

Davie County ARC

January Meeting

Volume 2, Issue 1

Starting a New Year

Well, we're kicking off a new year. Several things have changed in the last couple months. Four of the HF bands have been modified, and 80 meters has really changed. Nearly the whole 80 meter band is now for phone operation and all the digital modes and CW have been crowded down into the bottom of the band.

Shortly the CW requirement for HF opera-

tions will be history. There should be many Tech's looking to upgrade in the coming months. When the new ruling goes into effect Tech's will get limited HF privileges, the same privileges that Tech Plus now has. That includes CW on 80, 40, 15 and 10 meters, and a small portion of SSB on 10 meters. Hopefully this taste of HF will be incentive enough to get Tech's in the upgrade frame of mind.

Planning for 2007

I touched on this in last months issue, but there are a few things to add. The first thing that has to be done is the selection of officers for 2007. This is the last meeting before elections, which will be held at the beginning of the February meeting. So, once again, if you would like to nominate someone for a position or run yourself you should be at the January meeting .

Another thing that should be done is planning for club activities. This can be a general discussion of things we would like to do in the coming year such as operate during Field Day or have a special event operation for Daniel Boone this year. One thought I had was to move the date of the July meeting back to Field Day weekend and have a cookout during

Field Day. In addition to being a more social atmosphere for the meeting it also avoids having a meeting during the Fourth of July week when people often have other plans.

Ben (K4GHS) and I (N4QVM) had a nice QSO on 80 meters this morning and were discussing possible club activities. We talked about the possibility of having a rag chew net on VHF, but we could also do it on HF if people were interested. Something else we discussed was finding out what kind of programs people would like to see at the monthly meetings, and that also applies to what kind of information you would like to see in the newsletters. In the newsletters I try to include a mix of topics, but your input would help guide me. See you at the meeting.

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Special points of interest:

- Contact John at n4qvm@n4qvm.com
- Contact James at ki4bjr@yadtel.net
- Band changes went into effect December 15, 2006
- Morse Code requirement to be dropped soon

December Meeting Notes

The December meeting was an eat out meeting at Pier 601. I hope everyone enjoyed the meal and had a good time. Unfortunately I was unable to attend. I hope the holidays were great for everyone and I wish you the best in the coming year. If you haven't been to a meeting in a while why not come on out and see what we're up to. Now is the time to start thinking about activities for the coming year and your input is appreciated.

From the Quiz, Coax and Twin Lead Feedline

Twin lead is called a balanced line because it consists of two conductors parallel to each other. The current flow in one conductor is opposite to the current flow in the other and the two effectively cancel each other out, so there is no radiation from the feedline. Hence the term balanced.

Coax is a center conductor surrounded by a shield, the outer braid in common RG8X. In coax there is current flow in one direction in the center conductor, and current flow in the opposite direction on the **inside surface** of the shield. This may sound like a balanced condition also, but there is also the possibility of current flow on the **outside surface** of the shield. Since there is no current flow to cancel out the flow on the outside surface, coax is not a balanced feedline. Remember, current flows on the surface of conductors at HF. This is called the *skin effect*.

Talk to the International Space Station



If you want to talk to the Space Station you need to know the frequencies. For FM voice in the US the uplink is 144.490 and the downlink is 145.800. When the Space Station inhabitants are busy or sleeping the 2 meter system is used for packet. For packet the uplink is 145.990 and the downlink is 145.800. To use the repeater the uplink is 437.800 and downlink is 145.800. On UHF you have to take into account Doppler shifts.

A typical ground station is a 2 meter FM radio with 25 to 100 watts of output power. The antenna should be a circularly polarized crossed Yagi capable of being pointed in both azimuth (N-S-E-W) and elevation (degrees above the horizon). That being said, people have worked the Shuttle using a handheld

with a rubber duck. There is a web site at <http://ronhashiro.htohanet.com/am-radio/spacecomm/getting-started-iss.html> that has plenty of information for getting started. If you are interested in the ARISS packet system there is a web site at <http://www.rac.ca/ariss/arisspak.htm> with the basics, and a page with much more detailed information is at <http://web.usna.navy.mil/~bruninga/iss-faq.html>. If you want to try your hand at building an antenna go to the page at <http://www.arrl.org/FandES/tbp/ariss-kits/> to get the basics. The antenna is built from copper tubing so it is a solder job. So, do you want to take to a spaceman?

Topics for Discussion at January Meeting

Treasury Report

Check on status of ARRL affiliation

Need to start thinking about club officers for next year

Discuss the band changes and the new band plan

Discuss the dropping of the Morse code requirement

Take a poll to find out how many operate HF, VHF, UHF. What interests are

Band Plan Changes

The charts below reflect the old band plan as well as the changes that went into effect December 15.

75/80 METERS	OLD BAND PLAN	NEW BAND PLAN
3.590	RTTY DX	RTTY/Data DX
3.580-3.620	RTTY	3.570-3.600: RTTY/Data
3.620-3.635	Packet	Delete
3.790-3.800	DX Window	No change
3.845	SSTV	No change
3.885	AM calling frequency	No change

40 METERS	OLD BAND PLAN	NEW BAND PLAN
7.040	RTTY DX	RTTY/Data DX
7.080-7.100	RTTY	7.080-7.125: RTTY/Data
7.171	SSTV	No change
7.290	AM calling frequency	No change

15 METERS	OLD BAND PLAN	NEW BAND PLAN
21.070-21.100	RTTY	21.070-21.110: RTTY/Data
21.100-21.110	Packet	21.070-21.110: RTTY/Data
21.340	SSTV	No change

From The ARRL Letter/American Radio Relay League

ARRL RTTY Contest

If you got some new software or hardware to operate the HF digital modes the upcoming ARRL RTTY Roundup is an excellent opportunity to try it out. The contest begins at 18:00 UTC Saturday, January 6 and ends at 24:00 UTC Sunday, January 7. There are usually a lot of stations on the during this contest, and if conditions are decent you will have the chance to work a lot of different countries. Operating RTTY is keyboard to keyboard, you don't have to decode it by ear. The computer does all the work, all you have to do is hunt for stations to work. Give it a try. You can read the rules at <http://www.arrl.org/contests/rules/2006/rtty.html>. You can only operate for a maximum of 24 hours during the contest period, but if you don't want to invest that much time you can operate however long you feel like.

January Meeting

Davie County Amateur Radio Club
PO Box 516
Mocksville, NC 27028

Next meeting is 2 January at 7:00 pm at the

We're on the web at
www.daviearc.org
www.ki4orw.org

Monthly meetings are the first Tuesday
of every month.



The Davie County Amateur Radio Club was formed on August 16, 2005.

DCARC was formed for two reasons. First, there was no amateur radio club in Davie County, and second, there was a need and desire to form an ARES group in Davie County.

We would like to welcome any amateurs in Davie County or surrounding counties to attend meetings, and if you are interested, become a member.

Club officers for 2006 are:

President John Dwiggins N4QVM

Vice President James George KI4BJR

Sec/Treasurer Norma George KI4ADD

Odds and Ends

ARRL Outgoing QSL Service revises rates: The ARRL Outgoing QSL Service <<http://www.arrl.org/qs/qsout.html>> has announced a new rate structure, effective January 1, 2007. The new basic rate will be \$5 per half-pound (8 ounces -- or approximately 75 cards) or any portion of a half-pound. That's a change from the current rate of \$4 per half-pound or any portion. One pound will cost \$10, and larger packages will be assessed \$5 for each additional half-pound (or portion thereof). For example, a package containing 1.5 pounds of cards will cost \$15, while a package containing 1.75 pounds of cards will cost \$20. For smaller packages, the new fee is only \$1.50 for 10 or fewer cards, \$2.50 for 11 to 20 cards and \$3.75 for 21 to 30 cards. The new rate structure will help to cover basic handling costs for smaller packages while continuing to offer a price break to moderate-volume users submitting less than one-half pound of cards. The new rate schedule is in response to the recent postal rate increase and price restructuring, which doubled the bureau's postal costs. The ARRL Outgoing QSL Service is available only to ARRL members. The last rate revision went into effect in March 2001.

The ANDE, RAFT and NMARS satellites were deployed from the Space Shuttle on 21 December. ANDE and RAFT also carry packet radio communications systems and join with other US Naval Academy APRS digipeating satellites such as PCSAT-1 and PCSAT2. More information on all three satellites is available at <http://www.ew.usna.edu/~bruninga/ande-raft-ops.html> (Reprinted from the AMSAT Weekly Bulletin ANS-358 - <http://www.amsat.org>)

A ham station you have to see to believe. A little tease, all the telephone poles you see in the pictures are for the antenna system. The antenna farm covered 120 acres! There are 14 rhombics, 61 telephone poles to support the antennas, and another 110 poles for the feedlines. To see it go to <http://www.qsl.net/ne6i/w6am/> and follow the links.