

Smoky Mountain Signals

Journal of the Smoky Mountain Amateur Radio Club

April 2020

Ham Radio & COVID-19

Learn About DX Awards

How to Write for the Newsletter

First SMARC Foxhunt

Hams Make a Small World

W4OLB Repeater Site, Alcoa

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Smoky Mountain Amateur Radio Club Founded: 1947

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Newsletter is available via e-mail direct or online at w4olb.org.

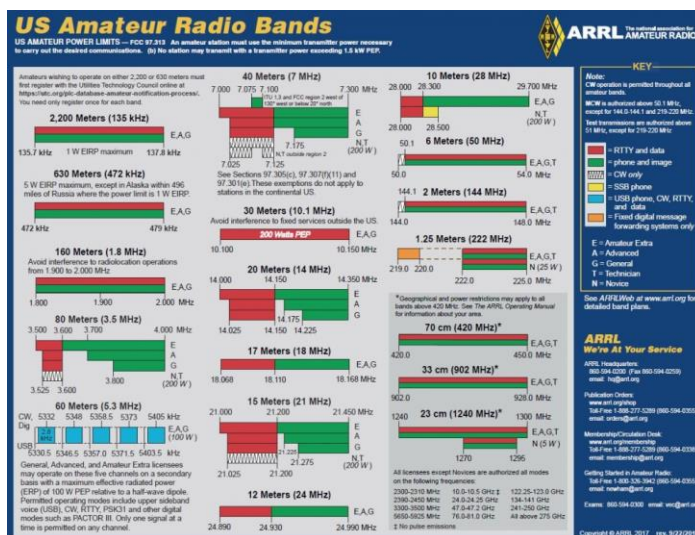
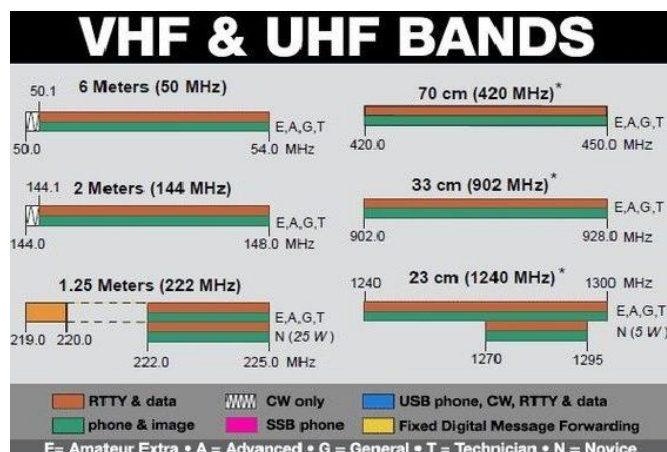
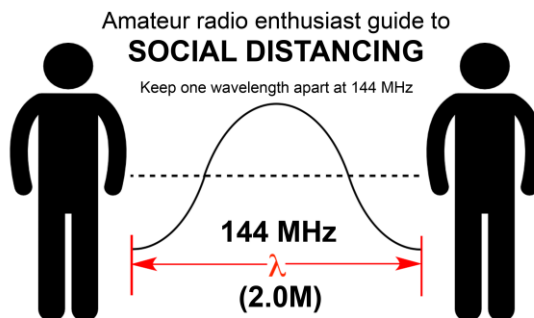
Direct comments, suggestions, article submissions, photos, etc. to k4dxv@arrl.net.



W4OLB Club Repeater:

146.655/-055

Tone: 100.0 Hz





Bob Wilson, KK4XA
Club President

From The President's Key...

Find a Way to Do Your Part

Hello, everyone. I hope this writing finds you well. Finding one well these days is a powerful statement as we are fully into the COVID-19 era. I just completed a one hour meeting with the club staff members. Not literally meeting in person, but via a conference call. My, how things have changed.

Quite frankly, I am a little nervous as to how things are going to change. Some things I can imagine already, while there are some things yet to be determined by the outcome of this crazy virus. Change seems to be the topic of our lives these days. The order of the day is adaptation and modification of our lifestyle while trying to remain calm.

One thing that hasn't changed, however, is ham radio. I'm not referring to the technical aspects, although as we know that has certainly changed through the years. No, I am referring to the personal side of ham radio, and The Radio Amateur's Code certainly has much to say to us about that in these strange times.

The Code is the doctrine we as hams should live by. It is basically six simple words that should be easy to remember. As I reviewed it, one word that stuck out to me was PATRIOTIC.

These days we simply need to be ready to serve. Now is a time to be of service to our country and community in ways that we probably haven't even thought of before now. Sure, there may be ways to use ham radio in the community for communications. Aside from that we need to be ready to serve in a capacity that is perhaps outside our comfort zone. I encourage you to ask yourself how you can make a difference. It could be as simple as taking the time to listen to someone who is dealing with a crisis or even the illness itself. Maybe you could get those groceries for an elderly neighbor. Pick up a prescription even or supply some food. I'm sure you can think of things I haven't. Now is the time. Until next time, take care of yourself and stay healthy!

The Radio Amateur's Code

The Radio Amateur is

CONSIDERATE...He/She never knowingly operates in such a way as to lessen the pleasure of others.

LOYAL...He/She offers loyalty, encouragement and support to other amateurs, local clubs, the IARU Radio Society in his/her country, through which Amateur Radio in his/her country is represented nationally and internationally.

PROGRESSIVE...He/She keeps his/her station up to date. It is well-built and efficient. His/Her operating practice is above reproach.

FRIENDLY...He/She operates slowly and patiently when requested; offers friendly advice and counsel to beginners; kind assistance, cooperation and consideration for the interests of others. These are the marks of the amateur spirit.

BALANCED...Radio is a hobby, never interfering with duties owed to family, job, school or community.

PATRIOTIC...His/Her station and skills are always ready for service to country and community.

- adapted from the original Amateur's Code, written by Paul M. Segal, W9EEA, in 1928

Guest Editorial by Jeff Davis, KE9V

Editor's Note: It has been my good fortune to connect with a number of hams across the nation and around the world through social media. One of my favorites on Twitter is Jeff Davis, KE9V. Based in Muncie, IN, he not only tweets often, but he also maintains a ham radio blog that is usually quite insightful. My sincere appreciation to Jeff for allowing me to reprint his latest blog entry as a guest editorial. I think you will find it a worthy companion to KK4XA's president's key this month.

Ham radio enthusiasts prepare for all manner of natural disasters like floods, hurricanes, tornado, storms, anything that causes normal communication channels to temporarily fail. What we don't train for is a viral global pandemic along with a complete shutdown of business and society. At least I don't think we do. I'm not involved with many emergency service aspects of the hobby, but I've attended enough Field Day events to understand its risks, like the potato salad left too long in the sun.

This isn't a failing on our part. I've found nothing in any *ARRL Handbook* to address the current situation. The ways we might provide service to our communities in this new reality are just going to have to be worked out as we go along.

The power of wireless communication has always been its ability to call for help. Like when a hurricane hits some large coastal area, radio amateurs can stand in any gaps in the existing infrastructure and call for help, relay messages, etc. The necessary element being that there is some other place, farther away, that's unaffected by the crisis and capable of sending assistance. But if the storm hits everywhere with equal ferocity, who do you call for help?

In our current situation, there's really no one to call to bring help and that tends to neutralize our unique power to shrink distance.

Of course the hobby provides us something to do while stuck at home, and the ability to communicate with other hams can soften the pangs of social isolation.

I've heard reports from around the US that local repeater traffic is way up. General welfare nets are popping up all over to check on elder hams and to make certain they have what they need. These kinds of activities begin at the intersection of kindness and radio, and I hope these persist long after this viral episode has subsided.

Too often our intense focus on DX and contesting makes contact with those in faraway places seem more highly valued than those in our own community. Perhaps this will change. The concept of hanging out on two meters seems odd to some, especially when our time could be spent filling the log with endless, vapid contacts. But we can get back to local communications, and we might even make a few new friends in the process who we never knew lived so close – friends who one day we will meet for coffee. We might even do that using FM simplex and that might become a thing again!

I'm not trying to tell anyone how to have fun, but we find ourselves in a unique time where all the major DXpeditions are postponed and all the radio conferences, hamfests, and conventions are canceled. Radio contests continue, but without multi-operators piled high in some million-dollar superstition. In all likelihood you won't be doing Field Day with your club this time around. We need a reason to be radio active and we must be creative or risk wasting an awful lot of what looks exactly like "free" time.

73, stay well, and wash your hands.

KE9V's bio:

I've been a licensed amateur radio enthusiast since 1977 and over these many years I've enjoyed many interesting facets afforded by this great hobby. It's been a constant in my life as a teen, husband, father, grandfather, and I expect even more from it when I retire. It's truly been a lifelong radio adventure for me.

Jeff mentions the recent surge in local repeater use, as well as a rise in welfare nets.

Our club president, KK4XA, was ahead of the curve, running a morning welfare net on the club repeater for several months now. Participation has grown just in the last two weeks.

If you haven't already, please join us Monday through Friday on 146.655 MHz at 9:00 a.m. EDT.

Plus, throughout the day, there are usually half a dozen or more club members monitoring at any given time.



Steve Carpenter, K4DXV

Newsletter Editor

From the Editor's Desk...

Smoky Mountain Rambling

How to Write for the Club Newsletter

In the past I have requested material for the newsletter at club meetings, on the net, and here in this column. Many have stepped up to contribute, and I appreciate it. Their contributions give our newsletter a level of value it would not otherwise have. However, I *always* need more, and it would be nice to have a variety of contributors.

I find that most members are reluctant to contribute because they have convinced themselves of one or more of the following:

1. I don't know what to write.
2. I don't have time.
3. I'm not a writer.
4. Somebody else will do it.

Well, let me address each of those and help you learn how you can write for the newsletter.

1. I don't know what to write.

I heard this for decades in the classroom. In recent years we solved the problem for students by giving them writing prompts. That isn't practical here, but I can give you a list to start from – mostly topics that have never appeared in our pages.

How To...

- ...do *any* digital mode (FT8, RTTY, etc.)
- ...use good repeater etiquette
- ...set up and manage an LOTW account
- ...improve HF SSB operation
- ...work split-mode in contests or for a DXpedition (and why)
- ...participate in VHF contests
- ...put together a POTA or other portable operation
- ...do *anything else you can think of!*

Other (...and it can be as brief as a paragraph!)

- >How and why you became a ham
- >A project (underway or completed)
- >Any accomplishment (worked all stations in a multi-special event; earned WAS, DXCC, etc.; placed in a contest; etc.)
- >Got a new piece of equipment? Write up a review!
- >Worked a new mode? (satellites maybe?) Tell us about it.

2. I don't have time.

Think of writing as a process rather than an event. Find a few minutes every day to work on your piece, even as little as 15 or 20 minutes. You will be surprised what you can turn out in five days at that rate. Spend your first session sketching out your piece. Don't worry about an outline; just do a list of points you want to cover. Then decide on the most logical order to present them.

3. I'm not a writer.

I spent 40 years teaching teenagers to write, so trust me...I get it. And I don't necessarily disagree. However, you don't have to be Shakespeare or Hemingway here. I play guitar. I'm no Chet Atkins, but that doesn't stop me from playing. If you can do what I said in point 2 about making a list of points and deciding on an order, the only thing that is left is to be able to write in complete sentences. *That's the basic skill set you need.* Don't worry about style and voice or even grammar. That's what editors do – we fix those things. And if you contribute something, study how it gets edited. Many years ago, I was at loggerheads with an old sports editor who kept hacking my stuff up. Finally, he said, "Read my version and compare it to yours." When I started doing that, I started to learn. So will you, and that will build your confidence to contribute again.

4. Somebody else will do it.

Well, maybe, and maybe not. I'm lucky to have two articles from a member in my files ready to go into future issues, but that's rare. I'm usually scraping the bottom of the barrel. Plus, it's a chance to contribute to the club beyond just paying your dues. In addition to helping create a quality newsletter, your contribution will perhaps encourage or educate other hams.

Finally, I will leave you with a quote Bill Nye shared from one of his professors: "*Everyone you will ever meet knows something you don't know.*" You know something of value to the club. Please share it.

ARRL — the national association for Amateur Radio™						
RADIOGRAM						
STATION	PRECEDENCE	TX	STATION OF ORIGIN	CHECK	PLACE OF ORIGIN	DATE
TO: All SMARC Members						
RE: General Club Information						
<small> <p>THIS MESSAGE WAS TRANSMITTED BY A LICENSED AMATEUR RADIO OPERATOR. IT IS THE PROPERTY OF THE AMERICAN RADIO RELAY LEAGUE (ARRL) AND IS LOANED TO YOU BY THE LEAGUE. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY MANNER WITHOUT THE WRITTEN PERMISSION OF THE LEAGUE. THE LEAGUE ASSUMES NO LIABILITY FOR ANY LOSS OR DAMAGE TO ANY EQUIPMENT OR INFORMATION TRANSMITTED BY RADIOGRAM.</p> </small>						

From the Club Shack...

Events and Happenings

Until further notice, all in-person club events are canceled.

Club Nets

Unless otherwise noted, the following nets meet on the club's W4OLB 2-meter repeater.

(146.655 MHz; Offset: -600; Tone: 100.0 Hz)

Regular SMARC Weekly Net

- Thursdays at 7:00 p.m. EDT (2300 UTC)
- If the club repeater is down, the net will meet on the WB4GBI at 146.625 MHz – No Tone

If you have questions or concerns regarding the weekly net, or if you would like to serve as a net control station (NCS), contact net manager **Melvin Turner, WB5KSM** at wb5ksm88@att.net.

KK4XA Daily Welfare Net

- Mon.– Fri. at 9:00 a.m. EDT 9:00 (1300 UTC)

SMARC Online

- Club Web Site: www.w4olb.org
- Facebook: Search for: [@w4olb](#)

Frequently Used Local Frequencies

W4OLB Club Repeater

146.655/-055 MHz

Tone: 100 Hz

Club Backup Repeater

WB4GBI

146.625/-025 MHz

No Tone

Radio Amateur Club of Knoxville Repeater

W4BBB

147.300/+900

No Tone

SKYWARN District 5 Weather Emergency Net

(Anderson, Blount, Campbell, Knox, Loudon, and Union)

WB4GBI: 146.940/-0340 MHz

No Tone

National Weather Service Broadcasts

WXK46

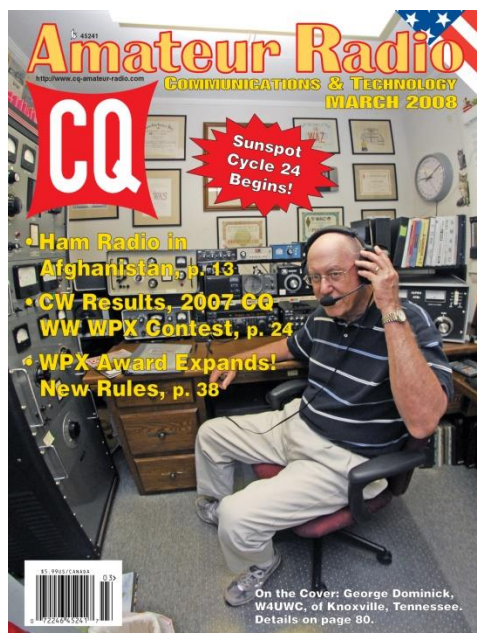
162.475 MHz

Sharp's Ridge

WNG732

162.450 MHz

Cross Mountain



Flashback: Newer members probably don't know that SMARC member George Dominick, W4UW (then W4UWC), was on the March, 2008 cover of *CQ Magazine*. Oh, and check the burst graphic. Remember sunspots?

Hams Make a Small World

by Melvin Turner, WB5KSM

Editor's Note: I almost did not include this article in this issue since it seemed a bit out of place with the current situation. But, it has been in my files since October, and, besides, it offers a positive message and that may be the most important thing we all need to hear right now.

Hams are just about everywhere enjoying their hobby, swapping radios, antennas, parts, and even fixing old equipment to work like new. Now, we even have digital modes that amaze even the elect brains. We do public service work for any agency when needed, and we help in communications during emergencies.

I was always amazed by radio receivers while in grade school. Finally, my uncle gave me the books he studied in a NRI course while in the Army. I studied all those books and got a clear knowledge of those radios, but that just fed my appetite, and I started fixing everybody's radios all through high school. That started my lifelong career at Collins Radio in Richardson, Texas, where I was Technician, Engineering Lab Technician, and then Lead Technician. I loved my job as Lead Technician because it involved going around helping my co-workers fix their radios. I am now 75 years old, retired at age 58, and still fixing those old broadcast band tube radios. I love to bring those old radios back to life after they have not been turned on for maybe 40 + years. The looks on the owners' faces is the only pay that I need.

While at a meeting at the Blount County Public Library in Maryville, I spotted a 1930's glassed display with old violins and an old table top radio. I suspected it was not in working order, but I wanted to know for sure. So, I found the owner, Linda Marcus, and talked about antiques until I finally could bring up the subject of the radio. She said that, indeed, it did not work and it belonged to her Mother, 93 years old, and she was still living. I made my request to have a go at repairing it. After a lecture about the sentimental value of the radio, she let me have it to restore, and I went to work immediately. It was in rather poor shape but I was able to get it working.

I played the radio for about a week and my wife wanted to go with me to take it back to Linda. So, off to the library we went. We found Linda right away and when she saw the radio, she exclaimed, "Oh, my! It looks so good!" We took it to her desk and she immediately plugged it up and turned it on. She was so happy to hear that little radio play. "My mother will be so pleased," she said, smiling.

Then came a surprise. Linda looked at my wife Sharon, and Sharon looked at Linda. They knew each other. It turned out that my wife Sharon and Linda's husband Kermit were friends and had worked together at Maryville Middle School for nearly 20 years. I just sat back and watched as Linda and Sharon had a long warm reunion time.

We can say it again – hams make a small world.



First SMARC Fox Hunt by Kurt Meltzer, KC4NX

Foxhunting combines several skills: radio direction finding, VHF propagation, geography and topography, mixed in with common sense deductive skills and basic detective work. The "thrill of the hunt" appeals to many people, and it is a great way to enjoy some fresh air and fellowship with other hams. Having some SMARC members skilled in radio direction finding is also useful for those instances when we may experience interference to the club repeater, or perhaps when an individual has problems at his or her station.

The first of what will hopefully be many club foxhunts was held at Springbrook Park on Saturday, March 7, 2020. At 9:00 a.m. that morning, I hid a small battery-powered beacon transmitter at the base of a tree in a wooded area of the park. The transmitter emits a tone signaling on 147.555 MHz at a power level of 500 mW.

By 10:00 a.m. we had fifteen hunters assembled at the pavilion about a quarter of a mile away from the hidden transmitter. I was pleased to see several folks show up who were new to foxhunting and did not yet have any radio direction finding (RDF) gear. Those folks were teamed up with others who had brought gear. After a short briefing and equipment check, everyone set out on foot in search of the fox.

The first team to locate the fox – in only 17 minutes – was Kevin Duplantis, W4KEV, and Melvin Turner, WB5KSM. Kevin is a member of the Radio Amateur Club of Knoxville and is an experienced foxhunter. Melvin, who is new to foxhunting, accompanied Kevin to learn some RDF techniques. Within about an hour, all teams had located the fox. The weather was perfect and everyone had a great time. Afterward, we adjourned to a local restaurant for lunch and discussion.

Anyone interested in learning more about foxhunting is encouraged to attend our next hunt (date to be announced). No RDF gear? No problem. Just show up and we'll team you up with an experienced hunter. The equipment needed to search for hidden transmitters is inexpensive and easy to construct. Anyone interested in building their own RDF rig may contact Kurt Meltzer, KC4NX, for details via email at mre1032@yahoo.com.



(L – R): N9KMY, K9JU, KN4VMC, K4AVG, N4AER, KK4XA, KM4JCH, W4KEV, KC4NX, WB7TLW, KN4RYB, W4LSM, KO4ANG, N4JHS



Bob Loving, K9JU
DX Editor

World of DX

Get Started Building Your DX Total

Hello again, fellow SMARC members, and welcome back to the fascinating world of DX!

In the previous column, I introduced you to ways of working a DX contest in search of entities. In this column, I will depart from the how- to in order to show you what we are attempting to attain by making contact with the entities of the ARRL DX Century Club (DXCC) program. Before Logbook of the World, hard copy QSL cards were the only way to confirm contacts with DXCC entities. Though no longer necessary for confirmation of contact, QSL cards are still very much in vogue. And it is fun to receive a card from a faraway location; even more so if it is a rare entity. In this case, *rare* does not refer to how you like your steak cooked.

A rare entity is typically an island or similar terrestrial feature that is sparsely inhabited, if at all, by more than sea gulls or penguins. An example is the recent attempt to activate Bouvet Island in the northern area of the Southern Ocean surrounding Antarctica. That entity is so remote and so formidable to approach that the expedition, unfortunately, even failed to reach it.

A more in-depth discussion of QSL cards and methods of obtaining them will be addressed in a subsequent column. For now, however, I want to show you some cards and awards in the hope that the photos will whet your appetite to collect a few of your own.

In the photo below, look closely at the lower right hand card and you will see the call VP6J from Pitcairn Island. If you recall *Mutiny on the Bounty*, this is where Fletcher Christian and several of the crew hid out while others from the Bounty sailed to Tahiti. There is a short and interesting account of the incident on Wikipedia- https://en.wikipedia.org/wiki/Mutiny_on_the_Bounty. The basic DXCC award from the ARRL is the DXCC Mixed certificate and can be attained by confirming contact with 100 entities or more using any legal mode of transmission. The Mixed award is also band independent.



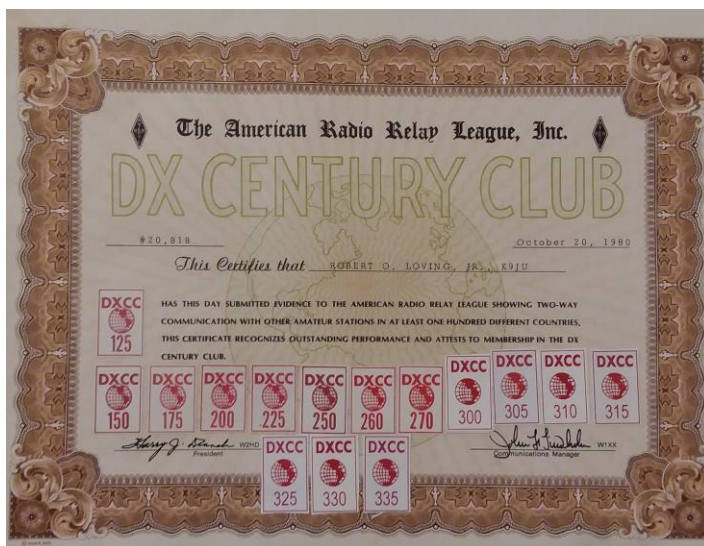
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World of DX, continued

Beyond the DXCC Mixed award are single mode awards. There are three mode-dependent DXCC awards: CW, Phone, and Digital. Phone may include any voice mode from AM to SSB to FM (where allowed). Digital is any of the digital modes, including but not limited to RTTY, PSK31, FT8 and the WSJT-X suite. Digital voice on the HF bands and SSTV are considered phone modes. DMR via the internet does not count for any DXCC award issued by the ARRL.

In the photo below, notice the numbered stickers on the certificate. These are “endorsements” added when you confirm contact with more than 100 entities. The certificate below was issued in 1980; the stickers have been added over the ensuing years.

There are also awards for working DXCC on separate bands. These are mode-independent and capable of endorsements. The certificates are the same as those for the modes except for being marked by the band.



Eventually, you may set your sights on the coveted Five Band DXCC (5BDXCC) award. The award is issued for making and confirming contact with at least 100 entities on all bands 80M, 40M, 20M, 15M and 10M.

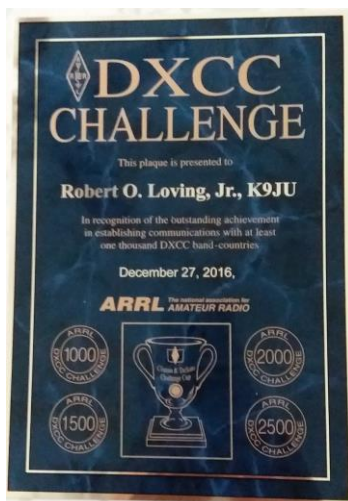


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World of DX, continued

Endorsements to the 5BDXCC include 160M, 30M, 17M, 12M, 6M, and 2M. Presently, there is no DXCC award for 60 meters. A plaque is available for 5BDXCC.

There is more. By making contacts with the entities on the different bands, you are accumulating what are called band-entities. For example, if you contact a Spanish station (EA) on 20M, 15M and 12M, you have 3 band-entities. Given enough time chasing DX, when the total equals 1000, you have achieved the minimum requirement for the DXCC Challenge. This award is endorsed in steps of 500 band entities.



It should be noted that none of these certificates or plaques are free, and plaques are obviously more expensive. Operators in the United States, its possessions, and Puerto Rico must be members of the ARRL to participate in the DXCC program and be eligible for the certificates and plaques.

Of course, the ARRL isn't the only organization to issue DX awards. Associations in other countries have awards. The awards may or may not represent contact with 100 or more entities across the globe, or they may be special event stations celebrating a national anniversary, such as the Soviet award pictured below celebrating the 40th anniversary of the Allied victory in Europe in World War II.



There are so many DX awards available from different countries and organizations that it would take a book to list them all. But, as a U.S. ham, you are probably going to want to start where most do with the basic DXCC award and then go from there. Once you get started, “chasing wallpaper,” as it is often called, can become quite addictive. So, if you haven’t already, get on the air and get started!