

Orange County Radio Amateurs (OCRA) Newsletter December 2008

From the Editor

In the spirit of the season, included in this month's newsletter are some articles that are very holiday focused. I have no doubt that you will quickly pick them out!

The editor's pen will be passed to the new OCRA Secretary at the January club meeting. I have truly enjoyed reinstating the monthly OCRA newsletter and look forward to contributing articles as the newsletter continues to be published. Please keep in mind that this newsletter is only possible through the articles contributed by OCRA members.

I hope that each of you and your families will enjoy a very blessed holiday season and a very Happy New Year 2009.

Well, it is that time again – Time to get comfortable and read your club's newsletter.

Best regards,
Laurie - N1YXU
lbmeier@bellsouth.net

Highlights from the November 10 OCRA Membership Meeting

- 1 Concurrent with the monthly meeting, a test session was held. Reports indicate that the test session was very successful. Thank you to the VEs who provided support, and congratulations to the folks who received licenses and/or upgraded.
- 2 The Simulated Emergency Test (SET) was scheduled for Saturday, November 15. Skip (N6LUZ) and those who participated can give an update of the SET at the OCRA Christmas party.
- 3 Dave (W4SAR) gave an update of the Field Day results. Again, congratulations to all for a very productive OCRA Field Day 2008.
- 4 Winter Field Day will occur in January. The exact date to be determined and communicated. If you're interested in participating, please let Woody (K3VSA) know.
- 5 The OCRA cup was awarded to Skip (N6LUZ) for his outstanding contributions to OCRA. Skip – Congratulations and thank you for your leadership in emergency communication preparedness.
- 6 Dee (KU4GC) was nominated and assigned (since he was not at the meeting ☺) to lead the nomination committee for the 2009 OCRA slate of officers and board members. The membership will vote on the slate at the January meeting.

Ham's Night Before Christmas

[Yes! This is one of those “in the spirit of the holidays” articles!]

Twas the night before Christmas,
And all through two-meters,
Not a signal was keying up
Any repeaters.

The antennas reached up
From the tower, quite high,
To catch the weak signals
That bounced from the sky.

The children, Tech-Pluses,
Took their HT's to bed,
And dreamed of the day
They'd be Extras, instead.

Mom put on her headphones,
I plugged in the key,
And we tuned 40 meters
For that rare ZK3.

When the meter was pegged
by a signal with power.
It smoked a small diode,
and, I swear, shook the tower.

Mom yanked off her phones,
And with all she could muster
Logged a spot of the signal
On the DX PacketCluster,

While I ran to the window
And peered up at the sky,
To see what could generate
RF that high.

It was way in the distance,
But the moon made it gleam -
A flying sleigh, with an
Eight element beam,

And a little old driver
who looked slightly mean.
So I thought for a moment,
That it might be Wayne Green.

But no, it was Santa
The Santa of Hams.

On a mission, this Christmas
To clean up the bands.

He circled the tower,
Then stopped in his track,
And he slid down the coax
Right into the shack.

While Mom and I hid
Behind stacks of CQ,
This Santa of hamming
Knew just what to do.

He cleared off the shack desk
Of paper and parts,
And filled out all my late QSLs
For a start.

He ran copper braid,
Took a steel rod and pounded
It into the earth, till
The station was grounded.

He tightened loose fittings,
Resoldered connections,
Cranked down modulation,
Installed lightning protection.

He neutralized tubes
In my linear amp...
(Never worked right before --
Now it works like a champ).

A new, low-pass filter
Cleaned up the TV,
He corrected the settings
In my TNC.

He repaired the computer
That would not compute,
And he backed up the hard drive
And got it to boot.

Then, he reached really deep
In the bag that he brought,
And he pulled out a big box,
"A new rig?" I thought!

"A new Kenwood? An Icom?
A Yaesu, for me?!"
(If he thought I'd been bad

it might be QRP!)

Yes! The Ultimate Station!
How could I deserve this?
Could it be all those hours
that I worked Public Service?

He hooked it all up
And in record time, quickly
Worked 100 countries,
All down on 160.

I should have been happy,
It was my call he sent,
But the cards and the postage
Will cost two month's rent!

He made final adjustments,
And left a card by the key:
"To Gary, from Santa Claus.
Seventy-Three."

Then he grabbed his HT,
Looked me straight in the eye,
Punched a code on the pad,
And was gone - no good bye.

I ran back to the station,
And the pile-up was big,
But a card from St. Nick
Would be worth my new rig.

Oh, too late, for his final
came over the air.
It was copied all over.
It was heard everywhere.

The Ham's Santa exclaimed
What a ham might expect,
"Merry Christmas to all,
And to all, good DX."

REMINDER: New Location for the Monthly OCRA Membership Meeting

[In lieu of a December membership meeting, the OCRA holiday dinner will be held at the Durham Mayflower restaurant on Tuesday, December 9.]

Please take note that the location for the monthly OCRA membership meeting has changed. The new location is the Orange County EOC Building which is located at 510 Meadowland Drive in Hillsborough. [Directions are detailed below.] The monthly meeting starts at 7:30 pm. Prior to the meeting, there is an open board meeting at the Casa Ibarra restaurant on South Churton Street in Hillsborough. The open board meeting begins at 6:00 pm.

Directions to the new Orange County EOC Building

From Chapel Hill:

1. Take Martin Luther King ("Historic Airport Road") north toward Hillsborough.
2. MLK becomes Highway 86 (north towards Hillsborough)
3. Turn right onto Highway 70 Business at Hillsborough at the "T" intersection
4. Pass Meadowland Drive at the Triangle Sportsplex entrance to Meadowland office park
5. Turn right onto the second Meadowland Drive (Meadowland Drive is a loop), approximately six tenths of a mile from intersection of Highway 86 and Highway 70 Business
6. Turn left into second driveway at 510 Meadowland (see radio tower), which is the location of Orange EOC

From Durham:

1. Take Interstate 85 South toward Hillsborough.
2. Exit Interstate 85 at Highway 70.
3. Bear to the left and take Highway 70 Business at Wayside Baptist Church
4. Turn left onto Meadowland Drive
5. Turn left into second driveway at 510 Meadowland (see radio tower), which is the location of Orange EOC

The President's QRM

by Woody Woodward, K3VSA

I'll begin by welcoming Mark Wright (KB2EHJ) back to OCRA after several years' absence due to work, etc. He'd been appearing at the Saturday morning conclaves at Bojangle's for several weeks and decided to make it legal, so welcome back, Mark!

One of the items mentioned at the November meeting was the upcoming election for club officers. As per our custom, we press-ganged Dee (KU4GC) into being the nominating committee once again, and he doesn't seem to mind because it precludes other people from nominating him for an OCRA office. (He's already the president of DFMA, so he has enough on his plate as it is.) I understand that Ken (KR4FM) has agreed to stand for Vice President for another year, and I am also willing to be President for another term.

I've not heard from Dan or Laurie on their intentions to be Treasurer and Secretary, respectively, once more, but certain individuals have advised me that they would be willing to step up to the plate if either of them want a break. I'll leave it up to the certain individuals to contact the nominating committee and advise their availability. I'd like to mention here and now that both Dan and Laurie have given exceptional service to our club. Being the treasurer is tedious enough without also being the repeater manager, and publishing a newsletter month after month can be grueling, too. I could easily understand if either of them wanted to enjoy a well earned rest. [Editor's note: When Woody submitted this article, I had not yet let Woody and Dee know of my intentions to step down as OCRA Secretary.]

In addition to our filling slate of OCRA officers, two of our board members have expiring terms and will need to be replaced. They are Justin Heinecke (KD4CPM) and Gary Pielak (AI4GT). I've made some suggestions to Dee as to whom he might ask to fill these upcoming vacancies, and if you know somebody you'd like to recommend, call Dee and let him know. Sometimes, the best people to fill club positions are the people who'd never think of stepping forward themselves!

Speaking of elections, our US presidential race is finally over in an historic ending. Mr. Obama will have a passel of problems to deal with upon taking office, and good luck to him, and, of course, us. We'll all need all the help we can get. I'm not sure where Amateur Radio will fit in to all this, but I know we're in there somewhere.

In case you haven't heard, there's a new net on Sunday evenings using the OCRA 6M repeater. J.R. (KG4NNT) of the DFMA club, is acting as the Net Control for this informal ragchew net (see the OCRA website for times), so if you have 6M capability, do please check in. We'll all be interested to determine how much better our 6M machine performs after February 19 when analog TV shuts down.

So, as 2008 careens to its end, I hope you all decide to reenlist in OCRA for 2009. (Some members have already paid for 2010!) And I hope everybody attends our holiday dinner gala on December 9th, this year at the Durham Mayflower Seafood.

Will 2009 be the year I finally gets that HF antenna up and operating? We'll see!

Until next year....

SKYWARN RECOGNITION DAY 2008

By Virginia Enzor NC4VA, EC Central Carolina SKYWARN

The 10th annual SKYWARN Recognition Day will take place Saturday, December 6, 2008, from 0000-2400 UTC. Created in 1999 by the National Weather Service and the American Radio Relay League, the event celebrates the contributions that SKYWARN radio operators make to the National Weather Service to help keep their communities safe. During the event, SKYWARN operators will visit NWS offices to contact other NWS offices and radio operators. Radio operators will exchange names, call signs, locations, signal reports, and a 1 or 2-word weather report.

Over 100 NWS offices across the country will participate in the event, including the Raleigh National Weather and Central Carolina SKYWARN.

Using the call sign WX4NC, Central Carolina SKYWARN will operate on Saturday from 9:00 AM to 5:00 PM, making contacts on 2 meters, the Carolina 440 UHF Link System, IRLP, and HF. Locally, you will find SKYWARN on 146.88 MHz, 147.105 MHz [82.5 Hz], 147.135 MHz [82.5 Hz], and 146.775 MHz for IRLP. For a

list of repeaters on the Carolina 440 UHF Link System, please visit www.carolina440.net.

A special QSL card has been designed for this event. Stations who log a contact with WX4NC may send a SASE to the following address to receive one:

National Weather Service
Raleigh Forecast Office
1005 Capability Drive, Suite 300
Centennial Campus
Raleigh, North Carolina 27606

Hams working at least one NWS office can receive an 8.5 x 11 inch certificate by submitting a list of NWS stations worked with a SASE to:

SKYWARN Recognition Day
920 Armory Road
Goodland, KS 67735

If you have never participated in SKYWARN Recognition Day, please do so this year and join in the fun!

For more information about Central Carolina SKYWARN, please visit www.centralcarolinaskywarn.net.

For more information about SKYWARN Recognition Day, please visit <http://www.crh.noaa.gov/hamradio/index.php>.

18th Century Gingerbread Recipe (Adapted for modern methods)

Submitted by Karen Snyder, KD4YJZ

[Yes – This is another “in the spirit of the holidays” article!]

Ingredients:

1/2 cup butter
1/2 cup sugar
2 eggs lightly beaten
1 cup buttermilk
1 cup molasses
2-1/2 cups flour
1 tsp baking soda
1 tbsp ground ginger

Directions:

Grease and flour 9" ring mold. Preheat oven to 350 degrees. Cream butter and sugar until fluffy. Add eggs, buttermilk, and molasses and mix thoroughly. Sift flour, baking soda, and ginger together. Add to molasses mixture and blend well. Pour into mold and bake 40 minutes or until a toothpick, inserted in dough, comes out clean. Cool and unmold. Good warm or cold. Note: One cup of chopped apples, blueberries, or raisins may be added before pouring into mold.

Enjoy!

100+ Things to do in Ham Radio

From the web pages of the North Fulton Amateur Radio League

Activity	Comment
2M SSB or CW	Working the "weak signal" bands can be fun!
6M - what a great band!	Operate the "magic" band on SSB or FM
10M - This band can really jump	Join 10-10 international and KEEP THE BAND OPEN!
75 Meter Roundtables	Sometime called the groan and moan nets!
160M	The Gentleman's Band
AM - Operate this "old time" mode	Join the AM net each Wednesday
AMSAT - Join and work the universe	Operate one of the amateur satellites like AO-51
APRS - find yourself	And let others know where you are!
ARES	Be more active with NCARES
ARES - Help your local group	Find your local ARES group and start having fun with them. Also strongly consider passing the various IS-xxx courses required to officially participate.
ARES nets	Check into ARES nets in NFARL and surrounding counties
ARRL	Join! Support your hobby with lobbying in Washington. Who else is?
Air Mobile	Work from an airborne station
Antenna Party	Friends don't let friends build and install HF antennas by themselves!
Antennas	Build'em and use'em Wire antennas, Yagis, quads, hex beams,- then argue about'em
Astronomy - Radio version	Looking for signals in all the wrong places
Audio - make it better	Heil, Berringer, audio filters, all things audio
Badge - tell everyone your callsign	Check the Sign Man of Baton Rouge
Balloonatics	Hams who put expensive transmitters in balloons and watch them fly away!
Bicycle Mobile	Talk while riding - look ma - no hands; look ma - no teeth!
Boatanchors	Collect and operate old radios
Books - read one - write one	Hundreds of books - new - old - used - collecting
CW - Learn it!	You only know half the fun of ham radio w/o CW
CW - get your speed to 20 wpm	Already at 15 characters
Christian Amateur Radio Fellowship	Join your friends on the air
Civil Air Patrol	Do the radio work for CAP
Class - as in Ham Radio	Teach a ham class and help others enjoy the fun
Club meetings	Don't even get on the air, just attend club meetings - FUN!!
Club.Join/renew! NFARL	A more general term - join a ham club! OR join 2 or 3 clubs. More clubs, more fun!
Computer Control	Computer control one or more rigs in your shack - Ham Radio Deluxe
Contesting	Make a lot of contacts and work on your operating skills at the same time.
County Hunting	Work 500, 1000 ... and all 3077 of them.
Crystal Radio - build one	Show how simple a radio can be
DSTAR	Get on the digital bandwagon! It's everywhere, it's everywhere!
DSTAR via laptop - Dongle world!	Use a laptop to access the Dstar network while you're traveling or anytime.
DX - Work other countries	DX The Ultimate Contact Sport - this can be tough if you already have 337!
DXpedition	Pack it up and hit the road to that small island!
Dayton Hamvention	Attend this once in your lifetime, bet you can't "eat just one"!
Digital modes	Work one or many of the various FREE digital modes available for download!
Echolink - computer and ham radio	Work repeaters/other hams via your computer
EmComm - Power Poles	Convert all rigs to PowerPole connectors
EmComm-ANTENNA	You never know when you'll need to go PORTABLE so build a portable

EmComm.ARRLcourses	antenna. J-pole is a good one. Consider the EC001 and possibly EC002 & EC003 courses. They're fun and you learn a bunch.
Field Day	Operate this fun event with your friends
Fox Hunting	Tie amateur radio into physical exercise
Friends	Meet interesting people and make new friends
Grounding	Build an uber ground, find a water pipe, install a ground rod, lay some radials
Hamfest	Attend a hamfest - sell that old junk, buy more! Work at the OCRA table for at least one hour!
Handi- HAMS	Help a challenged person get their license
IOTA	Islands on the AIR - every group of islands has an ID - work'em all!
Keys - Collect them	What a great way to enjoy ham radio - telegraph keys
Kit - Build some	At least an \$8 crystal oscillator or an SW-40 transceiver
Linear Amps	Build'em, tune'em, don't get shocked
Linux - another computer world	Download a Linux system for a computer and start playing with all the FREE software out there. Lots of stuff for hams too!
Logging Software	Get some. I like N3FJP. N1MM is FREE. Using this rekindled my fire for Ham Radio.
MARS	Military Affilate Radio - join up, serve your armed forces
Magazines - subscribe	Read, collect, give'em away - copy to CDs
Marine Mobile	Work from a Marine station, boating, waterways nets
Meteor Scatter	World's shortest and longest QSOs at the same time
Mobile - radio in motion	Set up a mobile station - VHF or HFMoonbounce OK, maybe a bit ambitious
Motorcycle Mobile	Shoot the bull while ridin' the HOG!
Nets	Check in before you check out!!
Ocilloscope	Learn to use Oscilloscopes are a blast. Watch that green trace go!
PSK-31 - Digital mode for all!	An easy digital mode
Pedestrian mobile	Got an HT? Have a QSO walking around.
Public service	Work a public service event (I believe every ham should work at least one each year!)
QRP - Try it!	Start trying QRP by turning down power to 5 w (10w SSB)
QSL cards	Collect'em, get some printed, mail out some.
RACES	... as in Radio Amateur Civil Emergency Service
RTTY	An ancient form of digital communications
Radio Control Planes	Fly away to your heart's content
Ragchew	Be much more active on the NFARL repeater; regularly check into nets. Get a RagChewers Club certificate for QSO of 30 Minutes
Remote Control your station	Operate your station over the internet
Repair Radio Equipment	Help out other hams, fix their radios and yours too
Repeaters	Build'em, use'em, fix'em, control'em
Restore old radios	This is very gratifying
SHF - Work your neighbor	Work a contact on CW, SSB, digital above 440 MHz
SSTV	Operate Slow Scan TV. Several nets meet daily.
Satellite-Antennas	Build a couple of antennas and put radio gear together so you can work one of the many ham satellites (FM, SSB or data).
Scanning	OK, it's only half radio but hams do it so it must be fun!
Schools - do a demo	Go to your kid's school and tell'em all about this stuff
Scouting (and ham radio)	Go hand in hand - Jamboree on the AIR!
Shack Simplification	See if you can get every rig in your shack down to one microphone and one PTT switch
Shack setup	Set up a shack (might need some help with an antenna raising party!)

Short Wave Radio	Listen to SW Radio from your favorite country. Maybe follow New Year's around the globe for 24 hours?
Simulated Emergency Test	The old S.E.T. - readiness - be prepared
Skywarn	Watch the weather = tell the National Weather Service
Software - Ham Radio	There are thousands of programs out there and they are fun to play with.
Software - program a chip	Write software to control a micro chip
Software Defined Receiver	Build or set up a software defined receiver or transceiver
Space Station	Talk to the ISS - chat up an astronaut
Tech FEST - attend	Not a hamfest, a TECH FEST!
Television - FSTV	Fast Scan TV - on 440 mhz - set up your station and show off!
Test Equipment	Make a list and buy or make yours
Traffic NETS	Try handling messages via SSB (75M) or CW(80M)
Upgrade your license -General Ticket	Or upgrade from whatever class you are
VUCC - Award	Get this award for working 100 grid squares on 6M and above
Vanity Callsign - get one	Are you a general or extra class? Well, maybe you should look into a 1x3 or 2x2 callsign, even a 1x2 if you qualify!
Volunteer Examiner (VE) - become one	Help grow the hobby by qualifying more hams!
Website - amateur radio	Set up your own URL and tell everyone what you do
Workbench - Set yours up	A place to do all that "fiddling around"
Worked All States - W.A.S.	Obtain this and other awards
Write - articles about ham radio	Submit to magazines, become famous
YLS - Young Ladies (YLRL)	Promote YL activity, recruit YLs, encourage YLs.
Youth - be one - help one	Help your neighbor become a ham. Loan him/her a radio

Our Rich Ham Radio Heritage (Number 11 of a Series)

by Woody Woodward, K3VSA

(QST quotes by kind permission of the ARRL)

It wasn't long after voice radio transmission became possible that the quest began to find a way to send and receive moving images, too. After all, listening is mere hearsay, but seeing is believing, right? Some groundwork had already been done late in the 18th Century by a German, Paul Nipkow, who suggested breaking down an image and then recreating it using spinning disks with tiny holes in a spiral pattern close to their circumferences. Each hole would scan a line of the image, producing a pattern of light and dark that would somehow be translated into an electrical signal. On the receiving side, a neon bulb shining on the back of an identical spinning disk would recreate the scanning line. Each hole on the disk would be a set distance closer to the disks' center than the previous one, and altogether, the spiral of holes would scan the entire surface of the image. So, for a disk with 36 holes, say, you'd have a picture formed from 36 lines.

To achieve any semblance of linearity, the disks would need to be relatively large, say a foot or two in diameter, and the image itself tiny, maybe a couple inches square. The disks would need to rotate quickly, and somehow be synchronized from transmit to receive. But the theory seemed to be sound, and people wanted it so badly that it was popular all through the 1920s to say that "television is right around the corner."

You might be surprised to learn that regular television programming began as early as 1928 in the USA, done out of Wheaton, Maryland by Charles Francis Jenkins, W3XX. John Logie Baird was doing the same thing in England. Many hopeful people, hams included, rushed out to buy the video adapter kits needed to view these TV transmissions. It was a phenomenon similar to the dawn of the personal computer era, where glowing advertisements ballyhooed all the wonderful things you could do with a Z-80 microprocessor, no floppy or hard drive, and 1KB of RAM.

They were quickly disillusioned and disappointed. In the January, 1929 issue of "QST," reader Hugh Mooney wrote to the editor about the price and quality of his recent television purchase: for the then princely sum of "100 iron dollars," Mooney got "scanning disks of cheap bakelite, both warped, the center holes unlike, a cheap resistance-coupled amplifier," and a "second-hand Dictaphone motor acquired in a job lot from somewhere." To say that Mr Mooney was displeased is an understatement. "Personally, I'd like to get my hands on some of the manufacturers of the junk sent me."

In that same issue, Hiram Percy Maxim, writing an editorial under the pseudonym of "The Old Man," recounted his own frustrations on attempting to view a TV picture. Half the problem was getting it synched. "I did hit it once," he wrote, "For about half a second, actually, I had a picture." The other half of the problem was the tiny image's quality. "It was a rotten picture. It flickered and it was fuzzy and foggy and about the time I was wondering how and why they picked on a cow to televise, it suddenly dawned on me that it was a man's face I was looking at." HPM allowed that, probably, someday, the technical problems involved with creating a practical television system would be solved, but until then, "Let's get back to twenty meters and see what the little dots and dashes are saying."

Two months later, the March, 1929 issue of "QST" carried an article by "M.B. Sleeper" titled "What Price Television?" in which Sleeper (undoubtedly Milton Blake Sleeper, an electronics researcher and inventor with many radio-related books to his credit back to the very early 1920s) undertook a sober analysis of what a practical television system would require in terms of frequency response, bandwidth, spectrum space, and cost. His conclusions were not encouraging. He surely didn't know that a young farm boy out west had conceived an all-electronic television system as a teenager and was running a laboratory in San Francisco that would perfect his vision. That boy was Philo Farnsworth.

After that March issue, "QST" had nothing more to say about television for nearly ten years. First a trickle, then a flood, of information would be published in support of the grandiose and pretentious "introduction to television" by RCA's David Sarnoff at the 1939 World's Fair. The Second World War and its aftermath would postpone TV for almost every American household until the 1950s, but nevertheless, the long sought dream of practical television had finally arrived.

2008 OCRA Officers and Board Members

Officers:

Woody Woodward, K3VSA – President
Ken Kauffmann, KR4FM – Vice President
Dan Eddleman, KR4UB - Treasurer
Laurie Meier, N1YXU - Secretary

Board Members:

Justin Heinecke, KD4CPM, One year term remaining
Gary Pielak, AI4GT, One year term remaining
Robert Little, N4ZAK, Two year term remaining
Brian McLamb, KI4YSZ, Two year term remaining