

# Smoky Mountain Signals

Journal of the Smoky Mountain Amateur Radio Club



*Our 76th year of Amateur Radio Fellowship* February 2018



Actress Suzi Crandall with a Gibson Girl SCR-578  
Emergency Aircraft Transmitter



# The President's Key

As I write this presidents key, I'm setting at One Ocean Resort in Jacksonville Florida. I came along with my wife on her business trip. This is the first time in over 10 years that I have been at the beach. One thing is for sure...this place is elegant and I'm being pampered along with my wife. I could get used to this. Unfortunately the weather has been pretty much all rain and wind. However I did manage to get out on the beach when the sun peaked out for a little while and I managed to grab a few pictures as well as a few shells.

So what am I doing with my time while my wife is in conference? Well one thing is site seeing. There is a lot to see and there are various beaches to visit like Neptune, Jacksonville and Atlantic beach. While driving around it is interesting to note that it's all flat and no hills. I see how from Florida citizens freak out when they come to the Tennessee hills' and encounter our roads.

Well sightseeing isn't my priority while I'm down here, its DMR! (Digital Mobile Radio). I recently bought a Radioddity GD-77 handheld for under \$100 bucks and gave it to Jordan (K4AVG) to program. The GD-77 is a VHF/UHF analog/digital handheld radio. Its my first taste of DMR in the world of Ham Radio. I am familiar with the commercial side of it as it is used exclusively now days, however ham radio usage is a little different buy very similar. Already confused? Well DMR has a little bit of a learning curve but Im into it headstrong. I feel that DMR is the ticket to getting younger hams into the hobby. The possibilities of DMR are endless. In fact, this month's program is on DMR radio and it is being presented by Jordan Webb, K4AVG Speaking of DMR, while I was here I had the pleasure of meeting some of the hams with KB4ARS which is Beaches Amateur Radio Society (go to <http://www.kb4ars.net/>) . Many of them operate DMR and they helped me set up the DMR radio in order to talk back to Tom (WB7TLW) and Jordan (K4AVG) in Maryville. It was really neat to be able to talk from the beach using a handy talkie. Note Tom and Jordan both were using a handy talkie as well.

I had the opportunity to have lunch with many of the members of the club at Ellen's Restaurant here at Atlantic Beach (see the picture below). What a great bunch of hams who enjoy eyeball QSO's as well as eating like we all do! I have a feeling that I'll be chatting with them in the future from my home QTH. I really learned a lot from them regarding DMR repeaters which will help me constructing my future DMR UHF repeater (more about that in future)

In summary, I came down here to Atlantic Beach with a few goals

1. To have Fun and relax
2. To talk back to Tom and Jordan in Maryville using a DMR handheld
3. To complete the Presidents Key for this newsletter

I managed to complete all of the goals so Ill see you all back in good ole Murville!



# From the Secretary

The Smoky Mountain Amateur Radio Club met at 7:00 PM, 01/22/18 at the USW Union Hall with Bob, KK4XA presiding. There were 30 members and 4 visitors present.

The visitors were: Ray Endsley, KM4ZPC; Wayne Houser, WV4TN; Brad Forester, KE4GBW; Juan Lopez, AC6ZM

Bob asked those present to introduce themselves, taking turns going around the room. Bob mentioned that the annual SMARC membership dues are due and payable to the club treasurer. Several members renewed for 2018.

Randy, K4RDJ gave the treasurer's report. The club account at Capital Bank stands at \$3151.09 Approx \$1500 of that amount is in the repeater fund. A question was asked about the club purchasing the repeater equipment presently installed and owned by Kurt, KC4NX. Kurt stated that the old repeater system was sold for \$1300 and the club could pay the balance on the new equipment which amounts to \$1700.

Bob announced the next SMARC VE session will be held on March 12, 7:00 pm at the St. Andrew's Church parish hall. He also reminded everyone about participating in the weekly SMARC net on the club repeater frequency of 146.655 with an alternate frequency of 146.625.

Bob reminded everyone that anyone with ideas for programs for the February and March meetings would be appreciated and to get with a staff person with an idea for a meeting program

Don, K9UQN told about the Friends of The Smokies organization is instituting a campaign for funds to support the National Park Service for an emergency communications system. The need for such a system became apparent in the recent fires that devastated areas around Gatlinburg. A discussion about what the club could do to support this effort will be held at the February meeting.

Steve Carpenter, K4DXV who is the club newsletter editor told that he had emailed the first issue for this year. He mentioned that some members were not able to open it on their computer due to not having MsWord. He said that in the future, the newsletter would be available on the club web site in PDF format.

A short break was taken for some coffee, soft drinks and cookies at this time. Following the break, the program for the evening was presented by Jordan Webb K4AVG. His program theme was called Ham Radio MESH was consisted of using 2.4 Ghz communication equipment to set up a network free of the internet to link stations together for sharing data among the stations on the network. He had some equipment for demo and used the club screen and projector along with his personal PC to show some slides of how the system is set up.

After the program, members enjoyed some "eyeball" QSO's. The winner of the 50/50 drawing was Sam, KV4XY

The meeting closed at 8:25 PM.



# World of DX

Hello fellow SMARC members. I am Bob Loving, K9JU, and my QTH is just east of Maryville in Blount County on Walland Gap Drive. I've been continuously licensed since September 1957 although there have been a few periods of low activity. I probably became interested in DX by accident when I worked a KP4 as a Novice and asked my parents, "is Puerto Rico the same as Porto Rico?" A few years later, a CQ on 15M CW was answered by KP6AL on Jarvis Island. In retrospect, if I had known and become interested in DXing, those were the days of solar cycle 19, the "BIG one."

I really started chasing DX in earnest in the late 70s but bicycling took over my interest in 1987. At the time, I had 270 "countries" confirmed for DXCC. After retiring from Motorola in 2001 I slowly returned to the hobby. The fire of chasing DX lit again around 2008. Since then, I have added to the DXCC totals. Presently, my Mixed total is 323 "countries" and CW total is 319. Both Phone and RTTY totals are just over 100, enough to qualify for the respective DXCC certificates. These numbers represent active components of the DXCC List. I am not bragging as there are others in our midst with totals greater than mine including at least one member with "all of them." At the other end of the spectrum are those who are just now expressing an interest in DX. Remember, each of us who has DXCC and high totals all started with that first QSO between us and someone outside of the USA.

So, what do the terms associated with DX mean? To start with, "DX" is CW shorthand for "distance." It can mean different things to different operators and frequency bands. At microwave frequencies, DX might be another station a few miles away. What I am referring to in this discourse is communication between our stations and stations in "countries" outside the borders of the USA. The frequencies typically used are from 1.8-MHz to 30-MHz although one can include 50-MHz as being a DX band. I am also not including bands where "moonbounce" is required for intercountry communication, typically 144-MHz and up.

"DXCC" stands for DX Century Club, administered and offered by the American Radio Relay League, the ARRL. The word "century" means 100; therefore, the minimum number of confirmed contacts with other "countries" is 100 in order to qualify for an award.

Why have I put the word "countries" in quotes? Because not all locations in the DXCC List are what you and I would consider a country. At least one is a group of rocks that pops out of the water at low tide. Therefore, the DXCC List refers to the components as "entities." At one time, the Canal Zone was an entity (it counts now as Panama). There were two areas known as Neutral Zones in the Middle East that were entities. The United Nations building in New York is itself an entity, 4U1UN. Granted, the vast majority of the entities are countries as defined by Merriam Webster.

Presently there are 340 active entities on the ARRL DXCC List. In this context, active means legitimate, as defined by a set of rules, and workable regardless of whether being populated. Entities come and go as the rules are refined or geopolitical events dictate. The former Yugoslavia collapsed into its constituent parts, giving us seven entities instead of only one. The latest DXCC entity is the Republic of Kosovo, Z6 prefix. Although the country obtained its independence from Serbia in 2008, a recent rule change to DXCC was necessary to recognize the Republic as separate from its former parent country.

The DXCC award program administered by the ARRL is broken into categories depending upon the mode or modes of operation used for contact. "Mixed" is the total number of entities contacted using any legal mode of transmission. Contacts can use a combination of CW, phone, digital modes or even Slow Scan TV, for example. There is even a DXCC award for contacts made using Amateur Radio satellites. The other DXCC awards are obvious by the title, CW, phone, etc., for contacts using a single mode.

In all cases, the contacts must be confirmed with either a paper QSL card or from LoTW. Ok, so what is LoTW? It is the "Logbook of The World," an electronic means for confirming contacts. When the operator of the other station registers and uploads his/her log and you register and upload your log, both of you receive credit for the contact. You must register with LoTW at the ARRL website in order to use the system. Registration and upload of contacts are free. Charges only occur when you wish to credit contacts toward an award. It may seem expensive but it is less expensive than paper confirmations. The downside is you don't have a pretty, full color card showing an exotic DX location!

Ah, but wait, there is a relatively inexpensive method of paper QSL called "OQRS," the Online QSL Request System. Some DX operations may not be interested in your card. For a few dollars, you can request a card through OQRS after you provide information about the contact (your call, date, time, frequency and mode). In most cases, multiple contacts on different bands and/or modes may be combined on one card although each operation will set the limit on contacts per card. With OQRS, there is no card to fill out, no envelope to address, no self addressed envelope to include along with "green stamps" (US dollars) and no trip to the Post Office. Some of you may have heard talk about "DXpeditions" and "Most Wanted" entities. "DXpedition" seems to be a play on words and a contraction of DX and expedition. In essence, it is an expedition to a DX location. "Most Wanted" is exactly as it looks. There are a few lists but the most up to date is compiled by ClubLog.org. As one might expect, number one is North Korea. Number two is Bouvet Island. Did you hear chatter on the SMARC repeater about Bouvet? The DXpedition was going well until very poor weather in the South Atlantic location of the island prevented landing. Adding to the woes, one of the engines of the transportation ship failed while at anchor at Bouvet waiting for better weather. The captain of the ship decided for the safety of the crew, the ham operators and the ship to abort the operation. As of February 7, the ship was slowly making its way to South Africa.

I've touched on the premier award program, DXCC from the ARRL. There are other awards and, unlike DXCC, may be free as a download ".pdf" file. Here are two awards that might whet your appetite to get on the air and try your hand at DX as well as download files:

- RI50ANO, South Shetlands Islands. The special call is in celebration of the 50th anniversary of the Russian Bellingshausen Antarctic Station. Two contacts with the station are required, either on two different bands or two different modes of operation. More information is available online at "qrz.com" by typing the call into the search box near the upper lefthand corner of the window.
- "All Saints Award-2018" from Bulgaria. This appears to be an annual event. Each month, a new LZ station will activate. The list of stations and award information are available at "qrz.com" by typing "LZ1833PSS" in the search box. Note: As non-European stations, we are required to contact only five of the twelve stations. The February station is LZ250MT.

Here are a few DXpeditions in March that might be of interest to you (number on Most Wanted list, location):

- 4B4B, Revillagigedo Island (#32, Pacific Ocean west of Mexico) is slated to take to the air March 01 until March 15. To my knowledge, this entity has not been activated in recent history.
- 9M0W, Spratly Island (#56, South China Sea), March 10 to March 20. This is a fairly rare entity and not easily activated. Some DXpeditions in the past have come under gun fire from the Vietnamese military!
- XR0YD, Easter Island (#98, South Pacific Ocean west of Chile), March 02 until March 15.

For now, "73 ES GUD DX."

Bob K9JU

Please email any comments or suggestions to "k9ju@arrl.net".