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# the exchange



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#### INSIDE THIS ISSUE:

3C3W, 3C0W	2
60 Mtr Update	6
Intro to 160M	7
Featured Station	11
Info on Tower Zoning	12
Perils of Being DX	13
AC8G in Action	14
New Member Spotlight	15
Club Member Quiz	16
IOTA Announcement	17
D44EE Interview	19
DXPedition Donation	23
Club Fact Sheet	24

# The Prez says.....

Seems like we went right from Summer into Late Fall here. I missed the usual days where the windows are open and neither heating nor air conditioning is needed. If you have an antenna project planned for the CQWW DX contests or just want to get it up in the air before winter, you'd best get 'er done. This year I'm standing pat with my antenna farm (more like a raised bed) and again, this winter, focusing my operating on 80 meters.

The SWODXA holiday party will be at the same location, The Spinning Fork in Middletown, but on a different day. This year we're going to have the restaurant all to ourselves to further promote fellowship and a good time. To do so, we needed to move the party to Monday, 17-December-2018. Don't miss this fun event, there are even prizes!

SWODXA members have been conducting DX Outreach and getting

both the club and DXing in general more visibil-



ity in the amateur radio community. In late September, the SWODXA contingent was a force to be reckoned with at SED-CO and it has been reported that a good time was had by all. Bill, AJ8B, Chuck, K8CR, and Dave, K8DV delivered a great presentation on DXing at the Hillsboro Amateur Radio Association (HARA). They brought some ideas back to lower our take off angle and extend SWODXA's engagement with DXers on the eastern edge of our "coverage area".

Bill, AJ8B has pulled together another informative and enjoyable newsletter. There are reports from recent and current DXpeditions/DXpeditioners and a couple of how-to articles. You'll also get a look at the station of one of very own honor roll members Rick, K8WWA.



With the time change approaching, maybe it is a good time to check the UTC settings on your PC, check your smoke detector batteries AND change your passwords!

PAGE 2 THE EXCHANGE

## February 28 - March 24, 2018

### Republic of Equatorial Guinea — Annobon and Bioko



Hello dear radio friends! After successful first expedition to 3C in the late 2017, it was time for our next much larger expedition.

This time the team initially consisted of eight operators - 3 from Latvia and 5 from Ukraine. As we were getting ready to set for this journey - we timely booked all our flights and hotels, submitted all applications for visas, and did all other necessary work for the expeditions preparation phase. Without much struggle we Latvians acquired the visas, however, Ukrainian team members had some problems and the grant of visas got delayed and delayed by the responsible embassy till that point where it could not wait any longer and unfortunately we could not go with the full team. After this setback, we continued with smaller team than planned. It was only three operators - Yuris YL2GM, Kaspars YL1ZF and Girts YL2KL.



Kaspars YL1ZF, Yuris YL2GM, Girts YL2KL

#### **DXpedition Diary**

Day 1 - Monday, 26th of February - At 6 AM we arrived at Riga airport. We were asked by airport personnel to re-pack one of our generators as the airport security did not let it through due to smell of gasoline. Even though I did leave it working until all the gas was used up and the generator stopped, there still was some drops left behind, enough to create the smell. After re-packing, we continued with the check-in procedures with our entire luggage.

The flight from Riga to Paris went by very quickly and the layover in Paris was only 1 hour and 40 minutes. We had to change terminals and everything went smoothly and we were on board the next

Team	Equipment
Operators: YL2GM, YL1ZF, YL2KL	Transceivers: 3x Elecraft K3
Coordinator: Kaspars Pētersons	Power amplifiers: 2x SPE Expert 1.3K-FA, Juma PA1000
QSL manager: YL2GN	Antennas
Graphic designer: YL2KA	160/80/60/40/30m bands – 18m high vertical with RA6LBSapacity hat
Webmaster: YL2VW	20-10m bands – Folding antenna
Technical advisors: YL3DW	20-10m bands - Spiderbeam
	40/30m bands - 3 phased vertical
Generator: Honda EU20i	Beverages for receiving

flight on an Airbus A330 to Malabo. The total travel time was around 8 hours with an in-between stop in Cameroon for refueling and disembarking some passengers as they reached their destination. Onwards to Malabo. The flight was only 45 minutes and their were only about 20 passengers left on the very big airliner. We arrived in Malabo airport around 7 PM local time. We passed security control without any questions, however, while waiting by the baggage belt, we found out that that one of our suitcases and one of the generators was missing. We filled out all necessary paper work at lost and found and we were assured that our things should arrive with tomorrow's flight. Customs representatives were very kind and it was enough to let us through just by showing our papers.

<u>Day 2 – Tuesday. 27th of February</u> - In the morning, I went to the Ministry of Telecommunications and new technologies to acquire the licenses. I already knew where to go and whom to approach. Director kindly met with me and promised to arrange the permits as soon as possible. He also told me what more paper work I have to prepare as the regulations have changed since the last time I was here. We agreed on meeting next morning 11AM in his office. Our local friend Jesus helped us with the enquiry about our next flights to Annobon and he booked the tickets for us. Travel Company promised that the flight would be on next Tuesday, on March 6. This looked great but as we know (Cont. on Next Page)

## Republic of Equatorial Guinea — Annobon and Bioko (cont.)

from our experience- these flights tend to change frequently so we can only be sure when we will be on the plane. In the evening, we went back to the airport to find out about our missing luggage. Suitcase was there, but the generator

was not. We turned to Air France office for some more information, but they said we should ask this to Riga Airport. In the end, it turned out that the generator was not loaded in Riga due to a smell of gasoline, so we remained with just one generator.

<u>Day 3 – Wednesday. 28th of February</u> - Next day we found out that the Minister has changed, with him also the regulation for applying for the licenses have changed. Locals kindly help us to solve these questions and we receive the license without much problems.

In the afternoon, when we returned to our hotel in Trocadero, we set up two verticals and started to operate. First QSO was on 30 meters with S52GP.





<u>Day 4 – Thursday. 1st of March</u> - From the very morning we started to set up all other antennas – Spiderbeam, Folding antena, 18m vertical for 160/80/40/30m with RA6LBS capacity hat and 2 phased verticals for 40m.

<u>Day 4 - 11</u> - We actively worked on air with two stations. Every second day I would go to the Malabo internet café to upload QSOs to Clublog. On the 7th of March, while on the way to upload next logs, I was waiting for a bus and taking some pictures of the local market, when suddenly my "adventures" began. A police officer approached me and asked if I had permission to take pictures, which of course I didn't. Turns out that tourists are not allowed to take photos unless they have bought special per-

mission for this. Who could imagine that tourists have to buy such a permission to take pictures in the city? Anyway, the police officer took me to the station where I had to wait for several hours while the police chief arrived. They took my phone and started to check every picture I had taken and asked me numerous trivial questions. They finally allowed me to make a phone call to my contact in the Ministry, then, after a brief discussion, everything was sorted out. They set a payment for tourist permission to take pictures and I could go. I asked the police chief if I can take pictures in tomorrow's manifestation in honor of women's day; he said – "Ok, but only if I go together with him!" After this incident I did not want to go to Malabo again; I`d better stayed in Trocadero and worked on the air. Next day we were visited by delegation of six people. We demonstrated to them how we work and told about amateur radio. They are favorable to us and did not have any claims against our work.

<u>Day 12 – Friday. 9th of March</u> - In the morning, we make our last QSO with EA3QP on 40m CW with this finishing our work from Trocadero hotel. In total we made 30 323 QSOs. After breakfast, we take down all remaining antennas and hardware and move to a hotel in Malabo.

<u>Day 13 – Saturday. 10th of March</u> - In the airport we had to wait for our flight to Annobon because it's delayed due to bad weather conditions. In addition, we get invited to the office of airport chief to explain who we are and what are we carrying. It takes around one hour and without a call to my friend in Ministry, we could not proceed.

(cont. on next page)



PAGE 4 THE EXCHANGE

## Republic of Equatorial Guinea — Annobon and Bioko (cont.)

Around 4PM we land in Annobon airport. We rented the same house that we had rented during our previous expedition. In the evening, we set up Folding antenna and vertical and during the night we made first 1500 QSOs!

<u>Day 14 – Sunday. 11th of March</u> - We check the surroundings and realize that in the previously planned place for RA6LBS vertical antenna has grown 1 meter long grass, so we hired local farmers who cut the grass and we could proceed.

<u>Day 15 – Monday. 12th of March - Today we visited the Governor of the island.</u> We have already met once before during our previous expedition. He kindly welcomed us and invited us to visit the island again in future.

Later we set up RA6LBS vertical and Spiderbeam. We also set up our second position that is approximately 40m away in another house. Local electricity is turned off twice a day, from 6AM – 10AM and 4PM – 7PM



and the grid voltage is  $\sim$ 160V. SPE Expert PA works perfectly in these power conditions, however it is not the same with Juma PA1000. During the day as power source we use our Honda 20i generator. This is the only 2kW generator that ensures our requirements and weights only 23kg. This generator ensures the power for one station and for the second position to work we have to reduce the PA power. In the evening, our neighbor drops by and says that we use all the electricity and because of that his fridge cannot function normally and all his fish is going bad. We have to

find a compromise so we give him grid autotransformer that ensures 220V



YL1ZF-Kaspars

 $\underline{\text{Day 19 - Friday, 16th of March}}$  - Beverage antenna gave good results and we made 150 JA QSOs on 80m.

<u>Day 20 – Saturday, 17th of March</u> - During the day we tuned the 3,5 SSB sub band RA6LBS vertical on 60m and during night we made 230 QSOs on 60m. Kaspars was taking part in RDXC with 3COW. That was a surprise for many operators when they heard our call and in total we made 900 QSOs in this contest. We could not get access to internet, so we could not upload the logs. We had to wait until after the expedition.



Cirto VI OKI

<u>Day 23 – Tuesday, 20th of March</u> - During the last 24 hours we have set our expedition record - 5748 QSOs. During the night, we worked also on SSB 80m and 160m.

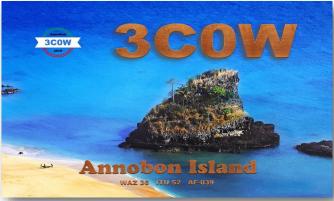
<u>Day 26 – Friday, 23rd of March</u> - Tomorrow is Saturday and our flight back to Malabo, so for today we have planned "Hams with hearts" activities. In total, with the donations left over from previous 3COL/3C1L expedition and the donations made by amateurs during this expedition, we together have raised 1422 EUR. Our local friend Eduardo arrived from Malabo with the first package - school bags, things. We also managed to buy some more presents in the local shop on the island, even though, it is the only shop on the island and the supplies there are very limited. We still had 980 EUR so we decided for the remaining money to buy stationary goods

when we will be in Malabo and ship them to island with the help of our

friends. At 1PM we met with the children and teachers in the local school. Children's songs and smiling faces was gratitude for our support. Common photos on the memory of the meeting. After that, we had a small excursion on the island and some more common photos on the memory of our wonderful journey. (Cont. on next Page)

## Republic of Equatorial Guinea — Annobon and Bioko (cont.)





<u>Day 27 – Saturday, 24th of March</u> - In the morning, we make our last QSO on 40m. In total from Annobon during this expedition we have made 54 267 QSOs. We take down all remaining antennas and equipment. At 2 PM our friends drive us to the airport. During security check we are forbidden to take the generator with us on the plane, so we have to leave it with our friend Eduardo for our next expeditions.

<u>Day 28-30</u> - In Malabo, together with Alida and her sister, we visit shops to buy school things for "Hams with hearts" program. We pack them and ship to Annobon by sea, as by air it is not possible due to its weight. Our friends Eduardo and Alida finalized this action by giving these presents to school and children of Annobon.

Thanks to everybody who supported "Hams with hearts" program and helped the children of Annobon.

**CONCLUSION** - In total we established 84 590 QSOs. We hope that many amateurs were very happy that they were able to make QSOs with 3C for one more time in case they missed 3COL/3C1L in 2017.

Thanks to all our supporters and thank you for reading this story. 73, Yuris/YL2GM/, Kas/YL1ZF/, Girts/YL2KL/ - You can find more information on expedition webpage: http://www.lral.lv/3c0w\_3c3w/



PAGE 6 THE EXCHANGE

# 60 Meters—The Channel Band By Joe, W8GEX

It is now fall and the contest season in full swing. With shorter days and longer nights, the lower bands should be better.

This is a good time to check your 60m antennas and if you don't have one, maybe it's time to build one. I have a vertical and also an inverted vee. Both work very well for me. I now have 167 countries worked on 60m with these two antennas.

To supplement my transmit antennas, I have six beverages. While most are only four feet high, my oldest one is eight feet high. The lower beverages have a lower noise level. One would think that the deer would take down the antennas that are four feet high, but that's not the case. They go under them or jump over them.

I find that getting on the band a little before our sunset is a good time to work some DX and I have been able to work many stations during our grayline. I get up early every morning, turn my radio on, and during the morning sunrise try to listen and work the Pacific region. It is a good time for me to call CQ ZL's. On FT8 I'll send "ZL 5.362 W8GEX". New Zealand cannot work on our FT8 freq of 5.357 so I split. I worked Tony 3D2AG on a regular basis this past summer.

This radio season will be a big challenge with no or very few sunspots, and they predict this could last for years and even thru the next sunspot cycle of 11 years. I guess the lower bands will be better than the higher ones.

As a reminder, the US channels are:

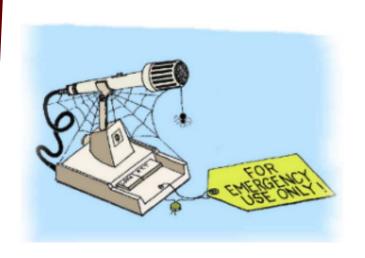


Most countries will have one or two freqs that will match up with the USA channels. The FT8 channel of 5.357 is common with most. I guess that is one reason that channel is so popular. Plus with lower propagation these days, everybody is there.

USB	CW
5.403.5	5.405
5.371.5	5.373
5.357.0	5.358.5
5.346.5	5.348.0
5.330.0	5.332.0

For some countries like Spain and New Zealand, you must split in order to work them.

Enjoy this winter DX season on your favorite band and try 60 meters if you haven't yet.



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## An Introduction to Operating on 160m

Carl Luetzelschwab K9LA k9la@arrl.net

(Reprinted with permission of K9LA—This article originally appeared in the November 2006 issues of CQ)



Operating on 160 meters has always been a challenge. Two of the biggest challenges are the physical size of efficient antennas and noise when receiving. The purpose of this article is to provide appropriate information to address these two challenges, along with general information about other issues necessary to get your feet wet on topband (also known as the Gentleman's Band).

#### A Short History of 160m

The 160m band has been around for a long time. In the First Edition of the Radio Amateurs Handbook (1926, published by the ARRL), Amateurs had an allocation from 150 meters to 200 meters in wavelength (that is 2 MHz down to 1.5 MHz). Due to AM broadcast stations and other services, the 160m band was eventually narrowed up to 1.8  $\tilde{\rm n}$  2.0 MHz.

Because of LORAN issues (LORAN is a radio location service), there have been power and frequency restrictions over the years. For example, during my early years in Amateur Radio in northwest Indiana (early 1960s) I could only operate from 1800 to 1825 KHz with a maximum power of 200 W during the day and 50 W during the night. There were similar restrictions in other areas of the country.

Nowadays those of us in the US can operate anywhere from 1.8 to 2.0 MHz at up to 1500 W PEP output. Of course you should always strive to use the minimum power to make the QSO.

The first order of business for an introduction to 160m is to look at the band plan for 160m  $\tilde{n}$  what frequencies should we use for CW, what frequencies should we use for SSB, what frequencies should we use for AM, etc.

#### 160m Band Plan

Unlike our HF bands, the FCC (Federal Communications Commission) does not regulate 160m with respect to band segmentation by mode. Legally any mode can operate anywhere. But obviously this could cause (and has caused) conflicts.

To impart order to this issue, a Gentleman's Agreement band plan was developed by an ARRL Ad Hoc committee with input from users of 160m. The recommended band plan is shown in Table 1. You are strongly encouraged to adhere to this plan. A little coop-

1.800 - 2.000	CW
1.800 - 1.810	Digital Modes
1.810	CW QRP
1.843-2.000	SSB, SSTV & other wideband modes
1.910	SSB QRP
1.995 - 2.000	Experimental
1.999 - 2.000	Beacons

eration among fellow Amateurs can go a long way!

With the band plan outlined, a couple comments on where common activities take place is in order. Rag chewing on 160m starts around 1.843 MHz and extends all the way up to 2.0 MHz. There is a lot of spectrum above 1.9 MHz that is relatively lightly used, so you might want to consider moving up there for your rag chewing activities. AM aficionados hang out around 1.885 MHz. and itis an enjoyable side hobby to fix up old radios and put them on the air (I can vouch for this through my efforts with my Viking Ranger II and Drake 2B with a homebrew converter). Finally, most DXing on 160m outside of contests is done on CW in the lower 35 KHz or so of the band. If you want to work DX on 160m, knowing code is almost a must due to CW is inherent weak signal advantage over SSB and the CW bandwidth letting in less noise (more on this latter aspect in a bit).

Since LSB (lower side band) is normally used on 160m, note that 1.843 MHz refers to the carrier frequency for LSB. The intent here is to keep the side bands at 1.840 MHz and above (since the bandwidth of an SSB signal is about 3 KHz). And there is no segmen-

tation by license class ñ General, Advanced, and Extra class licenses have equal access to the entire band.

(Cont. on Next Page)



For Biweekly DX Summaries, visit www.dx-world.net

PAGE 8 THE EXCHANGE

## An Introduction to Operating on 160m (cont.)

#### When Is 160m Good?

Now that we know where we should operate in the 160m band, the next issue to address is when should we operate, that is, when is 160m good?

If your interest is only for local QSOs (rag chewing, nets, etc), then 160m is good anytime, day or night, summer or winter. And where we are in a solar cycle won't matter, either.

If your interest in 160m is DXing, then there are times, seasons, and phases of a sunspot cycle when 160m is best. Due to excessive daytime D region absorption, 160m is useful for DXing when the path is in darkness or very near darkness. Because of geomagnetic field activity considerations, 160m is best during the winter months and from solar minimum to a couple years thereafter. The latter portion of the previous sentence says now is the time to get on 160m if you're pursuing DXCC or WAZ. We are at solar minimum between Cycles 23 and 24, and the next couple of winter seasons (2006-2007, 2007-2008, and possibly 2008-2009) should offer excellent opportunities for the DX minded.

#### Simple Transmitting Antennas

As stated in the introduction to this article, the first biggest challenge for operating on 160m is the physical size of an efficient transmitting antenna. The length of a half wavelength dipole at 1.85 MHz is approximately 253 feet (each side would be about 127 feet). That's quite a bit of a horizontal span for those on small lots.

An easy way to overcome this horizontal span requirement is to make the dipole into an inverted-vee. For example, the top of a 50 foot tower or 50 foot support could be used as the center point for the inverted-vee. The sloping portion of each side of the inverted-vee could be approximately 70 feet, with the remaining 57 feet running horizontal to the ground and even snaked around a bit to fit the lot. Figure 1 shows this configuration. This would make an excellent antenna for local

activity on 160m (but don't be surprised if you work DX with it the ionosphere can be the great equalizer among different stations).

If your interest is DXing, generally you'll want an antenna that puts more of its energy at the lower elevation angles. Perhaps the simplest antenna to fit this bill is the inverted-L. The total radiator length needed would only be about 127 feet, as this is essentially a vertical antenna operated against ground. A tree could be used to support the vertical portion of the inverted-L, with the remaining length (127 feet minus the vertical portion) sloping down to a convenient support. Figure 2 shows this configuration using a tree for the support. Either buried radials, radials lying on the ground, or elevated

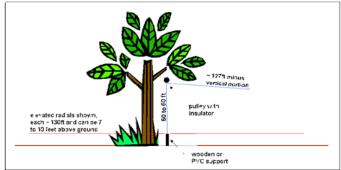


Figure 2 Inverted-L Installation

radials could be used to provide the ground image for this antenna.

Figure 2 is what I use on 160m, with a pulley in a nice tall tree anchoring the vertical portion and six elevated radials at about 7 feet to keep the deer from running into them.

(Cont. on Next Page)

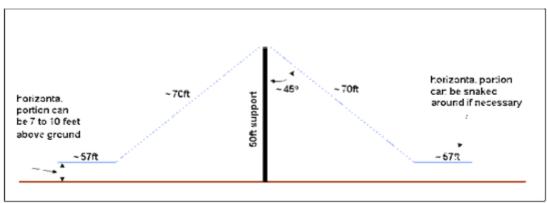


Figure 1 Inverted-Vee Installation

## An Introduction to Operating on 160m (cont.)

#### Noise

The second biggest challenge noted in the opening paragraph (mostly affecting those interested in DXing) is noise and is noise and its impact on the ability to hear weak signals. There are two sources of noise that make receiving on 160m difficult: man-made noise (machinery, appliances, lights, and so forth) and atmospheric noise (static from lightning discharges propagating into your QTH). Figure 3 shows the magnitude of the noise problem (from data in the International Telecommunications Union document Rec. ITU-R P.372-7).

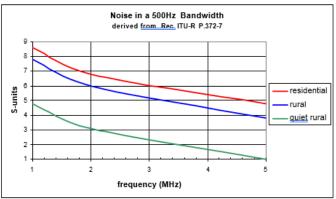


Figure 3 Expected Noise Levels

The three curves in Figure 3 are the expected noise from a short monopole antenna in a CW bandwidth (500Hz) in terms of S-units for three noise environments: residential, rural, and quiet rural. This plot should be used as a ballpark guideline, as your mileage may vary according to your specific local conditions. I would expect the noise received by the inverted -L in Figure 2 to roughly agree with the short monopole data in Figure 3, with the inverted-vee of Figure 1 maybe a bit better due to some directivity (see the next section). For the data in Figure 3, I assumed S9 was -73 dBm (50 microvolts) and an S- unit was 5 dB (based on my measurements, this is typical of current receivers).

In a residential area, the expected noise on 160m in a CW bandwidth is around S7. Wow! Even moving to a rural area only knocks this down to S6. Heading out into the country puts the noise at S3. That S3 value is the level of noise in a CW bandwidth on my OMNI VI Plus using my inverted-L.

The S3 value doesn't sound like much, but remember that the noise floor of a modern receiver is around -130 dBm. Using a signal generator, the S3 value on my OMNI VI translates to about -103 dBm. Thus I am giving up almost 30 dB of hear-ability, which is the difference between my external noise level and

my receiver's noise floor when using my inverted-L for receive.

Be aware that the data in Figure 3 assumes you don't have a particularly troublesome local man-made noise source that masks everything else (for example, a noisy utility line). If you do, then you have your work cut out to eliminate it. On a personal note, the most interesting noise source live had to find and resolve was an electric blanket used by our neighbors to keep their cat warm.

#### Simple Receiving Antennas

When you first start out on 160m, you'll probably use your transmit antenna for receive. As you progress with your 160m activities, you may need to work weaker signals that are at or even below the noise level resulting from using your transmit antenna.

This is where low-noise receiving antennas come into play. Regardless of the category of the low-noise antenna, they all work on the same principle  $\tilde{n}$  increase the directivity of the antenna (make front-to-back and front-to-side ratios larger) to reduce the total amount of noise being received from around the compass. This assumes the arriving noise is not a localized source as mentioned in the previous section. And if there is a noise source in the direction you want to receive, you have a real problem.

The improvement in hear-ability for a given low-noise receiving antenna will generally follow the narrowness of the pattern  $\tilde{n}$  a narrower pattern will let less noise into your receiver and lower your noise level, and thus will thus allow you to hear closer to your receiver's noise floor. From this consideration, we can make a first-order list of how effective some of the common low-noise receiving antennas will be. In order of least effective to most effective, they are:

- Short Beverage (80m long)
- ♦ Elongated terminated loops (EWE, Flag, K9AY, etc
- Standard Beverage (160m long)
- ♦ 4-Square (quarter wavelength spacing)
- Long Beverage (300m long)

(Cont. on Next Page)

PAGE 10 THE EXCHANGE

## An Introduction to Operating on 160m (cont.)

Remember that new layers of DX may be heard with noise reductions of as little as 3 dB. So donít rule out the antennas in the first two categories. Even though they are small, they will probably fit on almost any lot. And they might just make the difference for you in making a QSO.

If your only problem is that of a troublesome localized noise source mentioned earlier that defies elimination, consider using a small loop antenna to null out that direction.

#### **Propagation and Predictions**

If we look at worldwide electron densities, we'll see that the ionosphere always has enough ionization to refract 160m back to Earth for multi-hop propagation ñ even during the dead of night at solar minimum. Thus the problem on 160m is not with the MUF (maximum usable frequency) ñ itis with the amount of absorption and the resulting signal strength. This was the basic premise mentioned previously in the "When Is 160m Good?" section due to absorption, the best place for 160m RF is in the dark ionosphere.

Now if you've used propagation predictions on our HF bands, you've probably noticed that most of them do not include 160m. There is a very good reason for this is because of the impact of the Earth's magnetic field on three basic propagation parameters. With 160m being so close to the electron gyro-frequency, the magnitude of the magnetic field and the direction of propagation with respect to the direction of the magnetic field modify the amount of absorption incurred, the amount of refraction incurred, and the polarization of the wave(s). This can get very complicated very quickly over long paths, and the proper way to address this rigorously is with full-blown ray tracing software.

Over the years there have been several studies by 160m enthusiasts to come up with a simple method to predict whether 160m is going to be good on a given night. These studies have usually been based on solar flux and K or A indices. These efforts have not met with much success, as they do not consider all the variables that appear to be involved with propagation on 160m ñ especially events that happen in the lower ionosphere to enable ducting mechanisms and reduce absorption. In general a quiet geomagnetic field seems to be a requisite, but it doesn't appear to be the only requisite.

This all comes down to two simple pieces of advice with respect to propagation on 160m:

1. Use the excellent mapping feature in many of our propagation prediction programs to determine the best times for 160m propagation over the desired path with respect to darkness along the path. Pay par-

ticular attention to sunrise and sunset times at your QTH and at the other end of the path for possible signal strength enhancements.

Get on the band to check it out in real-time.
 Watching PackerCluster spots also helps to get a real-time assessment.

#### Worldwide Allocations

If your goal on 160m is to work DX, then it would be helpful to know where all the DX entities can operate on 160m. An up-to-date list of these allocations can be found at www.qsl.net/n1eu/topband/160FreqAlloc.xls.

#### Summary

As mentioned several times in this article, 160m is also known as the Gentlemanís Band. The current users of 160m would like it to stay that way. So regardless of your operating preference (rag chewer, DXer, contester, digital enthusiast, QRPer, or whatever) please strive to uphold the reputation of 160m.

The advice and solutions offered in this article probably wonít get you to the Top of the DXCC Honor Roll on 160m. But they will allow you to sample the challenge and adventure of 160m. Where you go from there is up to you.

#### 160m Tips

The following is a list of tips, slanted toward the DX aspect of operation on 160mn, to help you enjoy your experience on 160m.

#### Station issues

- Put out as much wire as possible for your transmit antenna.
- Work with the utility company and/or neighbors to fix noise sources Further improve your ability to hear by using low-noise receive antennas

#### Operating issues

- ♦ Listen, listen, listen
- Donít call incessantly in a DX pile-up
- Be courteous and uphold the reputation of 160m as the Gentlemanis Band

#### **Propagation issues**

- Know when the desired path is in or very near darkness Pay particular attention to sunrise and sunset times
- Donít shy away from elevated K indices ñ there may be skewed paths Check paths to the southwest at your sunrise and southeast at your sunset

## Featured Station: Rick—K8WWA





Send me your Station Pics to Be Featured!

Thanks Rick!



PAGE 12 THE EXCHANGE

## Looking for Tower Zoning Approval?

This information from John, K2SY, should help! (K2SY@fairpoint.net)

There was a lot of discussion at the SWODXA meeting I found some resources that wireless2.fcc.gov/UlsApp/AsrSearch/ might be helpful to other amateurs who need to receive zoning approval for antenna installations.

In our township, even though we live in an agricultural district, I had to obtain a conditional use permit and a height variance to install a tower and antenna system our property.

Shortly before starting the application process and meeting with our zoning inspector, I happened to meet Scott Yonally, N8SY, the ARRL Ohio Section Manager at the Germantown Hamfest. Scott gave me a brochure, "Ohio's Amateur Radio Antenna Law", which describes the state law and contains other information that can be helpful when applying for a zoning permit. I found the following resources very helpful when preparing my zoning applications.

The ARRL website has information on antenna zoning. There is also a very good report "Antenna Height and Communication Effectiveness" that explains the importance of antenna height. I included the executive summary of this report with my application to help the zoning people understand the reason why I was requesting a variance to the height limitation in the zoning. The ARRL website also has information about RF Exposure limits, the Volunteer Counsel and Consulting Engineer Programs available for help with zoning issues.

The actual state law pertaining to amateur radio, Ohio Revised Code 5502.031 Regulation of amateur radio service communications and structures can be found online at codes.ohio.gov/orc/5502.031. I included a copy of this state law with my zoning applications.

At the FCC website, <a href="http://">http://</a> towairSearch.jsp you can input information about your location and height of your antenna system to determine if your antenna system require registration. I included a copy of the results from this website with my zoning applications.

The brochure Scott, N8SY, gave me, "Ohio's Amateur Radio Antenna Law", can be found at <a href="http://arrlohio.org">http://arrlohio.org</a>. I included a copy of the brochure with my applications.

I would encourage anyone who needs help getting zoning approval for an antenna system to contact Scott. He can be a valuable asset in getting a zoning application approved. In my case, the zoning inspector actually contacted Scott regarding my application and I know his input was helpful getting my applications approved.





#### DXers have a choice!

Get a free two week trial of The Daily DX and The Weekly DX and decide for yourself which one best fits your needs for informing you of all the DX news! Send an email to bernie@dailydx.com or go to www.dailydx.com.

The Daily DX 3025 Hobbs Road Glenwood, Maryland 21738 Phone: 410-489-6518

## The Perils of Being "DX"

Several of our members have been in situations that would make us nervous. Currently, LA7GIA, Ken, is in just such a situation as TT8KO

#### OCTOBER 10, 2018

SECURITY POLICE SHUT DOWN THE STATION THIS EVENING. TT8KO IS TEMPORARY QRT UNTIL TOMORROW 10 UTC WHEN THEY WILL DECIDE IF I CAN CONTINUE. I THINK THIS IS TEMPORARY UNTIL ALL LICENSE AND EQUIPMENT ADMISSION DOCUMENTS HAVE BEEN REVIEWED BY SECURITY POLICE TOGETHER WITH MINISTRY, FOLLOWED BY A CW DEMO. SO FAR 2150 QS IN LOG FIRST 24 HOURS. ALL ANTENNAS HAVE BEEN INSTALLED EXCEPT 160M VERTICAL.

#### OCTOBER 11, 2018

THE INSPECTION OF THE EQUIPMENT BY THE NATIONAL SECURITY POLICE HAS BEEN POSTPONED UNTIL TOMORROW. NO TIME GIVEN. EQUIPMENT HAS BEEN DISCONNECTED. THE HEAD OF THE POLICE HIMSELF IS TRAVELLING WITH THE PRESIDENT, AND WHEN THEY RETURN FROM ABROAD TOMORROW, THE HEAD OF POLICE WILL CHECK THE EQUIPMENT PERSONALLY WITH HIS TECHNICIANS. ALL PAPERS ARE OK AND ISSUED BY MINISTRY. APART FROM THAT, ALL IS OK HERE. UNTIL THEN I CATCH UP WITH SOME SLEEP, IT WAS A VERY INTENSE FIRST 24H COMPLETING THE INSTALL ATION AND BEING ON THE AIR SAME TIME WITH 2135 OS THE

THEN I CATCH UP WITH SOME SLEEP, IT WAS A VERY INTENSE FIRST 24H COMPLETING THE INSTALLATION AND BEING ON THE AIR SAME TIME WITH 2135 QS. THE HOTEL IS REALLY GREAT, FANTASTIC TAKE-OFF. THE BEVERAGE IS ALSO WORKING VERY WELL. YESTERDAY THE MOSLEY BEAM FAILED, BUT I REPLACED ONE INDUCTOR THIS MORNING. I WAS RUNNING ON THE 40M DIPOLE ON 15M LAST 30 MIN YESTERDAY. FANTASTIC SIGNALS FROM NA ON 15 AND 40M! UNTIL THEN THE LOG FOR THE FIRST 24H HAS BEEN UPLOADED TO CLUB LOG.

#### OCTOBER 12, 2018 @ 12:45z

WAITING FOR THE PRESIDENT OF REPUBLIC OF TCHAD (IDRISS DEBY) TO RETURN TO THE COUNTRY AT 15:00 UTC TODAY. AFTER THAT THE CHIEF OF NATIONAL SECURITY POLICE, WHO IS WITH THE PRESIDENT, WILL PERSONALLY CHECK THE RADIO HIMSELF. IT'S NO JOKE. THEY SAY I PROBABLY CAN CONTINUE TODAY, BUT NO PROMISES. IF THIS DELAY CONTINUES EVEN MORE I WILL RETURN HOME.

#### OCTOBER 13, 2018 @ 19:10z

MANANA MANANA. I HAVE BEEN THROUGH 2 INTERROGATIONS BY THE SECURITY POLICE. MORE ABOUT THAT LATER. MY GEAR HAS BEEN DISCONNECTED. THE ANTENNAS ON THE ROOF ARE LOCKED DOWN, I CANNOT ACCESS THEM EVEN FOR VISUAL INSPECTION OR MAINTENANCE. I AM NOT ALLOWED TO TOUCH ANYTHING. AND I MEAN ANYTHING. WHEN I DID IT WAS REPORTED. EVERYTHING HAS TO REMAIN IN THE SAME POSITION, NO ALTERATIONS ARE ACCEPTED, NOT EVEN TO TIGHTEN A LOOSE NUT. THE BEAM FAILED ONCE DURING THE FIRST 24 HOURS WHICH I MANAGED TO FIX WITH A SPARE PART. FROM GROUND LEVEL I CAN NOW SEE THE REFLECTOR ELEMENT IS OUT OF POSITION, AS YESTERDAY WE HAD A BRIEF STORM.

THIS MORNING I ALSO SAW MY RED BEVERAGE WIRE BEING HIT BY APPARENTLY A COLOUR BLIND BIRD DURING LANDING – VERY POOR LANDING SKILL! THE SECURITY POLICE HAVE – THROUGH THEIR INVESTIGATION – CONCLUDED THAT ALL MY DOCUMENTS ARE OK – AND I HAVE DONE ALL CORRECTLY. HOWEVER, WHAT NOW CAUSES THE DELAY IS THE FACT THAT ARCEP, WHO ISSUED ALL DOCUMENTS, DID NOT INFORM THE SECURITY POLICE. THE POLICE DO NOT ISSUE AUTHORIZATIONS, BUT SUPERVISE THE NATIONAL SECURITY. THE POLICE ARE NOW AFTER ARCEP, NOT ME. STILL, EVEN AFTER LOTS OF MEETINGS, BELIEVE ME, I HAVE TRIED EVERYTHING, THEY CAN'T SAY WHEN THEY WILL INFORM ME.

SO, WHILE WAITING FOR THE POLICE – THERE IS ABSOLUTELY NOTHING MORE TO BE DONE. I MIGHT GET A PHONE CALL IN 5 MIN OR NEVER. I DON'T KNOW. IF THERE IS NO DECISION BY THE POLICE VERY SOON – I WILL RETURN HOME. THANKS TO EVERYONE FOR SUPPORTING ME – MY SAFETY HERE IS NO PROBLEM!

(cont. on Page 18)





PAGE 14 THE EXCHANGE

## **SWODXA Members in Action**

Not everything we do is on the air. Harry, AC8G, tells about a public service event

I am a member of the MOUND AMATEUR RADIO ASSOCIATION (MARA) based in Miamisburg. During public service and other events last year, the Mayor of Miamisburg asked me 3 or 4 times if the club would help during the upcoming Bicentennial celebration (200) in 2018. Not being an officer I would answer something like, "I certainly think so". I assumed others would be asked. SWODXA & MARA members W8WGT, K2SY, N2GSB and myself (AC8G)

had parade assignments.

At a meeting in the fall of 2017 it was announced the club needed someone to be club representative to a city committee for the celebration. An appointed member had a health situation develop such that he could not continue (the usual club officers who would do this had other commitments for scheduled monthly dates). After a little thought, I volunteered. As our participation was related to two parades, I felt my extensive past parade experience would help. I also agreed to be coordinator of club

participation for the events.

Little did I know the committee was some 50 civic leaders. I have been a resident of adjoining Miami township, but other than time our children were in school I basically had little contact in town (my wife did however through many years teaching in the school system). I don't think I knew any of the committee. Shortly before my first meeting I had formally met the Mayor. Efforts to contact the parade marshals failed due to one with illness, so I had to go it alone. I did get contact with the volunteer co- chairman and meet him minutes before a club meeting I invited him to talk to the club.

I asked him later about being able to meet with parade marshals. As a result he arranged a meeting at the city offices. To my surprise he arranged for the Mayor, police chief, fire district rep, several city employ-ees, one of co-chair for parade. When I found about this I asked MARA officers to also attend if available and several did. Lots of subjects were discussed and at least I got to meet a co-marshal. I did get to present my initial cover-

age plan as in next paragraph.

Before the meeting I had used google earth to review the parade route and measured it well over one mile (far longer than the usual local parades) with planned positions. I had estimated MARA head count needing 16 which I felt we could support based on staffing of other events I had assisted on.

Now a little on parades. The 200 event started with a parade on a Saturday with many events including a carnival during the week and ended up with another parade on the following Saturday with Shrine units from 5 or more different cities added. The parade route was on the main East/West state route cutting off traffic flow from the nearby interstate to points West. It also had impact on North/South flow. Both had detours that were complex.

A normal local parade would have 40 to 50 units. The two 200 parades had around 250 units plus the Shrine units on the second weekend.

To start the staffing, I decided to send all club members an email asking a reply if likely to do one or both parades or not available. As an incentive, I would likely assign a selected position on a first in reply basis.

This worked well as most indicated 'any where'

and the specific requests were very acceptable. Some of our other events request two to be assigned certain location. I had to split one couple as we did not have that luxury in this event. In the first parade one individual from the Germantown radio club assisted, and two other helped in the second event. Over all 33 different amateurs helped.

The parade route was adjusted several

times. First time added some more length, and then later shorten to accommodate some entry needs. Because of space needs two staging areas were initially planned but based on entries expanded to four used in the first parade and a fifth in the second parade for the Shrine units. We were called on to insure move ups were timely. One of the two main staging areas was several blocks away from start. The Shrine units were a mile away. We did use a mobile command post. Being short one op for the first units about three blocks from start, the command center moved to check in advance to see all was OK and timing set.

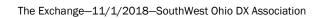
Our staffing included two ops at each of the large staging areas, an op riding in police command vehicle, special bus service and link to report late minute changes of parade units from staging. Each intersection on the route had an op assigned. Both of the parade marshals were assigned ops. The mayor and co-chairman declined as they would be in parade.

The 200 committee provided us with golf carts. One was for our parade control. One was for our general assignment and another one was used by our op who handled the link with TV coverage and provide the mayor with transport before start of parade.

One of MARA's repeaters was used for our parade control. Staging areas used simplex frequencies. The parade marshals had ops with both control and simplex.

Only several minor problems happened. To help the dispersal at parade end several staging area ops went to the end to help avoid any units stopping that might cause a back up.

In addition the club obtained a special event call W8M that was used for the parade, field day on the 23rd and some 300 plus contacts on 20 meters including 17 Countries outside of field day.



## New Member Spotlight: W8MRL—Rob

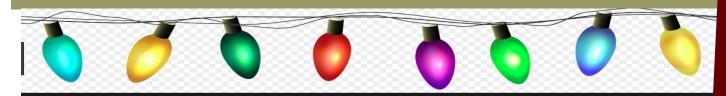
Back in 2011 I stumbled onto the fact the code requirement had been dropped and I immediately decided I would finally pursue an amateur radio license. I studied up and passed element 2 and 3. Being in the habit of studying I kept going and passed element 4 about 2 months later. Since then I've been very active not only on the air chasing DX and contesting, but also in various organizations such as Butler County Amateur Radio Association (BCARA), Queen City Emergency Net (QCEN) and the W4DXCC organizing team.

I live just north of Hamilton, Ohio. I have a modest station at home utilizing a fan dipole fed at 40', a 40/80 meter vertical and a small 6 meter yagi (actually awaiting a replacement as I lost the last one in a storm) teamed up with an Ameritron ALS-600 driven by an IC-7300.

My current adventure is pursuing the creation of an amateur radio mesh network in the Butler / Hamilton county area, while busily chasing DX!

I've met many SWODXA members over the past few years and attend the DX dinner each year. I hope to meet many more. 73!





## SWODXA 2018 Christmas Party

The SWODXA Christmas Party will be held on Monday, December 17th, at 6pm at the Spinning Fork Italian Restaurant, 2229 N. Verity Parkway, Middletown. SWODXA members and a guest (\$5 per person) are welcome.

SWODXA has the entire restaurant reserved. Signup Genius is available (link below-TX AB8YK) and you are encouraged to sign up so we can let the restaurant know how many to expect.

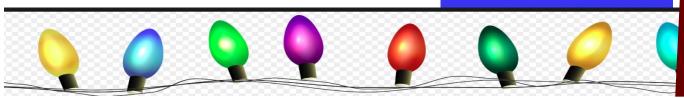
Adult beverages will be available - however they must be paid for by the individual. SWODXA will not be responsible for any alcohol sales. Again, this year we will be collecting money or unwrapped gifts for less fortunate children in the Fairfield Schools. Thank you in advance!

Mindi-kc8ckw@fuse.net

https://www.signupgenius.com/go/9040C4FA8AC2BA02-swodxa5



Before Christmas...



PAGE 16 THE EXCHANGE



## How Well do you Know your Club Members? (Answer on last page)

#### Who am I #1?

- ⇒ I was born in....West (by God) Virginia, or better question: I was born in a state 175 miles to the east.
- ⇒ My main occupation is/was... Field Engineer for a popular Cellular Company
- ⇒ My other hobbies include ..... Photography, Cooking, just plane ol' bothering other people, and Retired.... not necessarily in that order...
- ⇒ My spouses name is.... Shelia....and does hold her Ham Ticket
- ⇒ I do/don't have pets .... No pets.... I can make pets more disturbed than they all ready are....
- ⇒ Something that will surprise you about me.... Been Ham licensed sense 1968, the 10th grade. Novice WN8FQY...
- ⇒ Have held a Commercial Radio License sense 1967 and work the Sunday mornings AM radio shift. Completed all Commercial Licenses while in High School.... And worked at a local TV station. Got that job when I said to the Chief Engineer (I knew him) I'm getting my First Class Sheepskin. He said, while laughing, .... "Sure, and come down and see me, I'll give ya a job".... OK...Challenge ACCEPTED!! Three months later, I showed up.... put him on the spot.... got a job..... To my point of view... That was easy...
- ⇒ Previously, I lived in ... Many locations.... My 2nd favorite was Atlanta GA. And I could move back there anytime

#### Who am I #2?

- ⇒ I was born in.... December 1945 in Hollywood California at Cedars of Lebanon hospital
- ⇒ My main occupation was...Electrical engineer/IT manager
- ⇒ My other hobbies include Woodworking, Quadcopters and anything electronics
- ⇒ My spouses name was....Donna (deceased)
- ⇒ I do have a pet a calico cat named Butterscotch
- ⇒ Something that will surprise you about me: I use to compete in Motocross, Enduro and hill climbs, I rode a Yamaha 360 RT1.
- ⇒ Previously, I lived in ...El Paso, TX

## Announcement of New IOTA Groups at RSGB Convention 14 October 2018 Bernie McClenny, WeeklyDX, DailyDX

IOTA Management announced on 31 August 2018 on the IOTA website the five yearly review of the Directory list of IOTA groups. It had the intention of releasing a small number of additions at this year's RSGB Convention in Milton Keynes with a second tranche at Ham Radio Friedrichshafen in July 2019. IOTA Management is grateful to proposers of some 28 candidate groups received by the 1 October deadline. On Sunday 14 October IOTA General Manager Roger Balister, G3KMA announced the first tranche of 6 new groups at the RSGB Convention. They covered a Swedish/Finnish joint sovereignty island and groups in North America, Asia and Oceania. All new groups have provisional numbers. This means that they will need to be confirmed by an operation taking place after 14 October 2018 that meets the 1000 QSO and other normal validation requirements. Only after confirmation of the number will credit for past operations be considered.

The following 6 groups are added to the IOTA list as a first tranche of New Ones. A second tranche will be announced at Ham Radio Friedrichshafen 2019.

- 1. EU-192P SM/OH Kataja Island, Finland/Sweden (=Kataja) 65 41–65 43N 24 07–24 11E New 'split sovereignty island', located in the very north of the Gulf of Bothnia. Since the signing of a bilateral agreement in 1809 ground rise has caused the Swedish island Kataja and the smaller Finnish island Inakari to merge forming a larger island 2 km long. The border between Sweden and Finland now crosses the island, similar to Market Reef. No known previous amateur radio activity.
- 2. OC-297P FO Morane Atoll, Tuamotu Islands, French Polynesia (=Morane) 23 05S-23 15S 137 05-137 11W New 'remote island' group. This island, previously an outlier of the OC-113 Actaeon group, lies a distance of at least 153 km from Maria Est Island, the nearest island in the rest of the Tuamotus. No known previous amateur radio activity.
- 3. NA-249P KP3, 4 Puerto Rico's Coastal Islands, Puerto Rico (=Caja de Muertos, Culebra, Culebrita, Mona, Monito, Vieques) 17 48–18 40N 065 09–068 00W New 'coastal islands' group. Justified on the grounds that Puerto Rico is of a similar size to Corsica which has a coastal islands sub-group. Some 5 previous operations, 3 from Vieques, and 1 each from Culebra and Mona.
- 4. NA-250P KL Yakutat County Group, Coastal Groups, United States (Alaska) (=Fitzgerald, Gregson, Khantaak, Knight, Kriwoi, Krutoi, Otmeloi) 58 48–60 00N 137 56–141 00W New 'coastal islands' group, created by splitting the current NA-161 Skagway–Yakutat County group. It can be justified on the grounds that the qualifying islands in both groups are separated by at least 250 km and the two administrative counties can be easily split. No known previous amateur radio activity.
- 5. AS-205P ROX Bering Sea Coast East group, Koryanskiy Avtonomnyy Okrug, Russian Federation Asia (=Yoanna Bogoslova, Vasiliya Islands) 57 20–61 49N 168 00–174 30E New 'coastal islands' group, created by splitting the current AS-064 Bering Sea Coast group. Bogoslova Island lies 460 km away in a straight line from Verkhoturova Island, and 485 km away from Karaginskiy Island, the only two island counters of this group. The Vasiliya Islands are further away. This distance spread in a group is quite exceptional. We allowed AS-091 in a neighbouring area to be split in July 2014, the separation being 500 km or more. No known previous amateur radio activity.
- 6. AS-204P ROF Kuril'skiye Islands North, Sakhalinskaya Oblast', Russian Federation Asia (=Atlasov, Shumshu, Paramushir, Antsiferova, Makanrushi, Onekotan, Kharimkotan, Chirinkotan, Ekarma, Shiashkotan, Raikoke, Matua, Rasshua, Ushishir, Ketoy, Simushir) 46 40–51 00N 151 30–156 38E A new group, created by splitting AS-025 Kuril'skiye Islands into 2. The islands extend over a distance of more than 1200 km. Adverse comparisons are made with the Aleutian Island Chain and the Hawaiian Island Chain where there are many separate IOTA Groups. Some information sources specify North and South Kurils as sub-groups. Most activity has been from the South Group.

Roger Balister, G3KMA IOTA General Manager



I have just returned from the Big ham show in Tokyo. I'm sitting in the L A airport as I write this. Had a great time! I met Mr Icom, saw the new equipment coming out, spoke with Marti Lane, and with the winning team from the 2018 WRTC -73 Don N6jrl

Seen in Loveland, OH:



## The Perils of Being "DX" (cont.)

#### OCTOBER 17, 2018 @ 10:15z

THIS MORNING I CHANGED MY RETURN TICKET SO WILL LEAVE CHAD ON THURSDAY 18TH – WITHIN 24H FROM NOW. HOWEVER, I AM STILL NOT ALLOWED TO DISASSEMBLE THE EQUIPMENT UNTIL INSPECTION IS COMPLETED AS EVERYTHING MUST REMAIN AS IS. I INTEND TO TAKE MY ELECRAFT K3 RADIO AND ANTENNAS WITH ME, BUT I DON'T HAVE MORE INFO THAN THAT. WILL KEEP YOU UPDATED IF ANY CHANGE. THANKS FOR ALL KIND WORDS.

#### OCTOBER 18, 2018 @ 13:30z

LAST NIGHT I WAS INFORMED THAT A POLICE ORDER HAS BEEN ISSUED PREVENTING ME FROM LEAVING CHAD, EVEN W/O EQUIPMENT. STATUS OF MY RETURN FLIGHT HAS CHANGED TO "OPEN". THE NORWEGIAN EMBASSY AND FOREIGN MINISTRY IS NOW WORKING ON THE ISSUE. I GET MANY EMAILS EVERY DAY FROM DXERS AROUND THE WORLD WITH KIND WORDS – IT KEEPS THE SPIRIT UP – THANKS! HOTEL STAFF ALSO VERY SUPPORTIVE. STILL WAITING.

#### OCTOBER 23, 2018 @ 18:30z

THERE ISN'T MUCH PROGRESS. YESTERDAY'S MEETING WAS FAKE NEWS – IT NEVER HAPPENED. THE NORWEGIAN EMBASSY IS WORKING ON THE CASE. WE ARE STILL WAITING FOR THE CASE TO BE PROCESSED BY SECURITY POLICE. ALL MY ANTENNAS ARE STILL LOCKED DOWN. THE BEAM, DIPOLES AND BEVERAGE STILL UP. 80M ANTENNA FELL DOWN DURING A LOCAL TT PARTY, BUT IS NOW PACKED IN THE BAG. I AM SAFE AND IN THE HOTEL COMPOUND DOING ABSOLUTELY NOTHING. I REALLY APPRECIATE ALL EMAILS, I READ ALL OF THEM. ALSO THANKS TO EVERYBODY WHO SPEND 5 MIN OR EVEN HOURS CHATTING WITH ME, IT REALLY KEEPS THE SPIRIT UP.

#### OCTOBER 24, 2018 @ 12:15Z

I received the news that I can leave Chad immediately. I am not allowed to transmit. All antennas are to be taken down today before sunset because there is a Presidential event at the hotel tomorrow, and he will be here. Hotel is now packed with VIPs, police and military personnel. I am done with the sightseeing so my flight is booked for tomorrow.

PAGE 19 THE EXCHANGE

# An Interview with D44EE/OZ1BII—Henning Andreson

(mail@oz1bii.dk)

OZ1BII was active with call sign D44EE 19-24 February 2015 and 15-20 February 2018. I was fortunate enough to work him for several band slots. After a bit of research, I realized that I had worked Henning on Greenland, Malta and from his home QTH. Seemed like someone we needed to hear from and lucky for us, he agreed.

AJ8B: How did you first get interested in amateur radio? OZ1BII: As teenager I got a new friend and he used CB radio. Quickly I was interested in the use of antennas and the possibilities for contacts over a greater distance to our neighbor town 30km away. I was a bit fascinated of the electronics and within a year I had built power supply and got a "big" antenna on my roof. Now I talked with friends in most of Denmark and participated in local club with foxhunting and other radio activities alike. The year was 1972 and I was 18 year old.

1973 was the year when I joined the army and I was lucky to be picked for the Jutland Telegraph regiment. Here I was found ready for learning the Morse code and be a radio operator. The first 3 month it was only classroom training in Morse code and, of course the other military things. Then, the first time I get to listen in a HF radio, I was completely sold. It was a very whole new world for me to explore and every time I had a chance I turned on the radio. One of the other soldiers was a radio amateur with his own OZ call sign and he told me that it was possible to make this wonderful thing from my own home. 1974 I started the technical training and in 1975 I went to the final Test at the "Danish Post & Telegraph Service" (Now Danish Energy Agency). I got my C-License with medium technical skill and Morse at 60 wpm.

My HAM Radio career has started.

AJ8B: : When did you get on the air?

**OZ1BII:** My residential was in an old house on the top 3<sup>rd</sup> floor in the middle of Haderslev. The owner of the residential was a nice and friendly man and so were the neighbors, so I got permission to put up a W3DZZ dipole antenna. And I bought my first radio station with CW in mind. It was a Ten-Tec Argonaut 509 and I loved that radio from the very start. Both the receiver and transmitter did a really superb job and I especially was happy with the silent QSK. That fantastic pin-diode QSK was my reason to buy exactly that radio and I still own a Ten-Tec with super QSK but now its name is Eagle.

My very first QSO was December  $19^{th}$  at 12:30 UTC. 80m band was used and I had contact with DM4ZEB in former Eastern Germany. 30 minutes later I got in con-

tact with SP1GPI in Poland. My debut on the radio waves had happened!

AJ8B: Do you have a favorite band or mode?

**OZ1BII:** Do I have a favorite mode - sure - I only have one mode: CW. About favorite band I cannot tell. I only work on the HF bands and they often are so different in depth and width of the sound that they all can give me surprises. Some days the 40m is flat and there are no signals that can make a sound, only noise. Other days it is like an adventure giving me ZL with good signals and a completely big room with more clear signals around without interfering. Although I do have roofing filters, I seldom use them sharper than 450 Hz.

I think I had the greatest band-experience in 2012 when I was active from Greenland as XP2I. Early in the morning September the 14<sup>th</sup> I had some nice openings on 160m band inside the Aurora belt. I managed to work both EU and NA stations with band closing about every 10 mins for about 5 mins. In November I was back and made some more QSO's on 160m. My distance record was the contact with EY8MM Nodir in Dushanbe, Tajikistan more than 7200 kilometers away.

**AJ8B:** In reviewing your QRZ.com page, I see that you have been very successful using CW and in contests. Any secrets to your success?

**OZ1BII:** Here you see my two "secrets": rhythm and endurance

That is my keywords and I think that a contest QSO is all about rhythm - nothing more. It's nearly like working DX where you are just one of hundreds in a pileup. In DX-ing the keywords are rhythm and frequency. In contest you only have rhythm.

Endurance is what I use in the middle of the night when the QSO rate is not measurable, the sleep is pressing and the excuses for a break are many. In these long boring night-hours I sometimes go crazy and increase the Morse speed more and more until reaching my personal maximum speed with my paddle. Sometimes that is spreading some wake-up waves and more stations come in with fast speed. (cont. on next page)

## An Interview with D44EE/0Z1BII (cont.)

I get instantly awake and happy when a new multiplier suddenly comes out of the loudspeaker - so to say - out of the blue. That is worth waiting for.

**AJ8B**: What license levels do you have in Denmark and what do you hold?

**OZ1BII:** In Denmark we have only three levels of license nowadays. A, B and D.

The D license is for VHF/UHF only and power limit is 50 Watt. No technical skills and no home build radios on the frequencies.

The B license is for All bands and power limit is 100 Watt. Limited technical skills test. The A license is for all bands and power limit 1000 Watt. Extended technical skills test. CEPT. I am holding the A license including the CEPT.

**AJ8B**: Describe what you are currently using at your home station:

**OZ1BII:** I am living in an apartment in the middle of the old town with many restrictions for the buildings. So I do not have any chance to put up antenna here where I live. Another place in town, at my family, I have put up a simple 21 meter long wire attached to a 12 meter fiberglass mast and mounted as Inverted-L. An UNUN 9:1 is placed at the bottom feed point and I use it for all bands 160-10m with varying success.

In 2011 I started again with amateur radio and I bought a Ten-Tec Eagle. Also I had a great experience with Ten-Tec and I loved the little radio. In 2012 I gave myself another radio for Christmas, a 4 year old Elecraft K3. It was a jump up in quality and still the K3 is THE #1 radio for me.

AJ8B: When I first worked you, you were on a DXPedition to Cape Verde, D44EE. How/why did you choose D4?

**OZ1BII:** I am very interested in traveling and have always liked to explore other territories. Nowadays we all are so privileged to have the possibility for travelling all over the world and these possibilities I use as often as possible. When traveling with radio I mostly travel alone. It's cheaper, it's easier and it's more challenging.

In 2015 I wanted to seriously participate in the ARRL Int. DX Contest. So I looked for an exotic place like Azores islands, Canary islands and Madeira. After a lot of e-mail contacts to OH I EA CT amateurs, I found out the islands were all occupied with no places left for me. Cape Verde came to my mind and the D4C station is famous. I wrote to many different contacts on the islands and one of them told me to try contact Angelo D44BS who live in Praia, the Capital of Cape Verde.

Angelo was kindly inviting me to use his station for the contest and I prepared the journey with train, flight

and hotel. Angelo is a well-known radio amateur in Cape Verde for many years and is holding the D44BS call sign together with the D4CBS and D4A. Angelo is the beholder of the CQ 5-Band WAZ Award #1.

It turned out to be one of the most enjoyable and exciting tours and the contest score gave me  $8^{th}$  place in the world for DX stations (Lo Power All Band). I was using my Elecraft K3 100 Watt together with Angelo's 2elm 40m beam plus 3 elm 20-15-10m and 80m dipole.

**AJ8B**: Had you been on other DXPeditions? If so, how does D4 compare?

#### OZ1BII:

- XP2I Greenland five times 2012 and 2013 CQ WPX, SAC, LZ DX, CO WW
- ZF2EE Cayman Islands two times 2014 and 2015 -CQ WW and WAEDC
- 9H3EE Malta two times 2015 and 2018 CQ WW and CQ WPX
- ZA/OU2I Albania two times 2015 and 2017 CQ WPX and CQ WPX
- IT/OU2I Sicily one time 2014
- D44EE Cape Verde two times 2015 and 2018 -ARRL DX and ARRL DX

I cannot tell which one was best, but I can tell that Sicily (IT) was no good because I had no good antenna. And also Malta (9H) was a sad experience because the stormy weather on broke my fiberglass mast more times and I had an unusual high noise level so I could not hear stations calling me. Especially US stations were very disappointed because they could hear me but I did only hear noise.

D4 is very good for radio and the noise level in the middle of the capital was no problem. I had nearly constant pileup from US and that is where I really feel the Flow.

**AJ8B**: Where there any challenges to the D4 DXpedtion? **OZ1BII**: Because I visited Angelo and Zizi, and were using their shack and antennas, I had no problems whatsoever regarding operation. License was easy to get and I got an "EE" call sign that I like best.

Bringing my Elecraft radio didn't give me any troubles in the customs area and the hotel where I slept was small and cozy at a good price.

(cont. on next page)

PAGE 21 THE EXCHANGE

## An Interview with D44EE/0Z1BII (cont.)

AJ8B: What equipment do you prefer when you are on a DXPedition?

**OZ1BII:** I do prefer my Elecraft K3 with my Palm Radio paddle at the bottom and my Lenovo Thinkpad computer with UcxLog program. I can have it all in my suitcase, which I do not have as hand luggage, and only two places (Cayman Islands and Albania) wanted me to open the luggage and explain what it was.

In Malta and Albania I brought my own antenna. It is a 10 meter mini fiberglass mast from www.DX-Wire.de in Germany, only 67 cm long so it just fits in my big luggage. Only in Albania it has done a good job.

On Cayman Island I rent a condo with antenna the first time and next time I had an appointment with Andrew and was invited to use the ZF1A club station antennas. In Greenland I was using my Ten-Tec Eagle and I was welcomed by Jesper OX3KQ, also a huge contester. He helped me getting to the clubhouse placed in the mountains and showed me all the antennas and how to heat the small shack. It was very comfortable and with great hospitality. In Praia at D44BS I brought my Elecraft and used Angelo's antennas.

AJ8B: Do you have any DXPeditions planned in the future? OZ1BII: Surely I am returning to Albania. It has been two nice experiences in the WPX contest. I got a plaque in 2015 for the CQ WPX World Winner - Contest Expedition. And I got two good friends in Tirana, ZF1F Fatos and ZF1U Edmond. Also I have met OH2TA and OH2BH in Albania building a new radio station for contest use. Hopefully I will visit Angelo and Zizi again for ARRL DX Contest. In 2015 I was #8 DX and #3 AF. In 2018 I was #6 DX and #2 AF. Next time I will do better ;o)

**AJ8B:** What advice do you have for those of us trying to break pileups to work DX?

**OZ1BII:** Rhythm, rhythm and rhythm. If you have difficulties getting in contact you need to listen.

Do the operator use a fixed scheme for the receive frequency and can you figure that out. Does he sweep up or down the pileup? Some time it is best to stay on the same TX frequency and other times you have to try following his receiver.

With "Rhythm" I mean your rhythm relative to the DX. It is essential to start your transmission at just the right moment - the moment the DX start listening.

When I'm at the narrow end of a pileup, my senses are very sharp. When I have sent TU my brain changes to reception and I often get caught by the call sign that starts right now. However, one (or many) powerful stations may

come in and press the original signal and sometimes I have to change the concentration to another call sign that I can capture.

Here you may listen to a pileup I tried to serve - I call EU. http://www.oz1bii.dk/dx-d44ee.htm

AJ8B: Any QSLing hints?

costs 5 USD.

**OZ1BII:** I prefer LoTW and then eQSL. If you need paper QSL, ordering via OQRS is the preferred way for me. I upload all logs to LoTW, eQSL and ClubLog and it will be done as soon as possible after my return home. Direct QSL cards can be sent, but in Denmark we have almost switched to exclusively digital mail and that's why

I am grateful for donations via my webpage, but there are no requirements at all.

letters are very expensive to send. A normal letter abroad

**AJ8B:** What coaching/advice would you give new amateurs?

**OZ1BII:** If you find the airwaves exciting then GO FOR IT. There is no short way to learn Morse code, but you will get thousand fold back the energy you lay in training. It's all worth it.

I was lucky to join the telegraph troops when I was serving in the Danish army and in that way I got some very professional training in both radio skills and Morse code. But for most pre-radio amateurs the greatest success will come in a local club where you may get an Elmer with the same interests as you. He is the one who can give you the biggest step towards The World's Best Hobby.

- Listen to a HF radio and feel the Magic.
- \* Participate in a HF Contest and do feel the "Flow".

(PS. **Flow** - as explained in a great article by Brooke Allen, N2BA - https://brookeallen.com)

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## An Interview with D44EE/0Z1BII (cont.)

**AJ8B:** Thanks for taking the time to answer my questions. Is there anything you would like to share with us? **OZ1BII:** Thanks for reading my story. Hopefully we do meet on the airwaves again.

You may use these pictures as you like.



QTH with the tower on the roof and the dipole over the street at D44EE



XYL D44BW (Zizi) & D44BS in Angelo, 2015



D44BS— Angel0—Also D4CBS and D4A—2015





we host all types of websites for businesses, organizations and personal use



# SouthWest Ohio DX Association (SWODXA) DX Donation Policy

The mission of SWODXA is to support DXing and major DXpeditions by providing funding. A funding request from the organizers of a planned DXpedition should be directed to the DX committee by filling out an <u>online funding request</u>.

The DX Grant committee will determine how well the DXpedition plans meet key considerations (see below). If the DX Grant committee recommends supporting the DXpedition in question, a recommended funding amount is determined based on the criteria below. The chairman of the committee will make a recommendation at the general meeting on the donation.

#### Factors Affecting a DXpedition Funding Request Approval

DXpedition destination	Website with logos of club sponsors
Ranking on the ClubLog Most Wanted Survey	QSLs with logos of club sponsors
Online logs and pilot stations	Logistics and transportation costs
Number of operators and their credentials	Number of stations on the air
LoTW log submissions	Bands, modes and duration of operation

H40GC	H44GC	ZL9HR	XX9D	HKONA	FT4TA
KH1/KH7Z	EP2A	FT5ZM	C21GC	VK9WA	NH8S
K4M	CY9C	VK9MA	PT0S	FT4JA	YJOX
6060	VP6D	TO4E	XROZR	VP8STI	SP8SGI
W1AW/KH8	K1N	3D2C	<b>VKOEK</b>	S21ZBB	E30FB
STORY	TI9/3Z9DX	VK9MT	K5P	9U4M	TX3X
VU7AB	3Y0Z	3C0L	TX7EU	CEOZ	3C1L
		3B7A	K9W		

# SouthWest Ohio DX Association (SWODXA) Club Fact Sheet

Who We Are: SWODXA is comprised of active DX'ers and contesters with a deep passion for all aspects of Amateur Radio. We welcome everyone who is interested in joining our club to please contact us. SWODXA members are active in all facets of DX and Contesting. We also travel to, and fund various DXpeditions all over the world. SWODXA sponsors the annual DX Dinner held on the Friday evening of Hamvention weekend in Dayton, Ohio. In addition, SWODXA members moderate the Hamvention DX Forum. SWODXA is proud sponsor of the prestigious DXPedition of the Year Award.

**DX Donation Policy**: The policy supports major DXpeditions that meet our requirements for financial sponsorship. Details are available on the website at: <a href="https://www.swodxa.org/dxgrant-application/">https://www.swodxa.org/dxgrant-application/</a> and elsewhere in this newsletter

Club History: The Southwest Ohio DX Association (SWODXA) is one of the country's premier amateur radio clubs. Though loosely formed in mid-1977, the club had its first formal organizational meeting in August of 1981 where Frank Schwob, W8OK (sk), was elected our first President. While organized primarily as a DX club, SWODXA members are active in all aspects of our hobby.

**Requirements for Membership**: We welcome all hams who have an interest in DXing. It doesn't matter whether you're a newcomer, or an old-timer to DXing; everyone is welcome! Visit <a href="http://swodxa.org/member.htm">http://swodxa.org/member.htm</a>

**Meetings:** The club meets on the second Thursday or each month alternating locations between at Marions Piazza on Kingsridge Dr. in Dayton, OH or Marions Piazza in West Chester. (Check the website) Members gather early in the private room for dinner and then a short business agenda at 6:30 PM, followed by a program. If you enjoy a night out on the town with friends, you'll enjoy this get together. Meeting attendance is NOT a requirement for membership.

**Club Officers**: Four presiding officers and the past president (or past VP) make up the Board of Directors The current roster of officers are: President Tom Inglin, NR8Z; Vice President Kevin Jones, W8KJ; Secretary Mindi Jones, KC8CKW, and Treasurer Mike Suhar, W8RKO.

**Website:** We maintain websites at <a href="www.swodxa.org">www.swodxa.org</a> and <a href="www.swodxaevents.org">www.swodxaevents.org</a> managed by Bill, AJ8B. These sites provide information about a variety of subjects related to the club and DXing.

Who Am I #1?

Who Am I #2?

K8CR KC8RP