encouragement and improvement of the amateur service through rules which provide for advancing skills in both the communication and technical phases of the art.
- Expansion of the existing reservoir within the amateur radio service of trained operators, technicians, and electronics experts.
- Continuation and extension of the amateur's unique ability to enhance international goodwill.