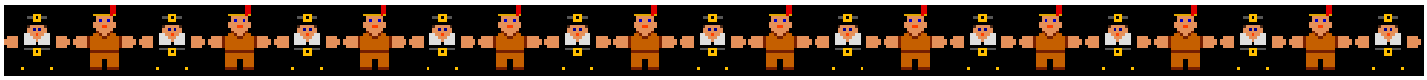
M.C.W.A.

Vol. 17, # 11 Our 39th Year Since 1978 November 2017



VE TESTING

Contact: Steve Maresso, KB9OLD at 847/ 477-3518

Testing is conducted quarterly at 7:00 PM on the third Tuesday for the months of February, May, August, and November . Walk-ins are welcome until 8:00 PM. No appointment is necessary. Testing requirements:

1. Cost for 2017 is $15.00 (Cash or check made payable to ARRL). If initial test element is passed, the person testing may continue take the next test element(s) at no extra charge during the given session. Retesting of an element failed during the same testing session will require payment of an additional $15.00 test fee.

2.Must show original and provide copy of Amateur Radio license and/or CSCE (if upgrading).

3. Must show a valid Government Issued Photo ID (Passport, Driver's License or State ID card) for identification.

4. Social Security or FRN number required.

5. Location: Free Methodist Church, 934 N. Seminary, Woodstock, IL 60098

Wednesday Night 6 Meter Net

Just as a reminder the 6 meter net/forum is held every Wednesday at 7-9:00 pm on 50.180 USB. Earlt check-ins at 6:45

See you on Frequency.
Pierre K9EYE
Net Control

MEETING NOTICE

November 7, 2017
Socializing: 6:30 PM
Meeting: 7:00 PM

Crystal Lake Bank
5100 Northwest Hwy (Rt. 14)
Crystal Lake, IL 60014

PROGRAM: Non Resonant antennas Why and How, by KA9CAR

K9GDI- SK Leo Hunter was a long time member of MCWA and recently was at a few meetings . This editor has known him for years when he would be mobile in his RV with his late wife, Marion, traveling the country. Leo was 99. RIP Leo !

W9CNC- SK Neil was, I believe, a charter member of MCWA back in 1978 at the very first meeting. Neil lived in TX and was 84. Oct, 12 RIP Neil

THE WORLD ABOVE 30M

Over the last few weeks we have experienced some interesting propagation above 10mhz. In the range of October 18-19, 3C0L was doing well on the upper HF bands. When I noticed this station from Annobon Island running 10 over 9 on 12m, I worked the call and put a notice on our reflector that 12m was especially enhanced for propagation. Several from our club got on the air and had fun on 12m. St Helena was also 59 on 12m. I worked ZD7FT on 12m that day. At the beginning of the month, I logged ZD7DL on

17m with a 57 exchange. Although I did not work 3C0L on 10m, I did log them on 15m as well. During the very recent CQ WW Contest, I logged 13 QSO's on 10m and many on 15m within various windows of operating time. On the Sunday afternoon of the contest, 10m and 15m were especially favorable. I think this shows that bands are a lot more open than we may think there are at this point in the solar cycles. This has been mentioned numerous times in this monthly article.

Solar numbers have been better in October than they were in September. A month or so ago saw some sunspot numbers at 0. However, in the last couple of weeks, we have had some decent numbers to work with. We hope that the sun treats us well going into the winter months.

Across November, look for an assortment of the following call prefixes: 4W, YJ0, VR2, VK9, and C21. You may also wish to work various operations from VK9MA, 9U4M, 3XY3D, 5H3DX, 5K0T, YJ0JA, TO2SP, 3W9CW, 9G5W, 3B9HA AND HC8LU.

If you haven't tweaked your antennas, the snow and ice may become factors soon. This past week there was a short-lasting snow in the area. This is a sign of things to come. Take advantage of these moderate days to be safe with your climbing!

As for now, good DX and Happy Thanksgiving..... Dave KA9OZP

PS..... I recently received an email from G8DNH who reads this article. Thanks, James! Thanks to all who appreciate Jerry's newsletter! We will miss his work as he retires from editor next month.

A Radial Plate for Cheapskates

Bill Savage, K3AN on October 20, 2017

A well-known ham antenna manufacturer sells a stainless steel plate that's designed to mount to a vertical antenna's support mast and provide connections for at least 60 ground radials. It appears to be a well-made product and has gotten good reviews here on eHam.

However it's rather expensive and considerable overkill for my Inverted-L installation, so I set out to look for something that could serve the same purpose at a lower cost. What I ultimately found is remarkably cheap, and should meet the needs of anyone who doesn't have the time, real estate, or inclination to put down more than 30 ground radials.

What is it? It's nothing more than a replacement kitchen sink strainer that you can buy at Home Depot or Lowe's for about $2.00. It's made from stainless steel and is “pre-drilled” for 10-24 size screws. You can readily install ten screws and nuts in the outermost ring of holes, and another five in the next ring. Install two solder or crimp-type terminal lugs under each nut and there's your 30-radial capacity. Furthermore, as shown in the photo, the strainer's center hole is large enough to fit over a copper-clad ground rod. You just have to remove the rubber stopper and pull out the metal center stem.

In my installation, each screw is fastened to the strainer with a compression lockwasher and nut. Then the radial lugs are placed over the nut and secured by a second nut. To prevent “galling” or seizing up of the

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Librarian .....Jeff Schmidt, KC9WSJ

VE Commander ..... Steve Maresso, KB9OLD

Social Media Director .....Dave Whaley, NT9E

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STRAY You don't need over 20 watts for FT8 and that is HIGH power

WA2HMM via Eham

FIREFOX CHANGES

September 08, 2017,

Those of you who use the Firefox browser need to know that changes are coming. In November Mozilla will introduce a new version of the browser and most if not all of your browser extensions will no longer work. These extensions include Adblock Plus and Classic Theme Restorer.

There is hope though. This afternoon I ported all my Bookmarks over to 'Pale Moon' which is a browser forked from an earlier version of Firefox. It's a slightly simpler interface BUT the browser runs like lightning!! I've never seen a browser run so fast.

So, if you are worried about the Firefox / Mozilla changes then give Pale Moon a try. Versions are available for Linux, MS Windows and Apple Mac.

http://www.palemoon.org/ Peter DL8OV

FROM THE EDITOR"S DESK

Something a Little Different This month it was decided to take a stroll back into history of the DX world and find a bit about the mysterious "deleted countries". Some of you may already be aware of them, but other may not know the tides of Ham Radio countries change with politics. This is the first part of what may be a 2-part article, hopefully. If any questions arise just consult Wikipedia for further data. Just the basic info was given, but for the history buffs there is more info on some. Can't recall anyone ever touching on this subject in the past.

On The LF Front Recents reports from ARRL seems to indicate that access to the 630 meter and 2200 meter bands are being denied because of 1 kilometer or less proximity to power lines using PLC technology. If that be the case, it would appear that terrorists now have another target ? So, perhaps these 2 new Amateur bands weren't such a "gift" after all .

Carl Smith, N4AA SK Long time publisher of QRZ DX and DX Magazine passed away Oct. 20. "Carl was a ham's ham, as he dabbled in many aspects of our great hobby," The Daily DX Editor Bernie McClenny, W3UR, observed. "He did a lot for Amateur Radio over the years." RIP Carl.

STRAY On the upside, if DX stations gave us the signal reports we actually deserved, everybody would be running legal limit and you'd never be able to sell a QRP rig, ever!
K9CTB via eham

STRAY Why is it that you always hear that the great DX is always on a band you do not have a decent Antenna for?
AF6AU de Eham

Radial plate - cont'd

stainless hardware, I placed Noalox grease on the screw threads. I also placed some grease on the flat surfaces of the lugs. Home Depot and Lowe's carry Noalox in the electrical section.
Depending on how many sets of stainless hardware you buy, the total cost for the strainer, the stainless steel screws, nuts and washers, and a small tube of Noalox will be under $10 to maybe as much as $16. For that price there's no excuse for not sprucing up (and adding to) your vertical's radial system.

K3AN de eham

Which Way Did they Go ???

For those of us who chase DX and look at the list of countries (DXCC Entities) there seems to be about 62 of them which have been DELETED. You might be asking yourself "why is that ?".

Some were just a matter of politics like the reunification of Germany where East and West Germany became one. Most of these deletions happened because of political situations such as independence being granted and redrawn borders after WWI , but others other are somewhat mysterious.

REEFS Many of these are subjuct to the whims of the worlds oceans are may disappear. Blenhein Reef is partly submerged in Indian Ocean and considered part of Chagos Islands. Geyser Reef is mostly submerged in Mozambique Channel and only exposed at low tide; now part of Tonga Islands. Kingman Reef also largely submerged in North Pacific Ocean and is only 5 feet above sea level.

Another one was Maria Teresa Reef which was a hoax. In 1966 amateur radio journal "CQ" published a photo and description of Don Miller transmitting from what he claimed was Maria Teresa Reef. This has been since proven to be a hoax. New Zealand's HMNZS Tui made an extensive search of the area in the 1970s and found no shallows or islands. The depths in the region were shown to be 2,734 fathoms (5,000 m). Maria Teresa no longer appears on the deleted list or anywhere else. Most of this information was found on Wikipedia.

High Capacity Battery Pack for Site Use Portable Operations

Scott Reaser, K6TAR

Handheld battery packs are good for maybe 3 hours use with modest transmit duty cycle. Add a spare pack, and you are good for the first daylight hours of emergency response that might go on for days. So what do you do when you have run down your handheld battery plus a spare you might have?

The supplemental power pack I show here is built around a 7 or 8 amp-hour, 12 volt, sealed lead acid battery. Why this? My tradeoffs were: weight, cost, size and safety. The battery size is a common item used extensively in building emergency lighting and exit signage applications. These batteries are found on many eBay sites. I package the battery with a built-in charger, car accessory socket and PowerPole outputs. A carrying handle completes the package. Two completed units are shown in Figure 1 (Portable Battery Pack).

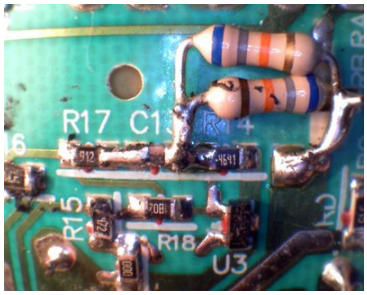
Portable Battery Pack

Pack Build Components

How do you make this? Ingredients are shown in Figure 2 (Pack Build Components). This is as originally built before PowerPoles and a carrying handle were added. This is a drill the holes and stick it together project except for maybe the charger.

This is a 12 volt wall wart that is repurposed to 13.5 volts. Used and overstock wall warts are stocked by the bin at places like All Electronics and swap meets. Wall wart cases can be popped apart at the part line with judicious pressure and persuasion with slip joint (water pump) pliers. The power inlet prongs part of the case is cutoff, and repurposed as AC in for the power pack box. See Figure 3 (Reclaimed Switching Power Supply). Another to-do is resetting the programmable, 3 terminal, zener reference diode to run the supply at 13.5 volts instead of 12. A control point is held at 2.5 volts. This is taken from a voltage divider from output voltage command to ground. By slightly bridging the ground side of the divider, with about 33K ohms, the output voltage is set upwards to again restore 2.5 volts to the reference point. Figure 4 (Voltage Divider) shows padding the existing surface mount part and the zener (U3). The power input part of a switching power supply floats on AC mains. Be careful what you touch in a running unit.

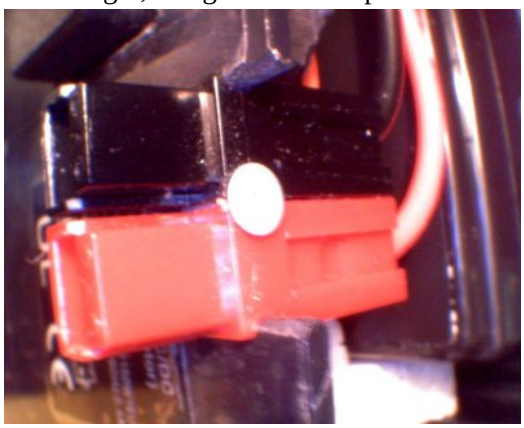
Reclaimed Switching Power Supply



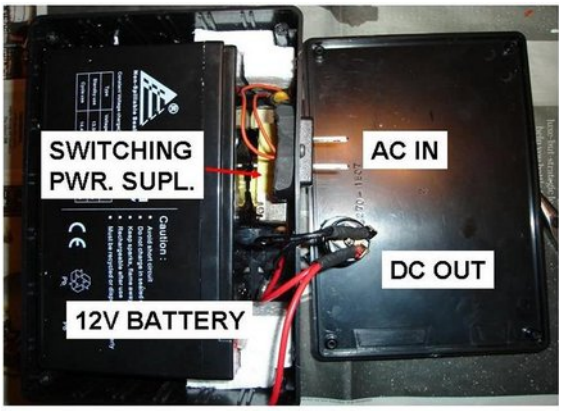
Voltage Divider

Power Pack - cont'd

PowerPoles were added as an output. Power output options for everybody! Paired parts mount in a case slot as shown in Figure 5 (PowerPole Mount). In retrospect the center captive pin shown is not needed. Convention for PowerPoles is “Red (plus) on the Right, Tongue on the Top”. Connector insets come in a barrel wire receptacle form (that best requires a pricey



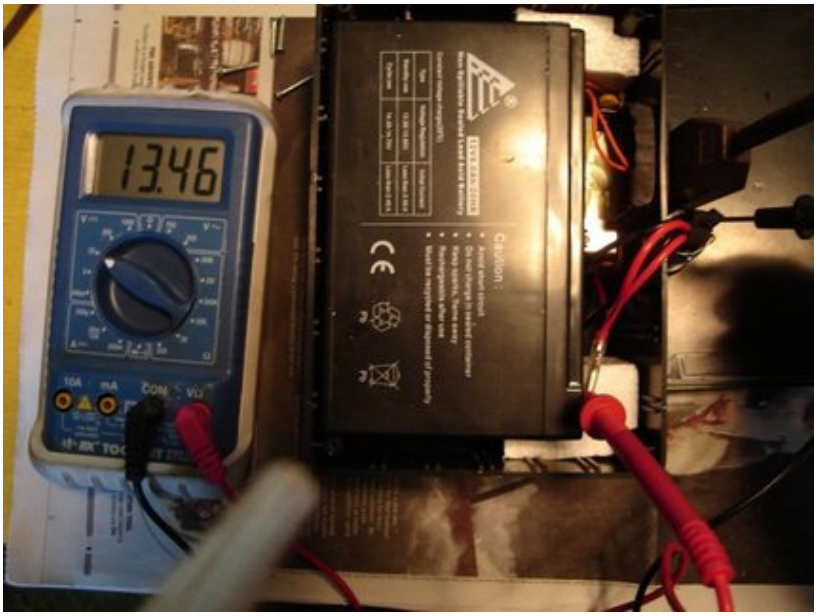
Pole Mount



Power-Box Assembly

tool) and U-shaped receptacles that can be closed with needle nose pliers and soldered.

The handle is a generic drawer pull. Pure serendipity. The part fits nicely and lends a little extra to the finished item. Figure 7 (Completed Unit Power Up) shows first run.



MCWA Jamboree On The Air Report

Around 6 weeks ago, MCWA received a request from the Scout Store on route 31 North of Crystal Lake to set up a station for Jamboree On The Air (JOTA). This timing was prior to our September meeting and to allow for their publicity to get out, we had to commit at that time. Later the club was also contacted by the Boy Scout Camporee organizers and asked to set up a JOTA station at Veteran Acres in Crystal Lake. It didn't take long for the MCWA to build up two teams of volunteers to man both JOTA locations!

On Saturday October 21st at the Scout store, Pierre K9EYE, John KA9CAR, and Desmond KB3LKM set up two HF stations. One station using an 88 foot horizontal antenna and the other station using a 20 meter vertical. The JOTA operation ran from 1 pm to 3 pm and had about a dozen Cub Scouts show up, including one family that drove in from Durand, Illinois about 90 minutes away, as this was the only JOTA event they found in their research.

Pierre and John had scouts talking with stations in Ohio and New York on 40 Meters while Desmond made contacts on 20 meters. The kids had fun getting an introduction to amateur radio and getting on the air for the first time.

The second group of MCWA volunteers set up JOTA stations at the Blackhawk Area Council, Sycamore District 2017 Fall Camporee which was held at Veteran Acres Park in Crystal Lake over the weekend of October 21st. The Camporee Staff planned an exciting series of spy-themed events that each Spy Team (Boy Scout Patrol) and Cub Scout participant enjoyed! Our JOTA stations were labeled as "Secure Communications" to keep with the spy theme.

Bright and early on Saturday morning two HF stations, one on 40 meters and the other on 20 meters, were set up and manned by Gary KD9FML, Dave NT9E, Mike WB8BZK, Dave K9RUF, Mike ND9G and Eric KC9WRB. Boy Scout Patrols started arriving at 9 am and continued at about 20 minute intervals until about 4 pm only stopping for a lunch break. Local area Cub Scouts were also invited to participate in activities during the day on Saturday and visited our set up at random intervals. Overall, more than 500 Boy Scouts along with untold Cub Scouts and Leaders paid visits to our JOTA stations.

It was a fantastic ham radio reach out to the next generation of potential ham radio operators. Our sessions all started out

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with Mike WB8BZK presenting a short slide introduction to ham radio and the Boy Scout "Radio" merit badge followed by an excellent 6 minute, kid oriented, YouTube video by Kelly M6KFA about amateur radio (https://www.youtube.com/watch?v=W3m0Hwcxob4). This video alone was worth the effort as it firmly planted the ham radio seed into each kid's head. We were amazed at how all eyes remained glued to the screen!

Following the video the scouts visited one of the two JOTA stations for a chance to make a ham radio contact. Each scout that made a contact was awarded an official JOTA log sheet with the contact details to commemorate their first amateur radio contact(s).

As part of this ham radio reach out event, a specially prepared MCWA club brochure was created and copies given to each adult scout leader and cub scout's parents.

We believe that there is potential for follow up club service to the scouts in the form of helping scouts achieve their Radio Merit Badge. Expect a full report with lots of pictures of smiling scouts at our November MCWA meeting.

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Will This Be a Future Problem ?

FT-8 Has more than likely caused a few problems for other digital modes. For example, the 17m frequencies that are with the software have driven PSK operators off that frequency (18.100) . There is an award for 17m QSOs (17 0n 17) from PODXS Club. RTTY and MFSK operators also inhabit 18.100 . On 20m the Hellschreiber group has also been disenfranchised by FT-8 operators. Have seen comments about other frequencies as well. Seems that the DX crowd has jumped on the FT-8 band wagon as well. There needs to be some coordination happening here before a lot of operators start jamming each other. Besides many of us know that FT8 was an Indian Ocean DXpedition !

New BBC Amateur Radio Station G8BBC Officially Opened

10/24/2017
BBC Director General Lord Tony Hall of Birkenhead on October 18 opened the new London BBC Radio Group's G8BBC Amateur Radio "premises" ("shack" in the US) at Broadcasting House, the headquarters of the BBC. The shack is in a small room tucked in the roof of Broadcasting House.

On opening day, Lord Hall used G8BBC to send greetings to GB2RN on HMS Belfast which is moored on the Thames River. The G8BBC call sign originally was held by the Ariel Radio Group BBC Club, under BBC engineering. The new group of radio amateurs and SWLs at the BBC are putting the finishing touches on its shack and antenna system on the roof. There are 28 current members, some of whom are BBC on-air talent.

"We are now testing on the air from our new shack in Broadcasting House," the G8BBC team announced on its QRZ.com profile. "Please listen and report our signal." Jonathan Kempster, M5AEO, is the G8BBC secretary and station manager. — Thanks to Southgate Amateur Radio News for some information & ARRL

STRAY Mains voltage has, here in Europe, changed from nominally 220 V to 230 V AC. You may want to check your boat anchor's primary transformer wiring.

PA0LPS de Eham

Communications Interoperability Training with Amateur Radio Community Set

10/24/2017
Elements of the US Department of Defense (DOD) will conduct a "communications interoperability" training exercise November 4-6, once again simulating a "very bad day" scenario. Amateur Radio and MARS organizations will take part.

"This exercise will begin with a national massive coronal mass ejection event which will impact the national power grid as well as all forms of traditional communication, including landline telephone, cellphone, satellite, and Internet connectivity," Army MARS Program Manager Paul English, WD8DBY, explained in an announcement.

During the exercise, a designated DOD Headquarters entity will request county-by-county status reports for the 3,143 US counties and county equivalents, in order to gain situational awareness and to determine the extent of impact of the scenario. Army and Air Force MARS organizations will work in conjunction with the Amateur Radio community, primarily on the 60-meter interoperability channels as well as on HF NVIS frequencies and local VHF and UHF, non-Internet linked Amateur Radio repeaters.

Again this year, a military station on the east coast and the Fort Huachuca, Arizona, HF station will conduct a high-power broadcast on 60-meter channel 1 (5330.5 kHz) on Saturday from 0300 to 0315 UTC. New this year will be an informational broadcast on Sunday, on 13,483.5 kHz USB from 1600 to 1615 UTC. Amateur Radio operators should monitor these broadcasts for more information about the exercise and how they can participate in this communications exercise, English said.

"We want to continue building on the outstanding cooperative working relationship with the ARRL and the Amateur Radio community," English said. "We want to expand the use of the 60-meter interop channels between the military and amateur community for emergency communications, and we hope the Amateur Radio community will give us some good feedback on the use of both the 5-MHz interop and the new 13-MHz broadcast channels as a means of information dissemination during a very bad day scenario.

Contact English for more information or questions about this exercise

From the President's Desk

The WSJT (Weak Signal Joe Taylor) digital modes have surely shaken both HF and VHF+ worlds. Earlier this year the new FT8 and MSK144 "fast" modes were released and they have changed the landscape. Some believe that it is a step in the right direction and others don't. It is very reminiscent of the shift from AM to SSB.

I want to thank Gary KD9FML and Dave NT9E for helping to inform our members of these new modes through their presentation a few meetings ago. Their live demonstration was an eye opener for many members. I know of several members who followed up and got on the air with FT8 to see what it was all about.

I'm one who got sucked into the new WSJT world this year. After listening to a couple of presentations on WSJT modes at the Dayton Hamvention this past May, I came back eager to get started. By late June I loaded the original WSJT software and began listening across the bands and learning how it worked. First I got on 6 meters and got my feet wet with a few nice contacts. When the Es openings disappeared, I went on to try my luck on the HF bands. I started off with JT65 as it has very good weak signal decoding capabilities and I was after new DXCC entities on 80 meters. I was amazed at how many stations were on 80 meter JT65! Very quickly I logged and confirmed eight new 80 meter DXCC entities and I was very happy. This was during the middle of the noisy summer season! While I was listening for additional new DX, I started to work toward Worked All States (WAS) using JT65. The states came in rather quickly but the last four (DE, LA, NM & VT) were difficult to confirm.

After a weekend away from the shack I returned one evening and literally, nobody was on 80 meter JT65. What the heck happened! I tried other bands and for the most part, there were only a few JT65 signals here or there but nothing like the previous level of activity. What had happened was a near overnight HF shift from JT65 to FT8. Virtually everyone moved from JT65 to FT8 to take advantage of the much shorter QSO times (about 4 to 1). I'm glad that I got 46 states confirmed on JT65 but it is not likely that I will be able to confirm the remaining four states on JT65 any time soon. There are so few stations remaining on HF JT65.

Since that virtual overnight shake up, I too have loaded WSJT-X program and moved to FT8. It is a lot faster and I've been able to confirm 49 states in a short period of time (still need Alaska). I've had fun during the last few months but my fun has been centered on trying to complete my FT8 WAS and to continue to try to work new DXCC entities. After I've completed my FT8 WAS, I doubt that I'll use FT8 for further domestic HF contacts. These contacts just aren't as fulfilling for me as contacts using other modes. I'm not saying that they are bad. It's just not for me right now. I'll continue to use FT8, JT65 and all of the new modes to hunt for DX as a supplement to other modes. You can bet that the WSJT-X modes will remain a tool in my ham radio HF tool box.

Now with regards to contesting, it does not appear that main stream HF contesting will be affected by FT8 or any of the WSJT modes in the short term. If anything, I feel that HF operators who like FT8 will probably really like working RTTY contests. If that's you then give RTTY contesting a try. On the other hand, VHF+ contesting has already been affected by the new modes in a big way. During the last few VHF+ contests many contesters used FT8, MSK144 and JT65 exclusively. The digital modes let these stations reach out a little farther which probably landed them additional grid multipliers but the contacts took significantly longer to complete compared to SSB or CW modes. It was unfortunate that many operators didn't switch back and forth from mode to mode as needed. It needs to be a balancing act. I got on and made several exciting meteor scatter contacts using MSK144. It worked well and I'm looking forward to using it again in the January VHF contest.

Have you tried the new WSJT-X modes? You just might find them exciting and a great way to build up your WAS awards and your DXCC totals. Let me know how it works out for you.

73, Mike WB8BZK