Orange County Radio Amateurs (OCRA) Newsletter
October 2007

From the Editor

According to the calendar, it is now autumn. I think Mother Nature needs to be informed! I am looking forward to the days when I can put on a sweatshirt and jeans and not be too warm. Maybe soon….

Be sure to spend some time reading through this month's newsletter. I think you will find the articles very interesting. And, remember -- get radio active!

Best regards,
Laurie - N1YXU
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Summary of the September 10th Meeting

- Woody has heard back from the soldier we have adopted through the Adopt-a-Platoon organization. The soldier provided a list of items that he would appreciate receiving. If you signed up to bring a specific item, please be sure to bring it to the October 8th meeting.
- The Adopt a Highway clean-up effort was scheduled for September 22nd.
- John (KI4QXO) made a gorgeous presentation box for the OCRA cup. Sincere thank you, John! Ken (KR4FM) presented the OCRA cup to Steve (KZ1X). Congratulations, Steve!
- There were two show and tell items. Robert (N4ZAK) demonstrated a system that he used when operating recently at a fixed mobile location. Steve (KZ1X) shared a mobile antenna that is under design and will soon be explained in an article in the newsletter.
- Congratulations to the winners of the paper contest -- Joe (K4SAR) and MK (K4MKR).
- The October meeting will be held at 7:30 on Monday, October 8. Hope to see you there.

President's QRM
by Dave Snyder, W4SAR

One of the tangible benefits of working stations on the HF bands is having the concrete proof that you've worked somebody - the QSL card. Anyone who has worked DX or has worked for the WAS awards has amassed a large collection. A QSL card is the concrete acknowledgment of a radio contact. At minimum, it must have the call signs of both stations, the signal report of the received signal, date and time of the contact, frequency band, and mode of contact. Many of the more inexpensive QSL cards will have this information and nothing else.

However, the more treasured cards in my collection and the ones that really grab a newcomer's attention, when you're showing them this aspect of amateur radio, are those that go beyond the minimum and add details about the operator or the location they are operating from, and those that are pleasing to the eye to boot.

It used to be that you'd have to submit an order to a printer to have a run of QSL cards made up, and generally 100 to 200 at a minimum. The printer would have a standard set of fonts and graphics you could choose from, the fancier the pricier. If you wanted to go all out and include your own photographs or artwork, the price would go up even more.

When I performed my portable operation in Chincoteague, I wanted to give out a special eye-catching QSL card for that operation. However, I did not want to spend the big bucks for having graphics printed up, and I certainly did not need 200 cards which would take years of trips to Chincoteague to exhaust.

Fortunately, technology has caught up, and anyone can make up and print their own QSL cards if they have digitized art (if you own a digital camera and/or a scanner, you'll have lots to work with), an inkjet printer, and a graphic modification program such as Adobe Photoshop Elements or GIMP.

I quite easily found in my files a gorgeous sunset I captured with a digital camera a few years back on Chincoteague National Wildlife Refuge. I imported the image into GIMP (BTW - That is a free program found on most Linux platforms), cropped the image to the proper proportions for a QSL card which is 3-1/2 by 5-1/2 inches. Then, I experimented with different styles and colors of fonts until I found some that pleasingly added information to the image. The result was then printed onto 4 x 6 photo stock which was then cut to the proper size. I opted to put my callsign and the location of the operation as part of the image, while putting the exchange information on the back. Experimentation showed that the backside of photo paper does not hold inkjet images well. It smears very readily. My solution was to print the exchange templates onto gum labels, which are then affixed to the back of the image. Besides the minimum exchange information, I gave a little information on the photograph and included my home QTH information. A last touch was leaving a little space for a brief personal note and signature.

I am quite pleased with the results, and the image here shows the front of one of my special QSL cards. Also, since the images are saved, I only have to print them on demand.

Making QSOs with DX and working Dxpeditions

By Bruce Meier, N1LN (aka NC4KW)

Well, you have had one month to refine your skills for making casual QSOs. Now that you are on your way from being referred to as a LID (term used for classifying poor operators in the Ham radio world) to becoming an excellent operator, it is time to take the next step.

Making regular DX QSOs

Making DX Qs can be the same as with casual Qs depending on the station you are working but not usually. Let just discuss what is different. DX Qs may be very short. The typical information exchange may be very brief. You may find yourself in a mini-pile up with many other Hams calling the same station. If you don't have a very strong signal, you may be there for a while. Also, perhaps an obvious difference but a key one, from the USA, DX is a non-W/VE station.

Responding to a CQ:

While you are listening around the band in either CW or SSB and you hear a DX station calling CQ, remember rule 1 - LISTEN. Listen to what is being sent. Listen to other stations he/she might be working. Why? – Learn the exchange that these stations are using as you should follow the same format. When you are ready – jump in and call.

Short Qs:

A DX station may simply be sending: CQ DX CQ DX ZL1AB ZL1AB. NOTE – no "de" or if SSB "from". This is VERY common. If you have been listening, what should you do next? Well, you could send: ZL1AB de (from) N1LN or simply N1LN. Follow the pattern from other stations working ZL1AB. If multiple stations are calling, you can bet over 90% of the time the only response being sent by the calling station will be their call: N1LN. If that is true, you can also bet that 90% of the calling station's call is sent ONCE only. If there were no other Qs before you, feel free to use either return. JUST BE BRIEF. You don't need to send ZL1AB more than once, and you don't need to send your call more than twice.

The Exchange:

If you have been listening, you know what the exchange is. Could be RSTonly from the CQing station. Could be RST / Name. Could be RST / Name / QTH. If you happen to be the first that works the DX, you have more options. I would suggest that you simply follow the pattern set by the DX. NOTE: You already would typically know the QTH of the DX station by his call sign. But, due to the US call sign and call area flexibility he won't know yours. So, always send your QTH. This would be an example of an acceptable exchange: SSB = 57 North Carolina or CW = 559 NC.

Completing the QSO:

If this is a quick QSO, you may already be done, especially if other stations are calling. If you try to send "73", "hope to work you again", "thanks for the QSO" you will be back to the LID category. Why? Well, you just transmitted on top of the next person trying to work the DX. So what should you? Hit enter on your keyboard, save the Q in your logging software, move on. Congratulations - THIS Q IS DONE ! ! !

Longer (conversational) Qs:

A longer or conversational Q with a DX station is much the same as with a state-side station. Rather than repeat last month's article text here, I will simply refer you to the September OCRA newsletter.

Making Qs with a DXpedition:

This is where the world changes. For many, the challenge makes it move interesting and, at the same time, much more frustrating. The word “competition” is one that comes to mind for me. Why competition? Well, by definition, a DXpedition is a group of hams that travel to a rare DX entity and spend a limited amount of time on-the-air. I might add, usually at great expense! So, the formula is simple: rare + limited time = competition. There will almost always be a pile-up. Most, if not all Dxpeditions, will be working split frequency. (More on that later.) As they are trying to make as many Qs as possible, the rate (speed of making Qs) will be higher than normal casual Qs. Frequency Police (I will leave this one for you to figure out) will be "helping”. And last, but not least, enter the LID storm. In this case, we will define LID storm as Hams (perhaps) that are there just to create interference such that Qs are next to impossible to make. Sound like fun – yes, you are correct.

Responding to a CQ:

The first rule is again in play here. LISTEN. This rule is important for all Qs, but if you want to work a DXpedition and NOT be a LID, it is a must. The DX station will provide very valuable information. Most important will be what frequency or range of frequencies is his receive frequency. What is the exchange? What is the QSL method and/or managers call? Perhaps more, but these three are the most important.

Split Frequency:

Split Frequency means you listen to the DX station on one frequency and transmit to the DX station on another. When operating split frequency, you need a radio that will allow you to receive on one frequency and transmit on another one. This means your radio will need an A and B VFO as well as a few additional features. Check your manual to determine if your radio can work split. Typically, DXpeditions will announce their RX freq. You will hear something like “ 5 up “ or “listening 5 to 10 up”. Let’s use some real frequencies to explain. As my preferred mode is CW, I will use CW frequencies, but the explanation will be the same for SSB. The DX station is transmitting on 14.025 mhz in the 20 mtr band. He states 5 up. So, you should transmit to him on 14.030 mhz. Simple – almost! But, you would be amazed by how many LIDS transmit right on the DX frequency. (Enter the frequency police!) If the station says “5 – 10 up”, his RX frequency will be from 14.030 to 14.035. If you are lucky, you will be able to hear the pile-up calling the DX station. If your radio has “dual watch” (ability to hear both frequencies at the same time), you might even hear the station being worked as well as the DX station. This will give you a clue where the DX station is “really” listening. The “up 5” is a guide. He may be saying up 5 and working people from 5 – 20 kcs up. I have Yaesu FT1000-MPs that not only have dual watch but also have individual VFO knobs. I can typically hear both stations and easily follow the DX station’s RX frequency. This really helps when trying to find the exact listening frequency. If you can hear the stations being worked, a good strategy is to determine if the DX station is moving up or down in his RX frequency and lead just a bit. What does lead mean? Well, let’s use trap shooting as an example. If you want to shoot the clay disc with your shotgun, you would need to shoot slightly in front of where the disc is at the time you pull the trigger. This is leading the trap. Same thing with leading the DX station. Using our example frequencies, if he is moving from 14.030 up the band and you hear him work a station on 14.030, then 14.030.5, then 14.031. You should QUICKLY move to 14.032 and start calling. Here again – PRACTICE.

Calling:

This is very easy. Say your call ONCE. If the DX station hears you, he will repeat your call and then the exchange. If he hears PART of your call, for example he might reply with the “N1?”, then restate your call twice. If SSB, USE STANDARD PHONETICS. If he says “N1L?”, simple state your complete call again as previously indicated. However, if he states “N1LM” ask the station to PLEASE CORRECT MY CALL – then, restate as above. But, be careful. He might not be calling you. As this is a pile-up, there just might be another station calling with the call N1LM. This will be touched on again in Completing the QSO below.

The Exchange:

If you have been listening, you know what the exchange is. If CW, it will be 599. If SSB, it will be 59. Always !!! The actual signal report does not matter. Sound simple? By design, it is simple. Remember, your goal is to get in the log and get the QSO confirmed.

Completing the QSO:

The Q will be done almost before it begins. However, one VERY important item. Make sure the DX station repeats your call and it is correct. If not, jump back in immediately before your Q is done and ask for your call to be corrected. This is easier on SSB as you can state "please correct my call. It should be N1LN". DON'T state the wrong letter. You could state "please correct the prefix" or "please correct the last letter". Think ARES messages. Keep them simple with ONLY the important information in the text. Don't repeat more information than is needed or requested. It slows down the process and can lead to confusion. Once you are sure your call is correct, you are done.

Congratulations, you have just worked a new DX entity and are on your way to DXCC.

What NOT to do:

1. Don't call on the DX stations frequency unless he is NOT working UP.
2. Don't send the DX stations call / de / your call – TOOOO slow.
3. Don't get into a long QSO. Simply send RST and Thanks or TU if CW.
4. Don't be a frequency policeman.
5. Don't provide more information than requested to be repeated.
6. Last – Don't be a LID.

You are now ready to go out there and make casual QSOs, DX QSOs and even jump into the DXpedition pile-ups. The sunspots are not in our favor now but the bands are still active. DXpeditions might be as rare as the entities they would be putting on the air, but that is fine. It takes time to become skilled. You don't want to be a LID. Go practice.

Next month – CONTESTING. The fall of each year brings with it cooler weather, earlier sunsets, and the annual contest season. By the time the November newsletter has hit the reflector, the Texas QSO party, California QSO party, CQ World Wide DX SSB contest and others will already be behind us. Not to worry – there are MANY more and always next year.

Sputnik and the Flowering of the Space Age

By Woody Woodward, K3VSA

This month marks the fiftieth anniversary of the first artificial earth satellite, Sputnik I, launched by the former USSR on October 4th, 1957. I would have been almost eleven years old when that momentous event occurred, and I can remember the paranoia that many people expressed because of that thing orbiting over our heads, looking down at us, and our inability to do anything about it.

Of course, we'd thought that the USA would become the first spacefaring nation because of our announced plans to launch our own earth satellite, and we were so intent on congratulating ourselves in advance of that event that we overlooked the USSR's signal tracking preparations with their Amateur Radio community and their press releases, considering them mere propaganda, more "we invented it first" blather.

Boy, were we ever surprised! And it didn't help at all when launch after launch of our own space vehicles ended as

embarrassing public disasters. I can remember watching the news footage of one of them, I don't remember which any more, rising a couple feet from the launch pad only to slowly and sickeningly collapse into fiery failure, a sort of phoenix bird in reverse.

We boys knew full well how hard it was to make a rocket fly, because we had plenty of first hand experience with malfunctioning missiles. We used to make our own rockets. Mind you, not the safe, parent-approved kind you buy at the hobby shop, but actual homemade affairs crafted (if that's the correct term!) from recycled tin cans stuffed with match heads. We'd cut up a tin can with snips, flatten it, then construct a cylinder from the sheet metal and solder it closed. That's where I learned how to solder. Can you imagine an eleven-year-old having free access to a soldering iron, lead solder, tin snips and matches nowadays? What were my parents thinking!!

Yes, we heard on the news all the time about some kid or another losing an eye, or a hand, or something, to one of these dangerous devices, but, like kids believe, we thought we were immortal. The rockets we built mostly didn't work anyway. And the USA eventually got its "stuff" right, and satellites with American flags orbited Planet Earth. I lost interest in rocket building when, in a little while, Amateur Radio seduced me. It might have saved my life, for all I know!

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