



SouthWest Ohio DX Association

THE EXCHANGE

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The Prez says... Tom, NR8Z

I'm writing this a few days after the SWODXA Holiday Party at the Spinning Fork in Middletown. I think I can say "a good time was had by all". There was great fellowship and a few lucky members and non-members walked out with a prize. The food was good and the servers did a wonderful job. We'll continue to look at ways to improve the intimacy, the current table arrangement spreads us out a little too much. If you didn't make the party, we missed you, and I hope you can attend next year.

I've been reading about the rapid uptake of the FT8 digital mode in the DX community but I haven't had an opportunity to try it out. As a "little pistol" the digital modes, including CW, are one of the few ways I can come close to working some of the more in demand counters. I was mentioning my need to explore FT8 and in true ham fashion, Bob, W8RES and Joe, W8GEX offered me a quick primer and tips right on the spot. Bob followed up with a couple of documents to my email to go deeper and get a solid start. This is one of the core missions of SWODXA, helping fellow DXers increase their proficiency and

enjoy the hobby at a higher level.

And all of this happened in a festive atmosphere, what more could one ask for?

The activity level for our annual DX Dinner is picking up. Bill, AJ8B sent out the stocking stuffer teaser to past attendees to kick off the ticket ordering season which will give Mike, W8RKO some Treasurer work. If you can help the committee, I know they would love your involvement. Connect with Mindi, KC8CKW to offer your services.

You'll get this newsletter in January when the winter winds blow and the snow may be falling. It is always the luck of the draw on whether any of our meetings in January through March are affected. As always, be safe out there and if you are uncomfortable traveling to the meeting there's no need to push things. You can always read about what transpired in the minutes.

I wish you all the best DX in 2018 and may propagation favor your signals!



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In this issue... We have some great contributions to share this month. OM2VL submitted an excellent article describing his journey to Ham Radio in the Slovak Republic. K9LA has a fantastic article on propagation and FT8, ZL2IO has a three part article about DX and contesting from ZL and we have the first installment of "The Little Pistols Guide to Propagation". All of this in addition to our regular columns and contributions from N8AA, K8WWA and NR8Z!

PLEASE... we want this to be YOUR newsletter. Your submissions are critical to the success. Feel free to send me anything, including comments and suggestions.—Bill AJ8B@arrl.net



OM2VL — A BIG gun from the Slovak Republic

By Guest Author, Laci, OM2VL

I have had the pleasure of working OM2VL many times and have marveled at his operating technique and excellent signal. I asked Laci to send us a description of his experiences in the Slovak Republic. He kindly and generously replied with this article and pictures. He is county hunting and would love to work all of us. Visit his qrz.com webpage and drop him a note for a sked.

My amateur radio career began at the beginning of the 70's when I was 5-6 years old. At that time in my home town Dunajská Streda, was a good working radio amateur club - OK3KTD, also my father OK3TCG was a member of this club. This club was every summer organizing "EXPEDITIONS" for one week in a nearby forest close to the river Little Danube. The families were sleeping in tents and there was a central large in which the radio was. To this very day I have very pleasant memories of this camp (boating, swimming during the day, campfire in the evening). At that time, I just observed the big ones as they were sitting in front of the radio and making QSO the whole day. At that time my prior interest was ARDF. I won my first competition at my 7 age and had very nice results during next 10 years.



As SWL I began at end of 70's, when my father taught me morse during 1 week. I took part on many contests and I collected QSLs for RARE Awards especially Islands, castles, Antarctica and many other. I have confirmed 339 DXCC, 160m-320, 80m-335, 30m-336, 20m-338, 17m-337, 15m-339, 12m-332, 10m-336, 269 Canadian Island, 320 US Island from all 50 states, 292 Antarctic station / 125 base / 25 DXCC. I have my all LOGs till today and when I hear some RARE station I send also my SWL card.

At the age of 15 I passed the junior ham exam and after that I began my HAM activity on 160m as OL8CTX. After follow-up new exams I got the callsign OK3TVL, but at that time I was attending the university, so I had very limited time for my hobby.

On 31st December, 1992, the Czechoslovakia was peacefully dissolved. It formally separated into two independent countries, the Czech Republic and the Slovak Republic.

I began work from 1st January 1993 with OM2VL callsign on all frequencies, but unfortunately at that time I had not much time for my hobby.

After dissolving Czechoslovakia, the radio amateur clubs were gradually cancelled, unfortunately, including the our club. The Thursday evening and Sunday morning club days attending by 15-20 ham members disappeared.



OM2VL — A BIG gun from the Slovak Republic (cont.)

At the age of 15 I met Tibi OM3RM who was acting in club OM3RMM (on contests OM8A). He approached me to join their club, I agreed with pleasure.

At that time we recorded the contests on paper and on the first contest I was observing the doubles, of course also writing on paper.....I still was just watching the big ones contesting them and I was happy to make few QSO before or after the contest. I learned much from them! We were taking part in every big contest and I took part on each of them with pleasure.

In 2003 I made a 83 m long delta loop, and I could work also from my home with LP.

We started in these years to build the OM8A radio amateur station on the new QTH – about 25km from my home, it lasted few years. As I remember we worked the first CQWW from new QTH in 2006. From that I was traveling to station regularly at free weekends to make DX's or contests. I have confirmed 338 DXCC, missed only North Korea; 160m – 247, 80m – 294, 40m – 315, 30m – 301, 20m – 330, 17m – 307, 15m – 328, 12m – 264, 10m – 297.

From 2008 I am interested in the US County Award and I started collect the counties, so now I have 2814 counties confirmed. Unfortunately, many stations do not send QSL. I started also to take part on various QSO parties – now these became my favourite contests. I have over 12.000 QSO during the QSO Parties. From this year I am interested also for County Challenge Toplist (need every county on every band and on every band on CW, SSB, RTTY) –I know, so hard from the Europe ...

Fortunately, my wife is very understanding also when I spend almost 3 weekends with contests every month. I qualified to participate in the: WRTC 2010 Moscow, WRTC 2014 Boston and now it is sure that I will be also a participant in 2018 WRTC in Germany.





DX QRP

By Kevin, W8KJ

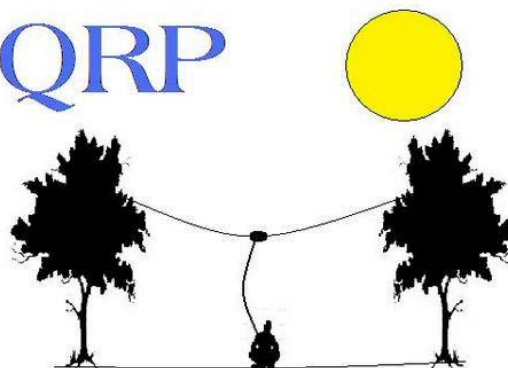
Kevin manages a
QRP blog at www.cincinnatiqrp.blogspot.com

The QRP culture : What is your favorite aspect of QRP? Do you like the simplicity? Maybe the challenge of trying to work stations with limited antenna's and low power? What about the hands on, build-repair-diagnose-design of some part of your low power station?

THE BAD... QRP is not for everyone. A reduction of power, compromise antennas, patience to call, listen, call, listen some more. Maybe NOT complete the QSO or DX contact...(the first time). Being totally dependent upon good band conditions... Sneers or laughs from those who say "life's too short for QRP"

THE GOOD... 1) Wow, I cant believe the DX station heard me and answered my call!
2) That's incredible, I built this radio with a \$45 bag of parts and just contacted Europe!
3) These QRP folks are very helpful, considerate, and willing to help me experience this aspect of the hobby!
4) I had no idea there were so many contests where I could contact and work so many other QRP operators around the world!
5) I'm learning so much about RF/radio and propagation

QRP



When you care to send the very least!

Submitted by John, N8AA—Thanks!

"I thought you'd be interested in this photo. Maybe put it in the newsletter — Murray says it's okay. That's Murray, WA4DAN atop a 1,000' TV tower."

The strobe flash head weighs 31 pounds. Murray's climbing gear, tools and flash head weigh about 60 pounds. It took Murray 90 minutes to climb. Murray does tower work for a living. He was a co-leader for the CY9C DXpedition last year (August 2016) and has also operated from Navassa, Desecheo, Sable Island and VK9 Mellish Reef.

Murray also does triathlons. He recently won a triathlon for his age class.. Murray is 60 years old!



60 Meters—The Channel Band

By Joe, W8GEX (W8GEX@aol.com)

Special Report—Bouvet Island

The 3Y0Z team tweeted the following: "Time is flying by for our DXpedition team. We just published our operating band plan on our website including special instructions for FT8. Everyone needs to read this. FT8 will not be a primary mode, but we will use it when no other mode gets through".

"Our band plan is now posted on our website.

The most recent propagation predictions continue to support the patterns shown in the videos on our propagation page." <http://www.bouvetdx.org/propagation/>

Do not transmit on our transmit frequency. Select a clear spot on the waterfall in the Wide Graph, do a <Shift, Left Click> on that clear spot to set your transmit frequency, and call us there. Check the box labeled "Hold Tx Freq" to keep your transmit frequency locked. We will not respond to callers on our transmit frequency. Click the "Next" button under "Generate Std Msgs" for the "Tx2" message. This will allow you to call us with a signal report, rather than with your grid square. We will not respond to stations calling us with their grid square. Calling us with a signal report will reduce the number of sequences per QSO.

A typical exchange between KL7YL and 3Y0Z will look like:

- a.) Bouvet: **K1ABC 3Y0Z 73** (finishing a preceding contact)
- b.) Vivien calls: **3Y0Z KL7YL -06**
- c.) Bouvet answers with: **KL7YL 3Y0Z -02**
- d.) Vivien answers with: **3Y0Z KL7YL RRR**
- e.) Bouvet answers: **KL7YL 3Y0Z 73**
- f.) The QSO is now complete and KL7YL is in the log. This took only one minute (four 15-second sequences) for a complete contact.



3Y0Z will transmit CW and USB modes on 5.400 and will listen for Europe on 5.353.

They will listen for FT8 on 5.357 and transmit low between 200 and 500 hz and listen up. PLEASE don't TX on their freq. for CW and SSB, 3Y0Z will TX on 5.400 and listen for NA CW on 5.405 and for NA USB on 5.403.5. They listen for Europe on 5.353.

See the band plan for 60m:

<http://www.bouvetdx.org/build-band-plan/>

A great link for JT65 and FT8 operating tips:

<http://www.g4ifb.com/html/digimodes.html#JT65>

Donate: Being # 2 in the world and our location this is the most expensive and dangerous DXpedition ever. their cost is over \$750,000 and any financial help you can give is very much appreciated. You may donate at this link <http://www.bouvetdx.org/how-can-you-help/>



DXCC Card Checking

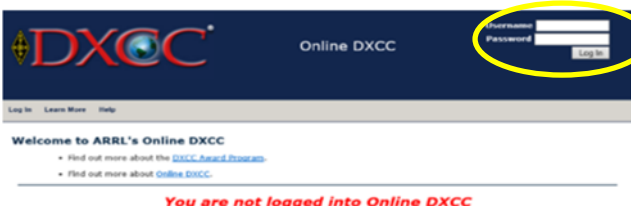
By Dave, K8DV

In the last issue I gave a very high level view of DXCC and card checking so with this issue let's start breaking it down piece by piece. I am going to start with Online Electronic DXCC Application, <http://www.arrl.org/online-dxcc-application> which has to be one of the best things the ARRL and DXCC Desk have done since the creation of the program back in the thirties. No more worrying about the order of the cards, no more do multiple QSO cards go at the front or back of the list, just enter as you receive new QSLs in whatever order.

When you use the link above you will be taken to a page that looks something like this:



From there click on "ARRL DXCC online application system" and you will end up at the sign in screen.



Once at the sign in screen, in the upper right hand side you will see two boxes, labeled "Username" and "Password" these are the same as the ones you would use to log into the ARRL members section of the ARRL homepage. This is most likely your "Callsign" and a password that you created.

After entering your login information you should see a page where the top of it looks something like:



On this page you will also find the step by step instructions so I will not include those here. The next step is to start entering QSL/QSO information. Start by clicking on "Enter QSLs" in the gray menu bar. You will end up on a page and down at the bottom you should see an entry screen:

Complete all of the fields below to add or edit QSL card information in your account. All fields must be completed.

Call Sign	QSO Date (dd-mm-yyyy)	Band	Mode	DXCC Entity	
<input type="text"/>	<input type="text" value="Select"/> <input type="text" value="Select"/> <input type="text" value="Select"/>	<input type="text" value="Select"/>	<input type="text" value="Select"/>	<input type="text" value="Select"/>	<input type="button" value="Save"/>

You are now ready to enter QSL/QSO information. When entering your data use the drop downs, you may find that the DXCC Entity may be filled out for you or give you a choice of several entities, such as when you enter a callsign starting with VP8 you will have several choices and you should select the entity that is printed on the card itself. Once you start entering QSO/QSL information you will see the list appear below the entry screen



Logbook of the World Status

890,840,176 QSO records have been entered into the system.
 159,602,451 QSL records have resulted.
 101,139 Users are registered in the system
 149,543 Certificates are active
 13,952,220 User files have been processed

DXCC Card Checking (cont.)

Complete all of the fields below to add or edit QSL card information in your account. All fields must be completed.

Call Sign	QSO Date (dd-mm-yyyy)	Band	Mode	DXCC Entity
<input type="text"/>	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

The 1 QSLs in your Online DXCC account are shown below.
More recently entered QSLs are listed towards the top.

[View All My QSLs](#) (as a PDF document)

Click the [View All My QSLs](#) button above for a PDF listing of your QSLs in the order they must be placed for submittal.

Call Sign	QSO Date (yyyy-mm-dd)	Band	Mode	DXCC Entity	
AJ88	2017-12-01	80	CW	UNITED STATES OF AMERICA	<input type="button" value="Edit"/> <input type="button" value="Delete"/>

1 of 1

Show 35 QSLs at a time.

After you have entered all your data and have all your cards in the same order at which they are entered you will need to click the "Submit Application" button in the gray toolbar at the top of the screen. At this point you can enter your payment info and other information. Once you do this you will see a button to review application this will bring up a PDF of your application, print all pages of this as this is the application itself and the QSL listing. Bring the printout, QSLs and envelope with at least one unit of first class postage to me for checking. Also did I mention that the fees for using this for your DXCC application is cheaper than the manual form and usually faster as well.

Have a good DX season and keep those DXCC applications coming and if there is a card checking topic you would like to see covered in the future just let me know at k8dv@cinci.rr.com

73,

Dave, K8DV

- I will listen, and listen, and then listen again before calling.
- I will only call if I can copy the DX station properly.
- I will not trust the DX cluster and will be sure of the DX station's call sign before calling.
- I will not interfere with the DX station nor anyone calling and will never tune up on the DX frequency or in the QSO slot.
- I will wait for the DX station to end a contact before I call.
- I will always send my full call sign.
- I will call and then listen for a reasonable interval. I will not call continuously.
- I will not transmit when the DX operator calls another call sign, not mine.
- I will not transmit when the DX operator queries a call sign not like mine.
- I will not transmit when the DX station requests geographic areas other than mine.
- When the DX operator calls me, I will not repeat my call sign unless I think he has copied it incorrectly.
- I will be thankful if and when I do make a contact.
- I will respect my fellow hams and conduct myself so as to earn their respect.

www.dx-code.org



QSL Stories—Please Submit to AJ8B@arrl.net



From Rick, K8WWA — In early May of 2007, the DXCC entity of Scarborough Reef was activated by a group of DXPeditioners. This was the last entity that I needed for DXCC #1 (Worked All countries). Each morning for a week I would clearly hear them on 20-meter SSB. The problem was that it was the same operator every day and he kept calling for stations with 1,2, or 3 in their callsign until he eventually faded out, no chance for stations in the 8th call area.

On the last day, Saturday, May 5, 2007, I heard a different operator, but it was later in the morning and propagation was starting to fade. He was taking on all call areas. The pileup was huge, and his listening split frequency was very wide. I called, and I called. I had great difficulty in hearing any station he was working. His signal was now down to 5x1 to 5x2. It was looking very bleak and I was getting very discouraged. I spun my receive frequency dial out of frustration and I immediately heard someone say 5x9, 73. I instinctively threw out my callsign. He came right back, "K8WWA, ur 5x9". I acknowledged with "ur 5x9 also, 73"

I had done it. I slumped back in my chair and took a deep breath. I was overcome with emotion. I was happy to have completed a goal which began 23 years prior. But I was also sad that the chase was over. There had been just as much fun in the chase as there had in the finish line.

Fortunately, getting the QSL card was routine and uneventful. About 2 weeks later, I learned that Mike, N6MZ, was the operator I had worked and I was able to personally thank him at the Dayton Hamvention.





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DXEngineering@DXEngineering.com

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Email Support Anytime: DXEngineering@DXEngineering.com

What Mode of Propagation Enables JT65/JT9/FT8?

By Guest Author, Carl Luetzelschwab, K9LA (K9la@arrl.net)



Very interesting and timely article by Carl—He was kind enough to allow us to reprint it here.

The purpose of this article is not to rigorously analyze how much improvement each JT mode offers – the purpose is to introduce the concept of a well-documented but less well-known mode of HF propagation and how it ties into the success of the JT modes.—K9LA

It should be obvious that K1JT's JT65/JT9/FT8 digital modes are making big changes in band usage, especially on the higher bands as we approach solar minimum between Cycle 24 and Cycle 25. Is there a new propagation mode lurking here? Or is it just a less-known propagation mode that hasn't received much attention? Let's analyze a 10-Meter path between Spokane, WA and Cleveland, OH (approximately 3000 km – one-hop via the F2 region) to understand what's going on.

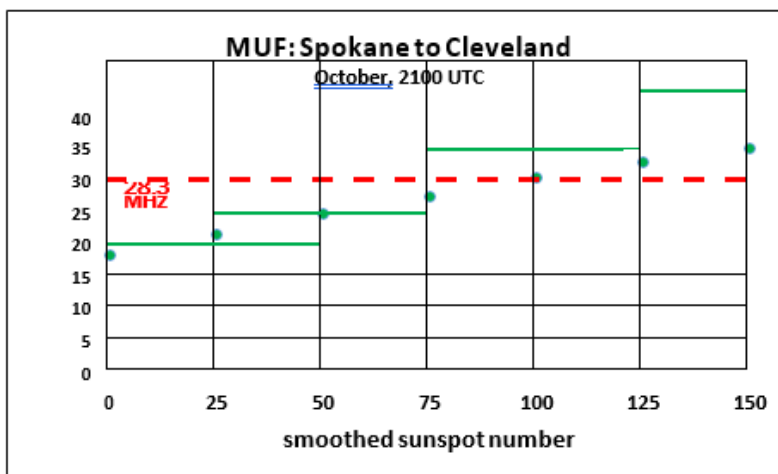
We'll use VOACAP to do this at a frequency of 28.3 MHz, with the transmitter in Spokane at 47.66° North latitude / 117.43° West longitude and the receiver in Cleveland at 41.50° North latitude / 81.70° West longitude. The month is October (a very good month for ionospheric propagation via the F2 region in the northern hemisphere) and the time is 2100 UTC (the best time for F2 region propagation between Spokane and Cleveland).

The antennas at both ends are assumed to be small Yagis at 40 feet over flat ground. The ground parameters used are for average ground – a conductivity of .005 Siemens per meter and a relative permittivity of 13. The resulting antenna gain is about 12 dBi at a peak elevation angle of 13 degrees. The transmit power is 100 Watts. The following are the predicted MUFs (maximum useable frequencies) from VOACAP at various smoothed sunspot numbers. The MUF is the first parameter needed for a QSO to be made – it must be high enough to assure that the signal gets from Spokane to Cleveland.

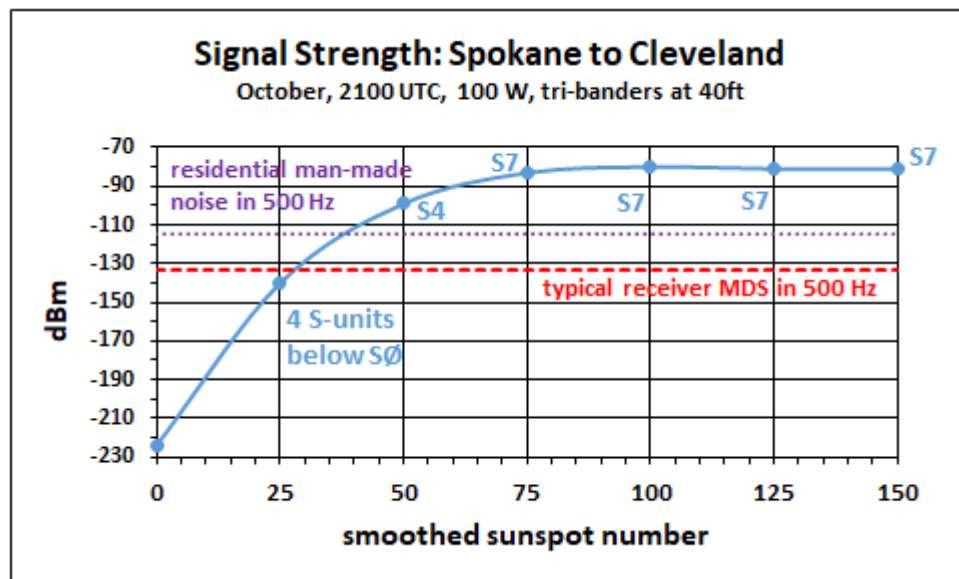
The important observation from the above plotted data is that F2 region propagation at 28.3 MHz should only be supported on this path when the smoothed sunspot number is greater than 75 because the MUF is greater than the operating frequency. The usual assumption here is that refraction occurs when the MUF is greater than the operating frequency. In other words, the ionization is sufficient to refract (bend) signals back to Earth. When the MUF is less than the operating frequency, the signal is not refracted enough and goes off into space, with no signal reaching the target.

Now let's look at the predicted signal strength from VOACAP. Signal strength is the second parameter needed for a QSO to be made – the losses must be low enough so you can hear the other station's signal. Here's what VOACAP says for signal strength versus smoothed sunspot number for the selected path.

There are two important observations to be made from this data. The first observation is that when the smoothed sunspot number is high enough so that the MUF is above the operating frequency (greater than 75 in this example), the signal strength is pretty much constant. This signal strength (actually signal power) is around -83 dBm, which translates to around S7 (as annotated on the plot) assuming S9 = -73 dBm and an S-unit is 5 dB (which is what I've measured on my receivers).



What Mode of Propagation Enables JT65/JT9/FT8? (cont.)



What's happening when the smoothed sunspot number is greater than 75 is refraction coupled with minimal ionospheric absorption (absorption is inversely proportional to the square of the frequency – it is less than a dB per hop on 10-Meters – this is one of the reasons why 10-Meter signals can be so strong). As a side note, all the signal strength values include the antenna elevation pattern of both Yagis at 40 feet.

Note that when the smoothed sunspot number is greater than 75, there is a huge amount of dB difference between S7 and the typical MDS (minimum discernible signal – a.k.a. sensitivity) of our receivers at around -133 dBm (the dashed red line) in a bandwidth of 500 Hz (a typical CW bandwidth). The difference is around 50 dB! This means the Spokane station could reduce his/her transmit power by 50 dB (to 1 milliwatt – now that's QRP!) and still be heard in Cleveland.

But we need to watch it here – usually man-made noise, even on 10-Meters, limits the sensitivity of our receiving system. Using the data in the ITU (International Telecommunications Union) document ITU-R P.372-13 for a residential noise environment indicates the true sensitivity of the Cleveland station is limited to around -115 dBm in a 500 Hz bandwidth (the dotted purple line). Realistically the Spokane station could now only reduce his/her power to 100 milliwatts when the smoothed sunspot number is greater than 75. Still not bad, though!

The second observation is that VOACAP still predicts signal strengths when the smoothed sunspot number is less than 75 – in other words, it predicts that propagation is still possible although full refraction cannot happen. At a smoothed sunspot number of 50, the predicted signal level is -99 dBm, which translates to around S4 and it is still above the man-made noise level. Is this an error on VOACAP's part? No, it isn't. VOACAP is simply trying to reflect (no pun intended) the real world.

In the real world, measurements over many paths have shown that a readable signal is still present even when the MUF is below the operating frequency. This called an above-the-MUF mode of propagation, and VOACAP includes the Phillips-Abel theory (note 1) to do the necessary math to predict propagation under this condition (note 2).

The mechanism for an above-the-MUF mode is believed to involve random patches of ionization that have a higher electron density than the background plasma and/or scatter – it could be ionospheric scatter, ground scatter or even sea scatter (note 3). Regardless of the specific mechanism, the one thing in common is additional loss. Thus the difference between the MUF and operating frequency is critically important – the more the difference, the more the loss. In summary, the above-the-MUF mode is why VOACAP still predicts signal strength (instead of abruptly cutting off the prediction) when the MUF is below the operating frequency.

Now that we've looked at the normal "decode with ear" scenario, let's move on to the JT65/JT9/FT8 scenario. Our analysis will make three major changes – we'll switch from signal strength to SNR (signal-to-noise ratio), we'll switch from 100 Watts to 10 Watts and we'll use a 2.5 KHz bandwidth. These changes put the analysis in line with current JT65/JT9/FT8 practices (note 4). The SNR versus smoothed sunspot number follows (note 5). The data point at a smoothed sunspot number of 0 is not plotted to give better resolution to the other data.

What Mode of Propagation Enables JT65/JT9/FT8? (cont.)

If Spokane is operating on CW at 10 Watts, Cleveland should be able to decode by ear the Spokane station's 10-Meter signal in the 2.5 KHz bandwidth when the smoothed sunspot number is above 50. This assumes humans can copy CW at an SNR of 0 dB, which is a realistic assumption.

But by using JT65/JT9/FT8, we should be able to make the QSO all the way down to a smoothed sunspot number of around 35. This assumes JT65/JT9/FT8 can decode down to an SNR of around -25 dB (a ballpark value for all three modes in the 2.5 KHz bandwidth – remember the purpose of this article is not to rigorously analyze the improvement with each JT mode). The 10-Meter band may be “dead” assuming the normal definition, but JT65/JT9/FT8 gives us the possibility of still making QSOs via the above-the-MUF mode.

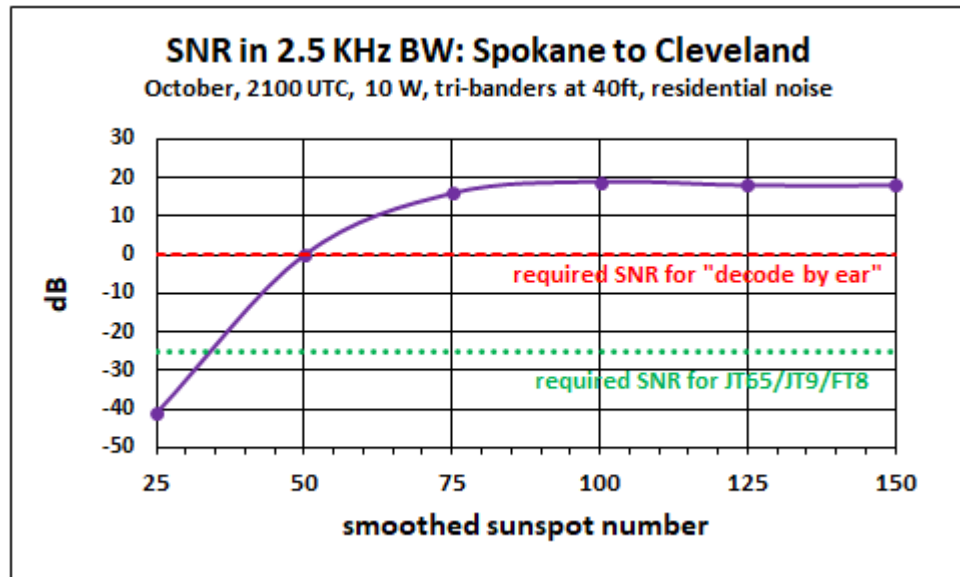
An interesting corollary here is that VOACAP should be able to be used to predict JT65/JT9/FT8 openings on our higher bands (15-Meters, 12-Meters and 10-Meters) as Cycle 24 declines and we go through solar minimum. How accurate would it be? Recording observed openings and comparing to SNR data from VOACAP (using appropriate power levels, noise environments, bandwidth and antennas) would shed light on that question.

As far as I'm aware, the Phillips-Abel theory should also apply to 6-Meters. Unfortunately VOACAP does NOT include 6-Meters, so you can't use VOACAP for any above-the-MUF predictions on 6-Meters. However, one might be able to extract the Phillips-Abel losses for the above-the-MUF mode from VOACAP, and then apply these losses to real-time MUF data (for example, at <http://af7ti.com/>).

In summary, there appears to be a lot of RF flying around up above us that is below our normal noise level thanks to what we can generally call “scatter”. Using JT65/JT9/FT8 allows us to “hear” some of that. Finally, to reiterate, there doesn't appear to be a new propagation mode for JT65/JT9/FT8. It's just a less-known propagation mode that hasn't received much attention.

Notes

- 1) J. L. Wheeler, Transmission Loss of Ionospheric Propagation Above the Standard MUF, Radio Science, Vol. 1, No. 11, November 1966
- 2) For analysis of above-the-MUF modes, see L. F. McNamara, T. W. Bullett, E. Mishin and Y. M. Yampolski, Nighttime above-the MUF HF propagation on a midlatitude circuit, Radio Science, Vol. 43, RS2004, doi:10.1029/2007RS003742, 2008
- 3) R. Silberstein, Great-Circle and Deviated-Path Observations on CW Signals Using a Simple Technique, IEEE Transactions on Antennas and Propagation, January 1965
- 4) Steve Ford, Work the World with JT65 and JT9, ARRL, First Edition Second Printing, 2015- 2017
- 5) Although a 2.5 KHz bandwidth is used in the plot for an apples-to-apples comparison, most CW operators use a narrower bandwidth (around 500 Hz) – which would offer CW a 7 dB performance improvement over that in the plot





The following was written in response to a health insurance inquiry.

I am writing in response to your request for additional information on my recent accident.

In block number 3 of the accident reporting form, I put "poor planning" as the cause of the accident. You said in your letter that I should explain more fully and I trust that the following details will be sufficient.

I am an amateur radio operator. On the day of the accident, I was working alone on the top section of my new 80 foot antenna tower. When I had completed my work, I discovered that I had, over the course of several trips up the tower, brought up about 300 pounds of tools and spare hardware. Rather than carry the now unneeded tools and hardware down by hand, I decided to lower the items in a small barrel by using a pulley which, fortunately, was attached to the gin pole at the top of the tower. Securing the rope at the ground level, I went up to the top of the tower and loaded the tools and hardware into the barrel.

Then I went back to the ground and untied the rope holding tightly to insure a slow decent of the 300 pounds of tools and hardware. You will note in block number 11 of the accident form, that I weigh 155 pounds. Due to my surprise at being jerked off the ground so suddenly, I lost my presence of mind and forgot to let go to the rope. Needless to say, I proceeded at a rather rapid rate up the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming down. This explains my fractured skull and broken collar-bone.

Slowed only slightly, I continued my rapid ascent, not stopping until the fingers of my right hand were two knuckles deep into the pulley. Fortunately, by this time I had regained my presence of mind and was able to hold tightly to the rope in spite of my pain. At approximately the same time, however, the barrel hit the ground, and the bottom fell out of the barrel. Devoid of the weight of the tools and hardware, the barrel now weighed 20 pounds. I refer you again to my weight in block number 11.

As you might imagine, I began a rapid descent down the side of the tower. In the vicinity of the 40 foot level, I met the barrel coming up. This accounts for the two fractured ankles and lacerations of my legs and lower body. The encounter with the barrel slowed me enough to lessen my injuries when I fell onto the pile of tools and hardware, and, fortunately, only three vertebrae were cracked.

I am sorry to report, however, that as I lay there on the tools and hardware, in pain, unable to stand and watching the empty barrel 80 feet above me, I again lost my presence of mind. I let go of the rope.

YL texts OM on a cold winter morning.
"Windows Frozen, Won't Open."

OM texts back "Gently pour some lukewarm water over it and gently tap edges with a hammer."

YL texts back 5 minutes later;
"Computer really messed up now!"



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Glenwood, Maryland 21738
Phone: 301-854-5650

QSL Stories—Please Submit to AJ8B@arrrl.net

From Tom, NR8Z — Club members may remember Dave Heil, K8MN, who belonged to the club and worked for the State Department. He had a number of overseas postings and was quite active from those locations, I have several QSL cards from his various postings including this one.

J52US Dave Heil
Bissau
Department of State
Washington, D.C. 20520

**Republic of Guinea-Bissau
West Africa**

(K8MN, K8MN/OH2, K8MN/OH9, OH9MD/OJ9)

CONFIRMING QSO WITH	DATE			UTC	MHz	RST	2-WAY
	DAY	MONTH	YEAR				
NR8Z	29	X	88	1627	1.8 3.5 7 14 21 28	SP	CW SSB RTTY

QSL via WA8JOC *[Signature]* Paragon, Model 585
Transceiver
A W4MPY QSL

☐ QSL ☒ FAX QSL 

Speaking of NR8Z.....

Tom competed in the annual ARRL Field Day competition in June. He finished **NINTH** in the nation for Category 1B—1 Operator Battery and tops in the 8th call area.



Raspberry Pi / QSL Display Board

By AJ8B, Bill (aj8b@arri.net)

Using a discarded monitor as a QSL and Calendar Portal in the Shack

I stopped by the QTH of K8DV, Dave, to pick up cards I had left to be checked as well as to talk strategy for the upcoming Ohio QSO Party. One of the things that caught my attention was an electronic picture frame that Dave was using to display QSL cards. I LOVE getting QSL cards and have been looking for a way to display them proudly and I realized that Dave was onto something!

I immediately went home and scanned in many of my favorite cards. My plan was to load them into the “cloud” so that I could access them from anywhere. I then setup my screen saver to reference these QSL images and voila’, I had access to QSL cards no matter where I was via my laptop!

I was later reading about the various projects that are being completed using the Raspberry Pi microcontroller modules. I am an old UNIX guy and have been itching to try this out, but, I needed a project. While researching the Raspberry Pi, I came across an article about a “Magic Mirror” (1). This is a unit that uses a Raspberry Pi to display overlays on top of a two-way mirror. I realized that this was the Raspberry Pi project that I needed to jazz up the shack and get the experience I wanted with this technology. Using a powerful LINUX computer to do nothing more than display images seems like overkill and if I were doing this with a PC, I would agree. However, considering the cost and the experience, it was well worth it. In contrast, I found a 22” electronic picture frame on Amazon for \$399 that would not be as this customized as this project was for a fraction of the cost!

This project has three phases. The first is setting up the Raspberry Pi 3. (RP3) The second part is configuring the cloud source. The third and final part will be to configure the RP3 to pull QSL card images from a “cloud” location and rotate through them as well as display the weather, time and my TODO list.



Phase 1 – Raspberry Pi 3 : Gathering the Components

Monitor: I had a 22” LG monitor that had been dropped at work. The bezel on the back was cracked and could not be supported by the monitor stand. Since I was going to use a wall mount, I knew that this would not be an issue.

Computer: The next item needed was the RP3 microcomputer. I recommend a kit such as those offered by CANAKIT. Amazon.com offers several versions depending upon how many options you would like. My kit came with all that I needed including an SD Memory card, case, and power supply. Prices range from approximately \$65 to \$90. The RP3 motherboard has 4 USB ports, an HDMI port, an audio out port, a network port, as well as a USB mini port for power! All of this on a 2.3 by 3.5 inch circuit board. The RP3 even has wireless network capability built in. For this project, we will run a version of Linux.



Video Connection: I was able to find a DVI to HDMI Connector on Amazon for \$2.99. This allowed me to connect the RP3 module to the monitor with a very short HDMI cable. The entire RP3 unit will be mounted on the back of the monitor, so, cable length is important.

Raspberry PI / QSL Display Board (cont.)

User Interface: Once the project is completed, you won't need to interact directly with the RP3 module. However, you will need a USB keyboard and mouse to get it up and running. If you have a Bluetooth keyboard and mouse, that will work as the RP3 has built in Bluetooth as well!

Network: Although the RP3 module has built in Wireless capability, I chose to use the built in ethernet as the network connection. My main reason was simply that the ham shack is in the basement, the furthest point possible from my wireless access point and I have a network drop at the location where I wanted to mount the monitor. Also, since the monitor was never going to move, I really did not need the benefits of the wireless connection.

Memory Card: One of the main reasons the RP3 module works so well in a small package is that it utilizes an SD memory card to store all of the programs and data. The memory card that I use is a 32 gByte card with a "10" rating. Many kits come with an operating system preloaded on the SD card, otherwise known as NOOBS. (New Out Of Box Software). When the RP3 initially boots, you are asked to select which operating system to load. NOOBS will handle the install and initial configuration automatically. Choose Raspbian, the RP3 version of Linux, for your O/S. If you choose not to get the NOOBS option, or would like a more detailed description of the O/S process, visit www.raspberrypi.org/documentation/installation.

Keyboard & Mouse.: You will need to have a keyboard and mouse available during the configuration and setup of this project. However, once you have completed your work, you will no longer need these to be connected to the RP3. My QSL display monitor has been running for 8 months and I have not yet needed a keyboard or mouse.

Once you have the components together, boot the RP3 by powering connecting the USB power supply. You will initially see a four color "rainbow grid". The system will continue to boot until the Raspbian Desktop is displayed. (The first time through is the longest.)



The desktop should appear as shown. There are only a few tweaks we need to make before we can launch our project. In the upper left-hand corner, click on the "Raspberry" icon and slide down to Preferences. Go to the Localization Tab and configure the Set Locale, Set Time zone and Set Keyboard as appropriate for your area. At this point, we are ready to configure the second phase of the project.

Phase 2 – Create the Cloud Accounts

We need a simple way to display our QSL cards in a random, rotating order. We would also like to display the time, weather and our "ToDo" list. This can be set up in four easy (and free) steps from the web browser on your standard desktop.

#1 – Set up a "dropbox" account at www.dropbox.com. This is the internet based account that you will load your QSL card images into and the system will use as an image source. Create a directory in that account called "QSLimages". Store a couple of QSL images in that directory to get started. If you already have a dropbox account, just set up the appropriate directory for your QSL images.

#2 – Set up a Gmail account for your calendar. This is the account that we will access for "ToDos" and appointments. I keep upcoming club meetings, CWA events and contests on my calendar.

#3 – The easiest way to display all of this information together is to use a free service called DAKboard. (Although this is a free account, I always recommend a donation to the developer, so he can continue to help support the existing product.) Go to DAKboard.com and choose "Create Free Account".

Raspberry PI / QSL Display Board (cont.)

#4 – Once you have created your DAKboard account, log into it and click on the settings icon in the upper right-hand corner. (Make sure to click “Save Changes” as you move from section to section) My settings are as follows:

Screen: Time/Events – Top, Weather – Bottom

Date/Time: Enabled, Time zone – New York, Digital Type, 24 Hour format, Show Seconds

Calendar: Enabled, Agenda, 5 Days to Show

In the Calendar section, you will need to click on “Add Another Calendar” and allow it to have access to your Google account; the Gmail account you set up in Step 2.

Photos: Photo Source- Dropbox – you will need to enter your dropbox account information from step 1. DAKboard will confirm that you can access those images.

Change Photo – Every Minute

Transitions: Gradually fade photos in and out

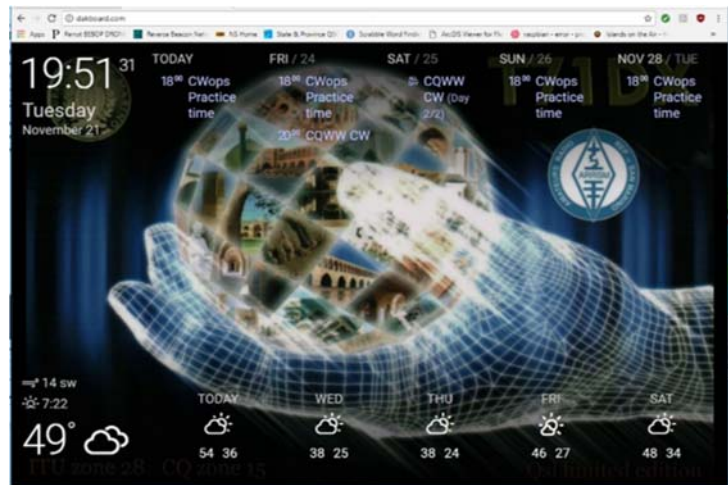
Dropbox directory: /QSLimages

Weather: WeatherSource : Yahoo

Location: <Your city and state>

Extended forecast: 5-Day

There is a unique URL that is created for your account that will allow you to access your customized DAKboard from any browser. You will need this URL when it is time to finalize the RP3. To get this unique URL, go to your account information in your DAKboard account screen. Your custom URL will be listed in the field “Private URL”. It can be copied to the clipboard by clicking on the clipboard icon immediately to the right of the Private URL field. Paste this into a .txt file as we will need it in the final step. You can click on Logout. Assuming that you have a few QSL images loaded into the Dropbox account and/or you have a couple of events set up on your Gmail calendar, you can now go back to DAKboard.com and login from your PC. You should see something similar to the web browser screen shot. The QSL card forms the background, (a card from T71DX in this case) the date and time are in the upper left-hand corner, the upcoming events are listed along the top and the weather along the bottom. Now that we have a mechanism in place to “collect” the information, we need to adjust the settings on the RP3 to instruct it how to reach the DAKboard.com website. (I use this URL as my home page on the browser in my shack)



Raspberry PI / QSL Display Board (cont.)

Phase 3 – Customize the Raspberry PI

When the Pi boots, we will want it to automatically launch the Chrome web browser and set the home page to our custom DAKboard. We will configure the Chrome browser to put it in “kiosk mode” so we won’t need a keyboard or mouse..EVER...I prefer to display the DAKboard in Portrait mode. To add these final configuration changes:

Open a command window on your RP3:
 Type raspi-config. Choose “Boot to Desktop”
 Save the configuration and reboot

Once the RP3 reboots, open a command window. Install the “unclutter” program which will hide the mouse cursor after a few seconds of inactivity by entering:

```
sudo apt-get install unclutter
```

We will now make a couple of system configuration changes. At the next command prompt, enter:

```
sudo nano /boot/config.txt      and add
# Display orientation. Landscape=0, Portrait=1
display_rotate=1
# Use 24 bit colors
framebuffer_depth=24
```

Save and quit when done.

While still in the command window, execute the following commands which will install the chromium browser (This may take several minutes):

```
sudo apt-get update
sudo apt-get dist-upgrade
sudo apt-get install -y rpi-chromium-mods
```

Finally we’ll want to force the screen to stay on and load the Chromium browser running DAKboard on boot. The last line to enter requires the Private URL that we copied a few steps ago. If you don’t have it, you can log into your DAK board and get it again. In the command window, enter the following:

```
sudo nano ~/.config/lxsession/LXDE-pi/autostart
@xset s off
@xset -dpms
@xset s noblank
@chromium-browser --noerrdialogs --incognito --kiosk http://dakboard.com/app/<your private
```

URL from above>

Reboot and when the Pi comes back up, we should see DAKboard running in full screen!

To add further capabilities over the network, investigate the SSH. Let me know if you give this a try and/or any RP3 projects you have undertaken.

Amateur Radio Challenges from New Zealand

By Guest Author, Holger Hannemann, ZL2IO/ZL3IO/ZM4T

Having worked ZM4T earlier this year, I read about the club station on QRZ.com and was amazed at their accomplishments. I sent Holger an email and he IMMEDIATELY agreed to send me something for the newsletter. I am so glad he did!



New Zealand facts:

New Zealand is one of the youngest countries (geologically and by human habitation) located at the end of the world. It consists of two main islands (North & South) and many smaller islands around the coast line. There are a few outer territories which we touch later. The North-South dimensions of the main island are about 1200 miles and there is hardly any point further away from the Ocean than 70 miles.



About 700 years ago the first Polynesian sailors arrived. At the end of the 18th century started the second settlement wave mainly by British. Today the population is about 4.5 million people strong. The majority has European roots. About 5% are Maori which are the descendants of the early Polynesian arrivals or indigenous people. We still are a country of immi-

grants. About 25% of the population are first generation immigrants and born outside of New Zealand. Another 60% are here in the second generation. Currently the ethnic Asian population is growing the fastest and Auckland as our biggest city with 1.5 million inhabitants (30% of the NZ population) has already a very Asian touch.

The capital is Wellington at the Southern tip of the North Island with a population of about 300,000. The South Island is very densely populated and has less than 1 million people living here.

Climate ranges from sub-Tropical in the North to sub-Antarctic in the South but typically it's very mild. Due to the long isolation from any other land, the flora and fauna is very different here. When you wander through fern tree forests hearing the local birds you often feel like transferred millions of years back and expect Dinosaur coming around the next corner. The winters are relatively mild due to the dominant thermal mass of the Ocean. As a result the native plants are evergreen and don't lose their leaves in winter. There were also no mammals here. Due to the lack of enemies many local birds could not fly any-

more like our national bird the Kiwi.

New Zealand is not an industrial country and agriculture and tourism are the main sources of income. The number one industry is dairy farming and so it is no wonder that the world's number one dairy company is Fonterra, a cooperative of about 11,000 farmers. The products are mainly supplied into Asia with PR China being the biggest market. Even if we could quadruple the output we would not be able to saturate this market.

The number two industry is tourism and third is forestry. Due to the nice climate here, trees like the Pina Radiata grow twice as fast as they do in e.g. California. Otherwise we have strong fruit and meat exports from here.

The government and public services in New Zealand are very stable and one of the most integer ones in the world. We are a promoter of free trade and no country in the world has more free trade agreements than New Zealand. It is also a relatively safe place. Our police typically do not carry guns.

Amateur radio in New Zealand:

With a ZL call sign you can be active from five different DXCC entities that can be distinguished by their prefixes. ZL1-4 are stations on the North & South Island plus coastal island groups. In the past we had a territory allocation by the number with ZL1 being the upper North Island, ZL2 the lower North Island, ZL3 the upper South Island and ZL4 the lower South Island but for over 10 years now that is not the case anymore. ZL5 is reserved for activities from Antarctica. NZ has a research base on Ross Island next to the American Amundsen base. ZL7 is Chatham Island, ZL8 is Kermadec & Raoul Islands and ZL9 is for the NZ sub-Antarctic Islands (Auckland, Campbell, Snares). The ZL6 prefix is reserved for activities of our national organization NZART.

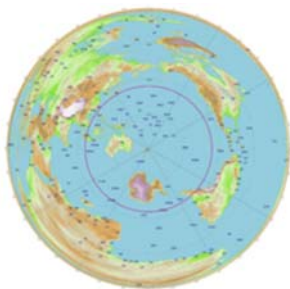


Amateur Radio Challenges from New Zealand (cont.)

We have about 4000 licensed HAMs but only 1700 are organized in the NZART. The average age is well above 65 years and the majority of the HAMs are only active on UHF/VHF via repeaters or modes like D-Star. The building code is due to living in an earthquake prone environment very strict and antenna towers are restricted to 10-15m (30-45 ft) in most areas. Some districts allow up to 25m/75ft. Even utilities are restricted to 30m/90ft max towers for e.g. transmission lines. Setting up a contest station with 200 ft towers is impossible. With low installed antennas and based on the end of the world DXing is a challenge. The DXing community is very small, probably 100 HAMs or less. The contesting community is even smaller and only about 20 HAMs strong. Can you imagine a local contest down here... Yes, it takes about ten or fifteen minutes of activity and you worked them all. Therefore we are allowed to work each other again after each hour to get at least few hundred QSO's into the log during a 24 hour event.

In New Zealand a Ham can have a primary and a secondary plus a special (event) call sign. The Kiwi's are very mobile and work in one corner of the country while they may have their home in different region. The primary and secondary call sign rule is still a relic from the time when we had regional number allocations. When we came to New Zealand we started in Christchurch on the South Island where I got ZL3IO as my primary call. Today we live on the lower East coast of the North Island in Hawke's Bay and I use ZL2IO which is my secondary call from here for radioing. I also hold the special call ZL4T. That is used for contesting where we can use the ZM prefix à ZM4T.

The picture below shows the azimuthal map for New Zealand. An additional circle shows the 5600 miles horizon. As you can see there is a lot of water around us but not any of the main radio populations nearby.



Japan/China is the closest one but is still further away from ZL than it is from EU or the US West coast!

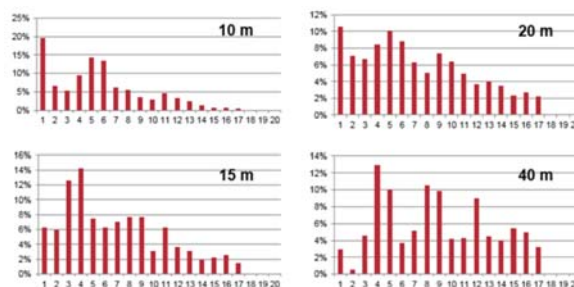
Within this horizon we have about 50,000 Hams, probably 50% of them do not speak English (Indonesia). Among those are about 500 DXer and 100 contesters. If you compare this to any US location you have around 800,000 Hams or more around you with probably 50,000 DXers and 2,000 plus contesters.

If you guys participate in a contest you have tree focus regions for rates. EU, AS or SA. We often can hear you very well and may try to break into your pile up but we a few hops more and come from 90 or 180 degrees into your antennas.



So here we were, located at the end of the world, off the track of the main radio links and limited by building regulations. How to be successful and loud under those circumstances?

(ZL (North Island) to USA, statistical take off angles)



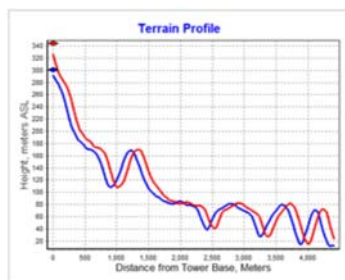
When we investigated the material available from the ARRL handbook regarding statistical take off angles (TOA) it became pretty clear that a 30 or 60 ft tower in flat country was not the solution. You have to achieve maximum antenna gain at TOA's of 1-15 degrees or you only heat the ionosphere. The only option with local antenna height restrictions is to use your terrain or Go hill top!

Once that was clear, we had a specification for the real estate agents. Hill top location, underground main power supply 400V/3~, free visibility to 300-360 degrees (AS/EU-sp), 40-60 (NA), 120-150 (SA, EU-lp) with steep down sloping terrain into those directions, sea views would be a bonus. While those guys did raise their eyebrows and wondered about the spec., we found a spot that was accepted but the girls as well, bought it, installed a few antennas and built a house on it.



Amateur Radio Challenges from New Zealand (cont.)

Terrain profile ZL3IO/ZM4T towards NA



The location is about 1000 ft high, the district plans allow towers up to 75 ft. we use 60ft towers with multiple beam antennas available from 40 m upwards. Location and height of antennas are optimized for target direction to achieve lowest possible TOA. Max gain is always achieved below 10 degrees! Antennas are combined via stack matches.

The biggest challenge for our location is wind. New Zealand is the Saudi Arabia of the wind and has the highest average onshore wind speeds of the world. We experience 80-120 mile/hr every months! So there is a learning curve of what antennas survive our windy conditions. Where we live we luckily have no thunderstorms (lightning) or ice but strong winds. We are classified as "extreme wind" location and every structure here needs to be designed and built for 120 miles/hr or more wind speeds. Most commercial beams failed and the current antennas are all special mechanical designs.



The radio shack is very average with K3 transceivers and KPA500 amplifiers. The setup is made for M/S or M/2 operation. The automation is all homemade reading band data and switching low and high power band pass filters and antennas plus four stack match units for 40-10m. On 80m we have a 4 square and on 160m a dipole or vertical antenna.

Does it work? It works reasonably okay. We can't compete with the Caribbean stations but within New Zealand we hold many records and are one of the more competitive contest stations.

That would bring us to the history of the ZM4T contest station which we will cover in one of the next issues.

Thank you



The Little Pistols Guild to HF Propagation—Part 1

By Robert Brown, NM7M

I discovered this book several years ago. I thought it would be an excellent series of articles to include in our newsletter. Although it was targeted at the "Little Pistol", I believe it pertains to all of us.

I attempted to contact Bob Brown, NM7M, but, he is now an SK. I found a reference to this on K9LAs website. Carl contacted the family and I received their gracious permission to reprint excellent technical discussion. Thanks to the Brown family and to Carl for this.



In writing about propagation for the Little Pistol, I'm really writing about two different subjects, the first being the ionosphere and the other DXing. So I'll have to deal with those topics, perhaps just one at a time, but in the last analysis, the emphasis will be on the ionosphere and how it relates to the Little Pistol's DXing.

Now I started in ham radio before WWII and I don't recall that term, "Little Pistol," being used back then. True, there was great interest in DXing in the late '30s, DXCC getting its start in '37. But I don't remember people strutting around, being pointed at as being a "Big Gun," or anyone feeling sheepish for being just a Little Pistol. Perhaps my own personal sphere of interaction was too small or too local. On the other hand, I did know of some operators who'd qualify now as being a Big Gun, say Reg Tibbetts, W6ITH, in the San Francisco Bay Area and the late Don Wallace, W6AM, in Southern California.

When you come right down to it, the difference between a Little Pistol and a Big Gun is one of degree, not interests. So I would have to think that the operative term in describing a Little Pistol is "modest," say one having a modest station or modest accomplishments when it comes to DXing. But modest is not the term to use in talking of the Little Pistol's ambitions; they're larger and grander than that, even to the point of wanting to become a Big Gun in the future.

Before getting to what the Little Pistol needs to know about the ionosphere to make that transition, let's look at his modest station and see what's typically involved. First, the Little Pistol usually operates on the upper bands at the "barefoot" level, running about 100 Watts RF output from a transceiver with some "bells and whistles." And the antenna system would be something like a triband Yagi with three elements, up there between 30 and 50 feet above ground. A 40-Meter antenna would be included in the setup, say a trapped vertical or a single inverted-V with its apex up around 35 feet.

By contrast, a Big Gun would have a stout linear amplifier after a flashy transceiver, with bells and whistles galore. As for power levels, they could be from 100 Watts output right up to the full legal limit, at the flip of a switch. And antennas would be monoband Yagis, stacked or otherwise, on several towers at 50 ft. or more above ground. There might be a 40-Meter Yagi included as well but certainly 80-Meter and 160-Meter dipoles, well up off the ground, for low-band DXing. So I think you can see there's nothing modest about a Big Gun's setup.

As for accomplishments, the Little Pistol has the "DX Bug" and may already have gone beyond the first step, getting the DXCC Award, and is looking to eventually have enough DX in the log to qualify for the DXCC Honor Roll. That takes "a heap of doing," as the saying goes, but every Little Pistol knows of a Big Gun up there in "Honor Roll Country" and usually has a role model close at hand. So it becomes a numbers game for the Little Pistol, the difference between the number of DXCC countries actually confirmed and the number needed currently to qualify for the Honor Roll. How that game is played out is another matter, in part related to our main topic, HF propagation. But there's another important side related to paperwork.

In that regard, no matter what job I've had, it seemed like I always had to push a broom at one time or another and I also had to keep records. So it is for the Little Pistol, keeping the shack in good order and maintaining an accurate log of stations worked, QSLs received or outstanding, and following the DX scene, perhaps from reading a DX bulletin or monitoring the DX packet cluster. To those chores, I'd have to add another — keeping tabs on the current state of solar/geomagnetic conditions. When taken with the knowledge of the ionosphere that I'll be laying out next, those will be vital to the Little Pistol's advancement toward becoming a Big Gun. As for what information about the ionosphere will help the Little Pistol in reaching his goals, I plan to offer a full and serious discussion of the subject for the Little Pistol to think about and study. However, I will assume the Little Pistol has gone through the basic ideas, as presented in the ARRL Handbook, to get to his present position in the DX hierarchy. That spares me going through what I'd term "introductory material." Since DXing is truly an intellectual pursuit, my task is to build on that kind of fundamental discussion and bring out additional, finer points that will help in DXing.



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 online funding request.

(<http://aj8b.com/application-for-dxpedition-grant/>)

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 regarding 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

To join SWODXA, go to <http://swodxa.org/member.htm>



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: <http://aj8b.com/application-for-dxpediton-grant/> 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 and Frank Schwob, W8OK (sk), was elected as 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 <http://swodxa.org/member.htm>

Meetings: The club meets on the second Thursday of each month at Marion's Piazza on Kingsridge Dr. in Dayton, OH. 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 officers are President Tom Inglin, NR8Z; Vice President Steve Coy, K8UD; Secretary Mindi Jones, KC8CKW, and Treasurer Mike Suhar, W8RKO.

Website: We maintain a website at www.swodxa.org; managed by Richard, KC8RP and www.swodxaevents.org managed by Bill, AJ8B. These sites provide information about a variety of subjects related to the club and DXing.