



March 9, 2018

# CHEROKEE AMATEUR RADIO SOCIETY



# EXPAND YOUR RADIO SKILLS

#####

# TRY SOMETHING NEW!

An Introduction to DXing, Radiosport and QSL card exchanging

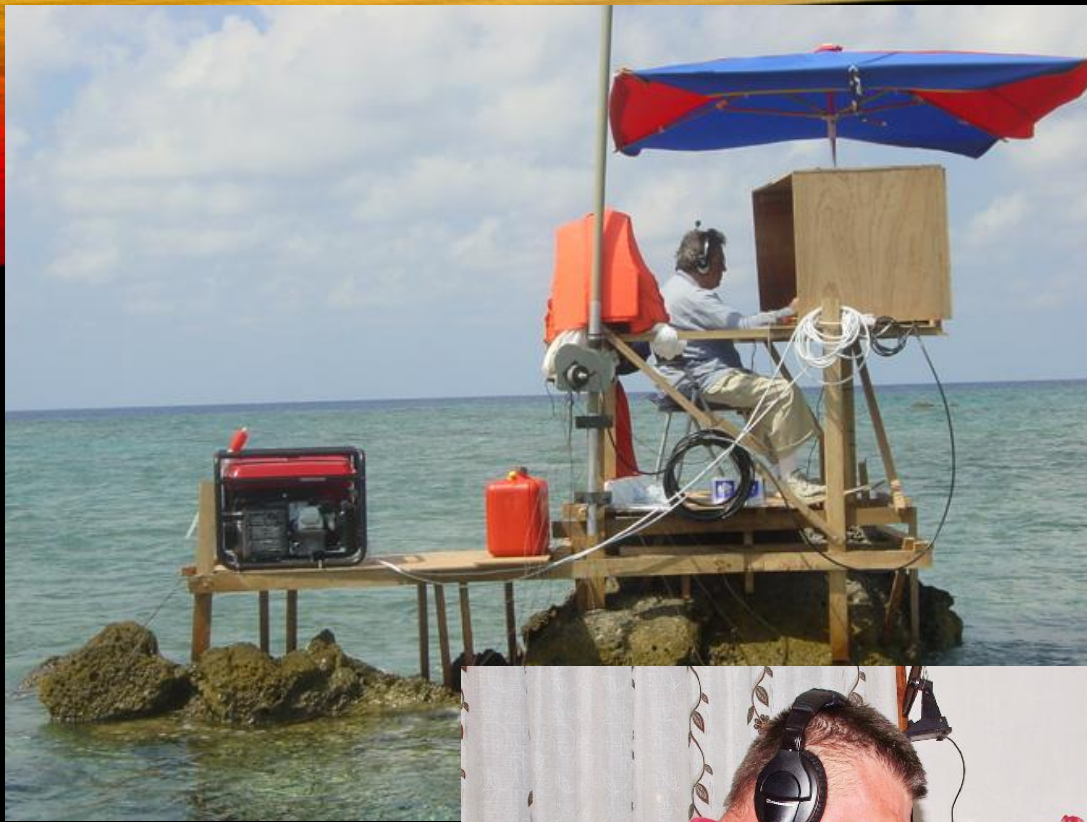














# DREAM ANTENNA FARM W2RE



# WHAT IS DX AND WHO ARE DXERS

Most DXers have modest equipment and DXing is only a part of their enjoyment of amateur radio.

***The term DX comes from the old telegraphy abbreviation for “distance”. The practice of DXing arose during the early days of radio broadcasting. Listeners would mail “reception reports” to radio broadcasting stations in hopes of getting a written acknowledgement or a QSL card that served to officially verify they had heard a distant station. Collecting these cards became popular with radio listeners in the 1920s and 1930s, and reception reports were often used by early broadcasters to gauge the effectiveness of their transmissions.***

You can be a short wave listener Dxer, as I was for years before getting my ham license.





## 1. Early GE Portable

**My early short wave receivers**



1. Early GE Portable

## My early short wave receivers

2. Realistic DX-150







1960's

## 1. Early GE Portable

# My early short wave receivers



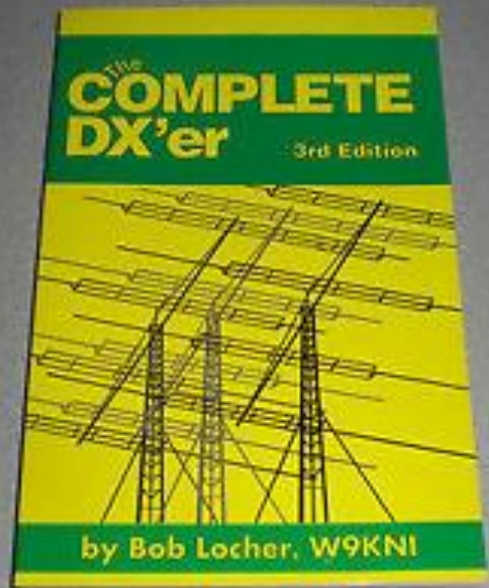
1970's

## 2. Realistic DX-150



1980's

## 3. Japan Radio NRD 535



# DXING RESOURCES

Just searching the internet for Dxing you will find tons of useful information.

Two publication that I have found very useful are:

Bob Locher, W9KNI is, a classic DXer. Over 35 years ago – in 1983 – he published a book called *The Complete DXer*. According to Bob, the book was intended to make the point that DXing is a fun endeavor that requires skills that can -- and must – be learned.

Available from ARRL for \$20. On Amazon it is shown for \$70!!!

Another free resource is **New Dxers Handbook** available at:

[http://www.k7ua.com/uploads/4/9/9/0/4990079/new\\_dxers\\_handbook\\_second\\_edition\\_01-29-2015\\_optimized.pdf](http://www.k7ua.com/uploads/4/9/9/0/4990079/new_dxers_handbook_second_edition_01-29-2015_optimized.pdf)



# DX Spotting or Cluster Services



10:30:42 UTC 21 Feb 2019

Enter Query... by Callsign Search

Database

News

Forums

Swapmeet

Resources

Contact

N4VLK

[Check out the latest DX News...](#)

Live DX Spots from

**DXWATCH.COM**

This page auto-refreshes every 60 seconds.

DE	Freq	DX	Time	Comment
PD5MVH	14074.0	TF2MSN	1030z 21 Feb	FT8 Hi Odinn Good to cu
Z33ST	14009.0	Z33ST	1029z 21 Feb	cq cq
RZ3QWE	14250.0	R30AFG	1029z 21 Feb	AFGAN AWARD opRU3KO
YO8BFB	14209.0	R120MG	1028z 21 Feb	59tnx
IT9EYA	28500.0	IT9EYA	1028z 21 Feb	cq cq
SP3EA	7127.0	DL3JJ/P	1028z 21 Feb	WCA DL-03651



Contribute  
to QRZ

# MY SUMMIT







## RADIO X ARCALA

[Spots](#)[Spot Search](#)[Daily DX](#)[News](#)[Radio Arcala](#)[Visit Azores](#)[Feedback](#)[Tutorials](#)[+ ▾ Filters](#)☒ dx☒ inc

 10:35:43 21 Feb



### Share a spot

 Spotter	 Freq.	 DX	 Time	 Info	 Country
MM0XXW	7130.0	LX1FF	10:35 21 Feb	cq	Luxembourg
PD0RWL-@	14242.0	ON/PD0RWL/P	10:35 21 Feb	WCA ON-00574	Belgium
PD1LV	14218.0	IU0FNW	10:35 21 Feb	tnx Antonio !	Italy
IZ8GHL-@	7138.0	ARPI LEONARDO DA VINCI 500 P.5	10:34 21 Feb	ARPI LEONARDO DA VINCI 500 P.5	Pakistan
I A4PM	10118.0	VP9/AA1AC	10:34 21 Feb		Bermuda



# VOACAP

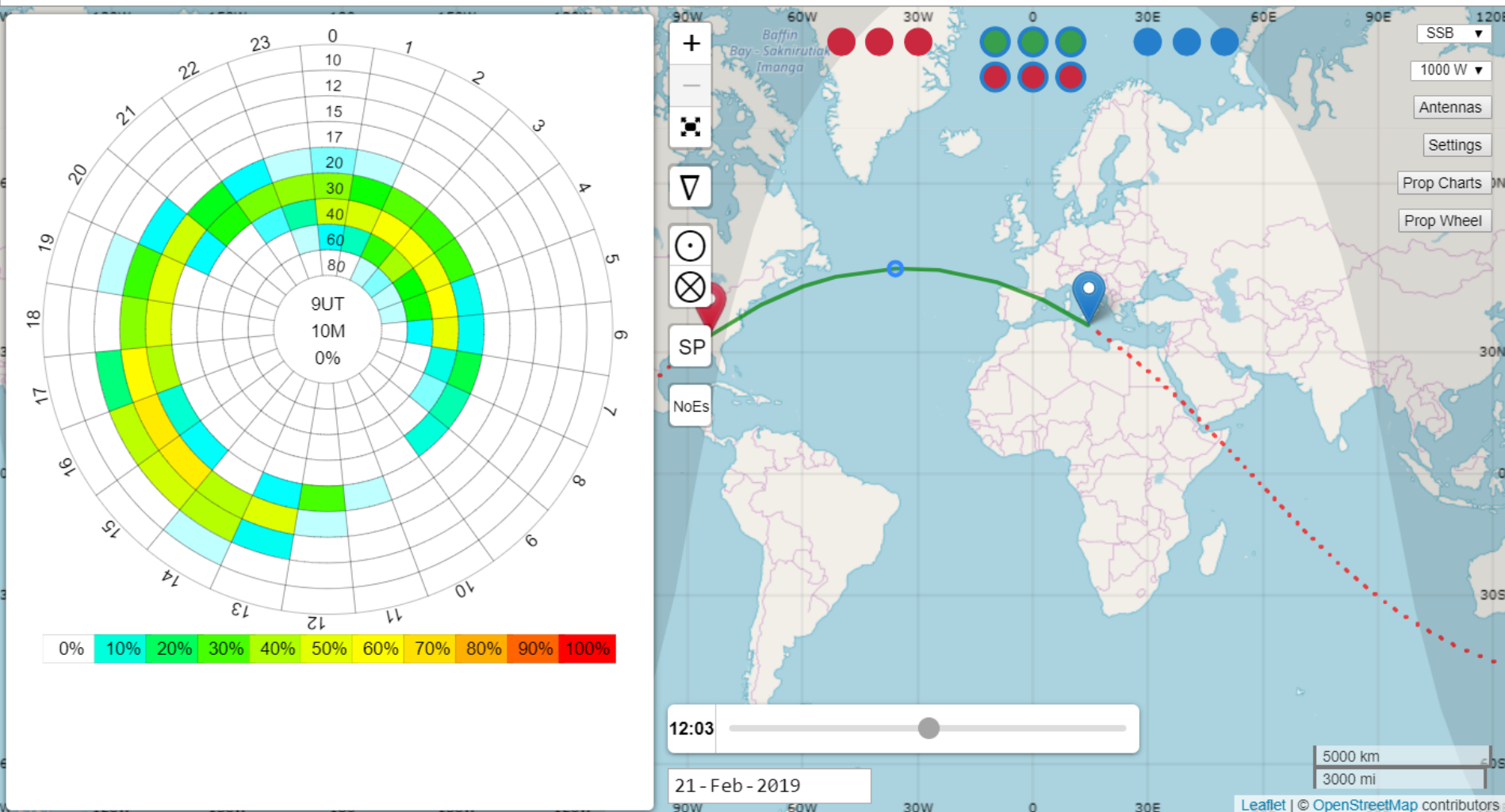
What is VOACAP?

VOACAP (Voice of America Coverage Analysis Program) is a free professional high-frequency (HF) propagation prediction software from NTIA/ITS, originally developed for Voice of America (VOA).

# Vocap Online HF Prediction

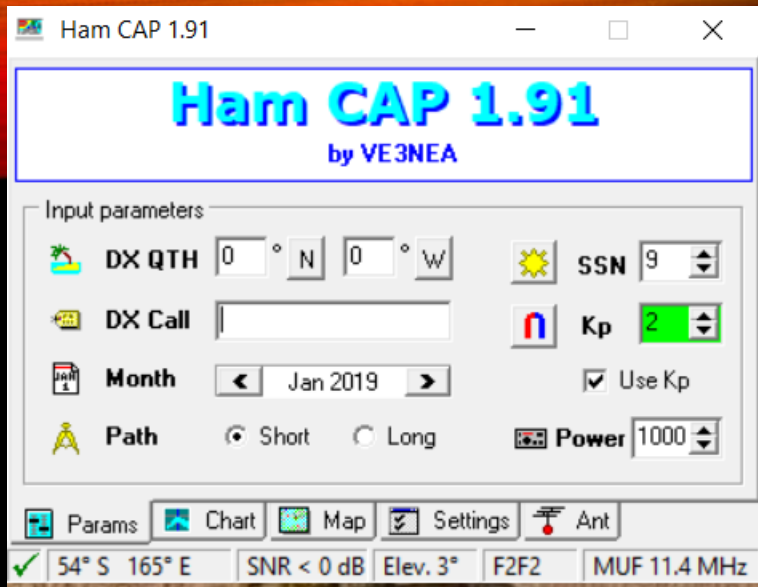
## VOACAP Online HF Predictions (Amateur Radio) – 10:59:47 UTC (5:59 AM)

Select TX QTH:  or set Grid:  or Latitude:  Longitude:   
Select RX QTH:  or set Grid:  or Latitude:  Longitude:



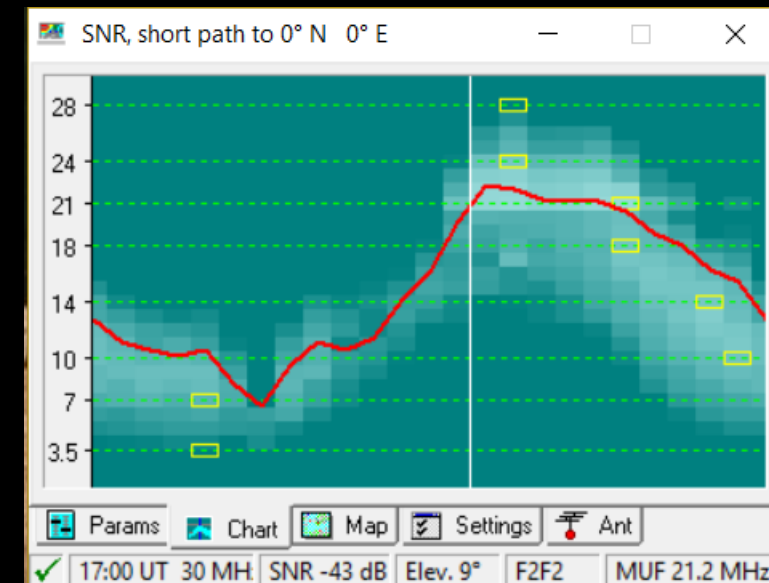
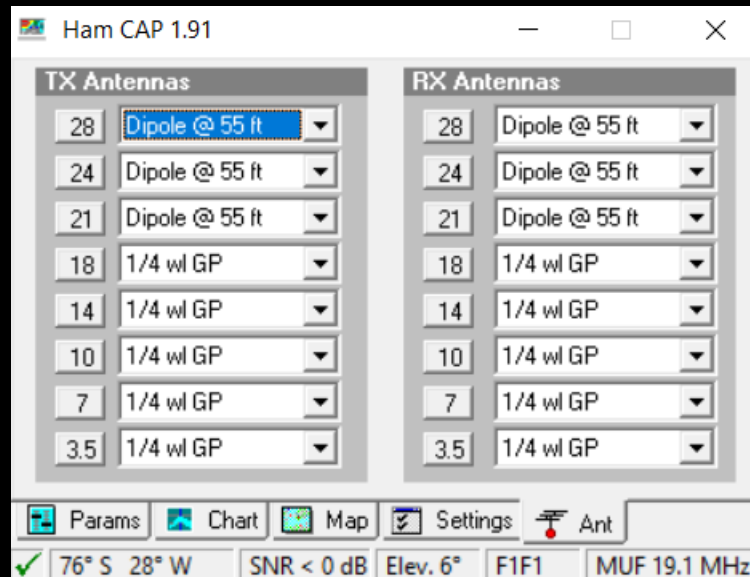
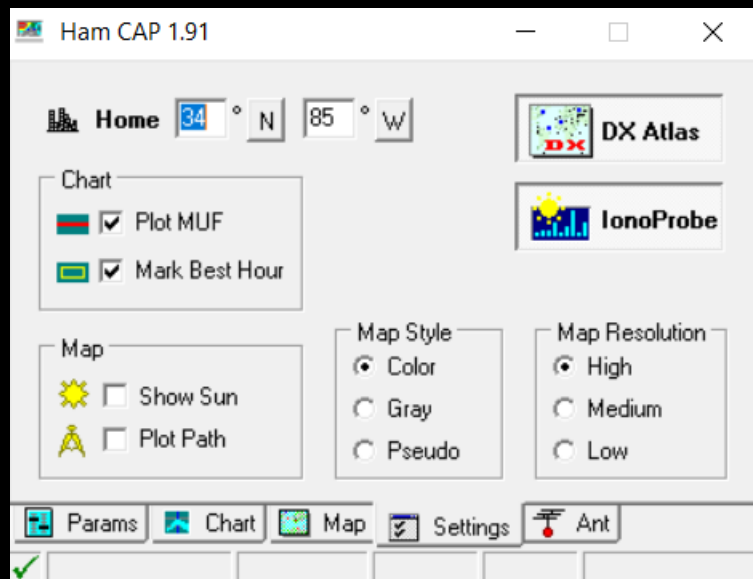
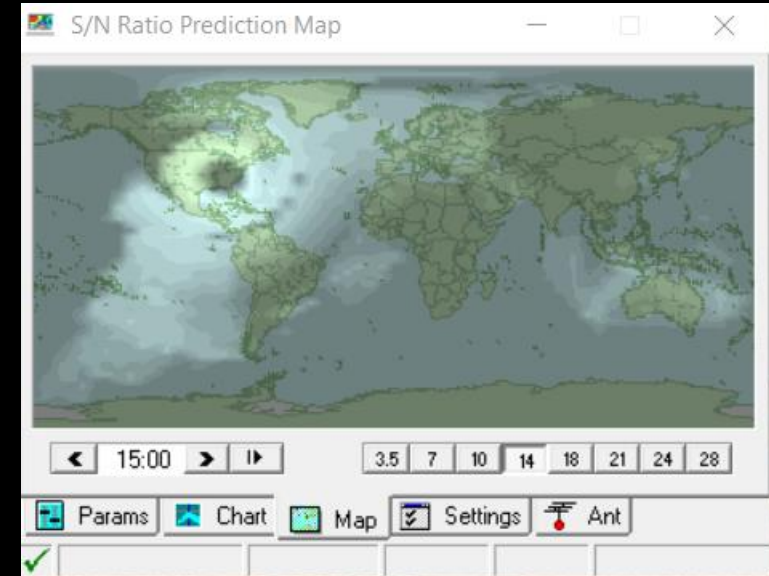
TX: 33.75, -84.38 | RX: 35.89, 14.44 | Short: 8597 km — 5342 mi | 55° — 303° | Mid: 46.9596, -35.8363 | Long: 31411 km — 19518 mi | 235° — 123° |  
Mid: -46.9596, 144.1637

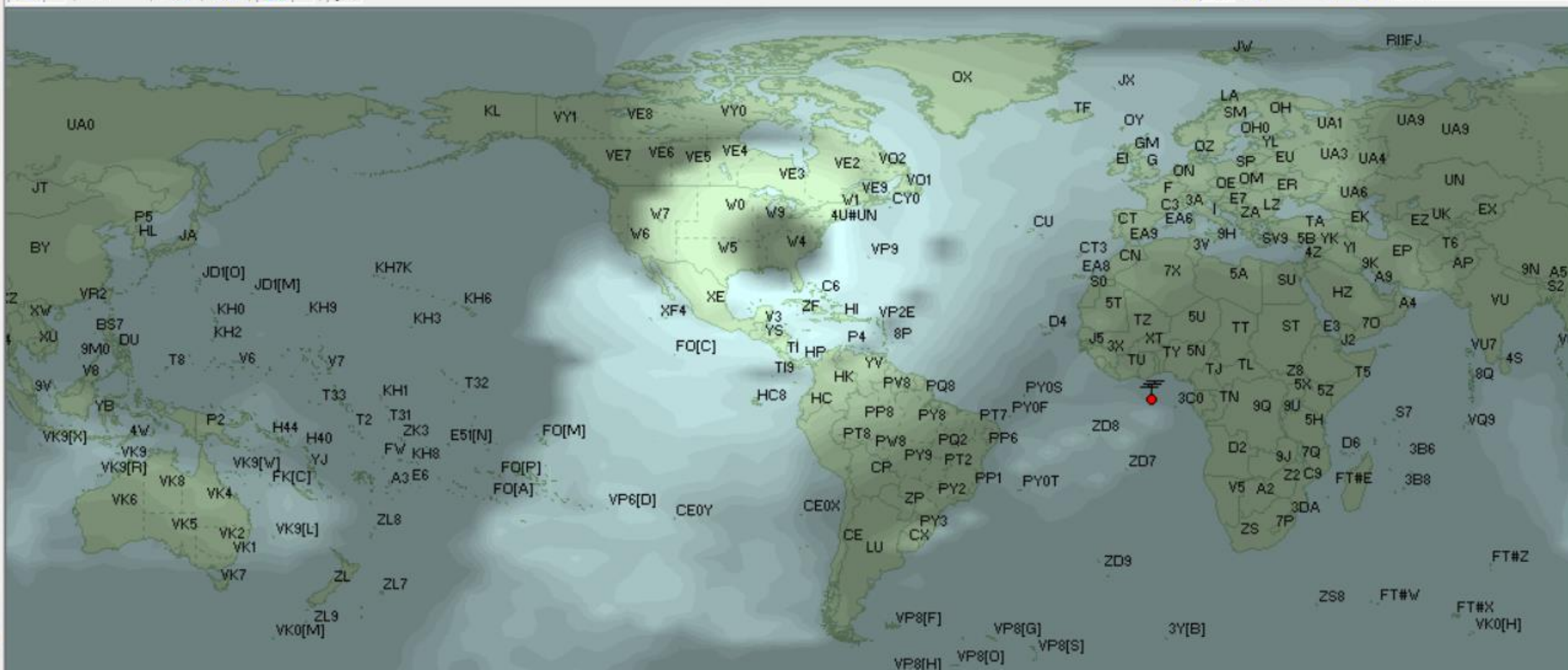




# Ham CAP

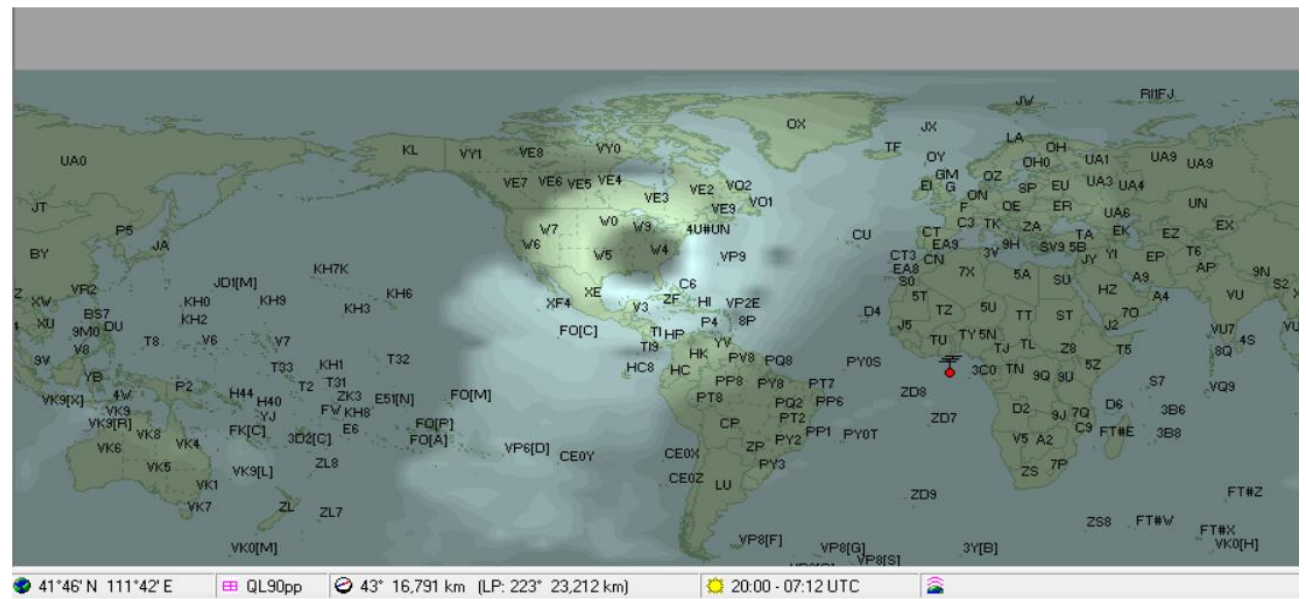
## Interface for VOACAP







**By changing the antenna type, you can compare reception with different antennas.**



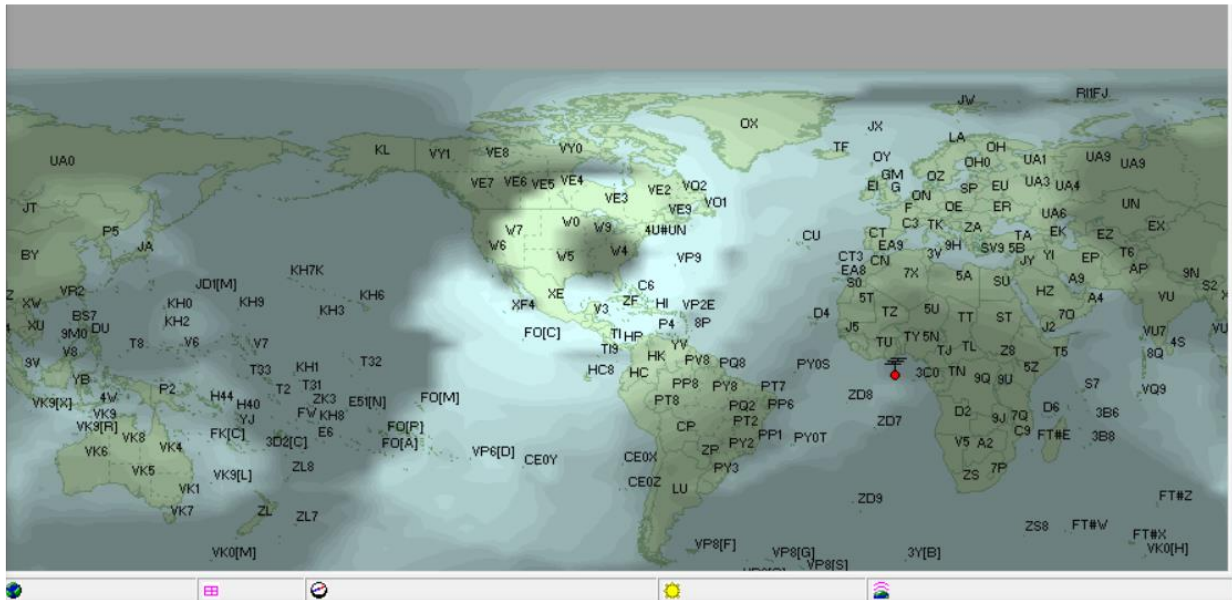
Propagation with 100 watts with my meager  $\frac{1}{4}$  wave vertical (-0.6 Dbi)



Propagation of 100 watts with a 5 element Yagi at 95 ft. (14.3 Dbi)

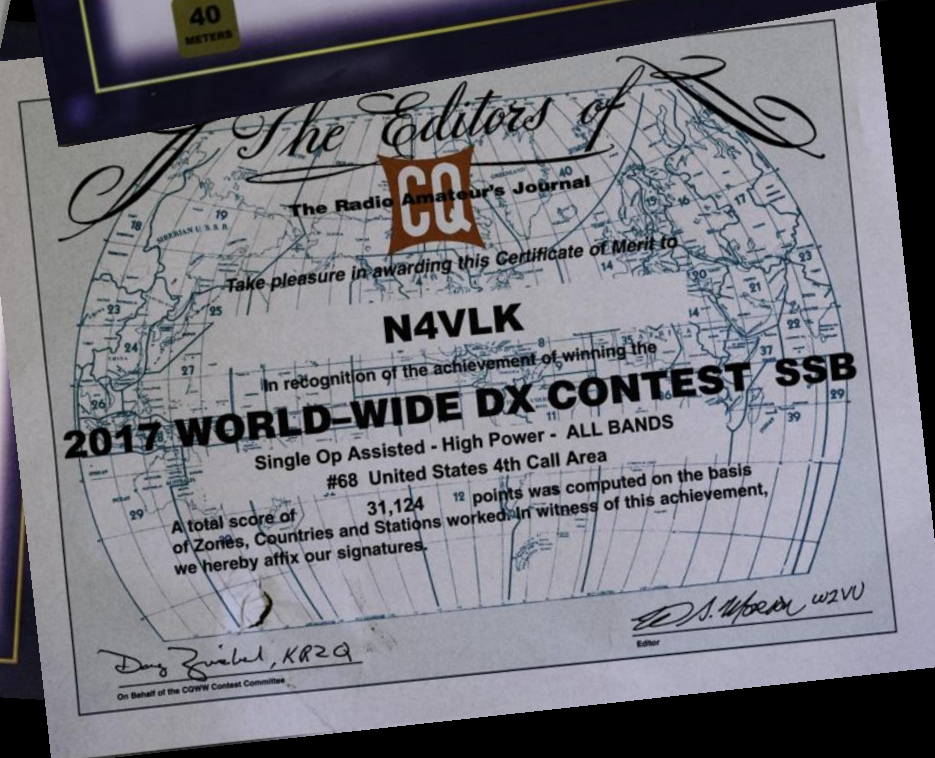
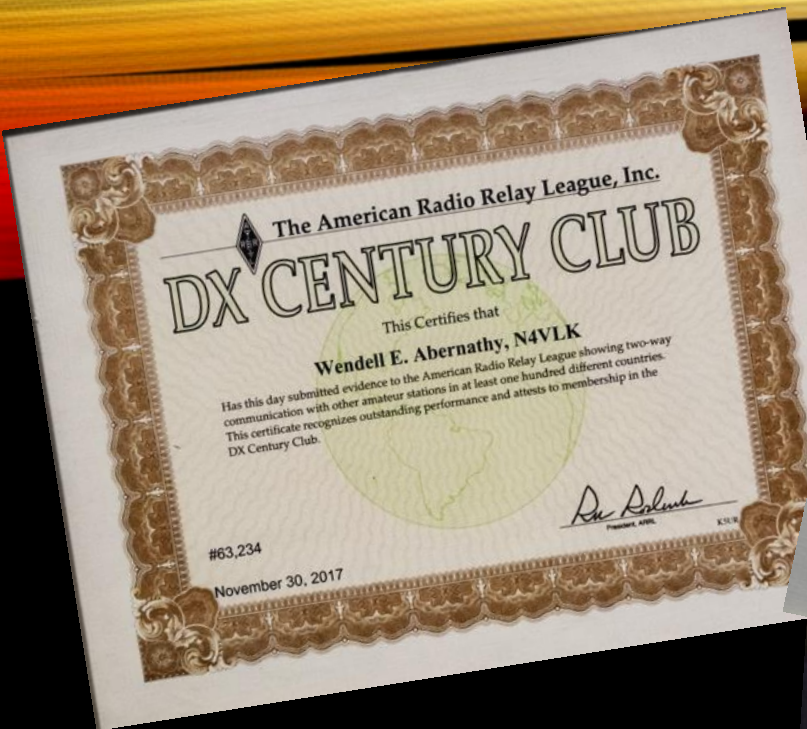


**Looking closely, you can see that the pattern doesn't change, only the STRENGTH within the pattern.**





# Chasing Paper





# WHAT ABOUT CONTESTING AND RADIOSPORT?

Radiosport is often used interchangeably with contesting, but radiosport actually encompasses much more than just contesting. I think of radiosport as any radio activity where there is a set goal, whether you are directly competing with other hams for a score or not.

- Examples would include  
SOTA, Summits on the Air which Joseph gave a presentation on  
IOTA, Islands on the Air  
NPOTA, National parks on the air  
13 Colonies  
Make your own – collecting special event contacts – Indianapolis 500, etc.
- Fox Hunting – locating hidden transmitters competition
- Field Day
- And of course Contesting

Please keep in mind that all of the resources we have talked about for DXing are also tools which are useful in contesting, especially in world-wide contests and to some extent in more localized contests.

# HISTORY OF CONTESTING

Contesting grew out of other amateur radio activities in the 1920s and 1930s. As intercontinental communications with amateur radio became more common, competitions were formed to challenge stations to make as many contacts as possible with amateur radio stations in other countries. Contests were also formed to provide opportunities for amateur radio operators to practice their message handling skills, used for routine or emergency communications across long distances (I guess a forerunner of ARES). Over time, the number and variety of radio contests has increased, and many amateur radio operators today pursue the sport as their primary amateur radio activity.



# WHAT IS CONTESTING?

- Contesting: In a contest, an amateur radio station, which may be operated by an individual or a team, seeks to contact as many other amateur radio stations as possible in a given period of time and exchange information
- Rules for each competition define the amateur radio bands, the mode of communication that may be used, and the kind of information that must be exchanged. The contacts made during the contest contribute to a score by which stations are ranked. Contest sponsors publish the results in magazines and on web sites.

# CONTEST RULES

**The contest sponsor sets the rules for each contest.**

This includes:

- Time and date of contest

- Duration of contest

- Eligibility to compete in contest

- Modes of operation, voice, CW, RTTY, PSK31, etc.

- Exchange required – call, CQ zone, State, Country, contest sequential number, etc.

- Class of participant , which might include

  - Allowed power of operation, QRP, <100w, upto 1500w, etc.

  - type of station power, ie. Portable (battery and or solar) or commercial power

  - Use of spotter service or not

  - Rookie (licensed less that 3 years)



# GETTING STARTED CONTESTING

Contesting can be a little scary at first regardless of your station capabilities. You hear loud station working other stations one after another at a fast clip. On Phone some operators talk so fast you can hardly understand them. Before actually entering a contest, try listening to a couple of contest to get a feel for the pace and exchange.

Study the rules of the contest you are interest in entering.

Setup your logging software and practice entering exchanges to make sure you are comfortable.

During the contest you will notice that exchange is kept to a minimum. Contesting is not the place for ragchewing. A contester is not interested in your weather, only in making as many contacts as possible. Speak clearly and pause. The other party will either acknowledge or ask for a repeat if something is not clear. The name of the game is efficient exchanges. Anything that causes a repeat request waste time. For example if your serial number is 55 and you say "Fifty Five", it might be mistaken as "Sixty Five". Instead say "Five Five". 255 would be "Two Five Five". If giving your state is required, instead of saying "Georgia", it is often better to say "Golf Alpha". It is better to spend an extra second giving a clear first copy than having to spend several seconds to do a repeat cycle.

Don't be intimidated. Wait until the pace slows a little and that big powerhouse station will be looking for you!



# TYPICAL CONTEST EXCHANGE

A typical exchange in the CQ World Wide DX contest might go something like this –

**ME: CQ contest November Four Victor Lima Kilo, N4VLK contest.**

(I am soliciting a contact in the contest)

**Station 2: Zulu Lima Six Quebec Hotel**

(The station calling, ZL6QH, gives only his callsign. No more information is needed.)

**ME: ZL6QH 59 05** (said as "five nine oh five").

(I confirm the ZL6QH call sign, sends a signal report of 59, and that I am in ZONE 05 (Eastern US).)

**Station 2: Thanks (or QSL, or roger, etc) 59 32** (said as "five nine three two").

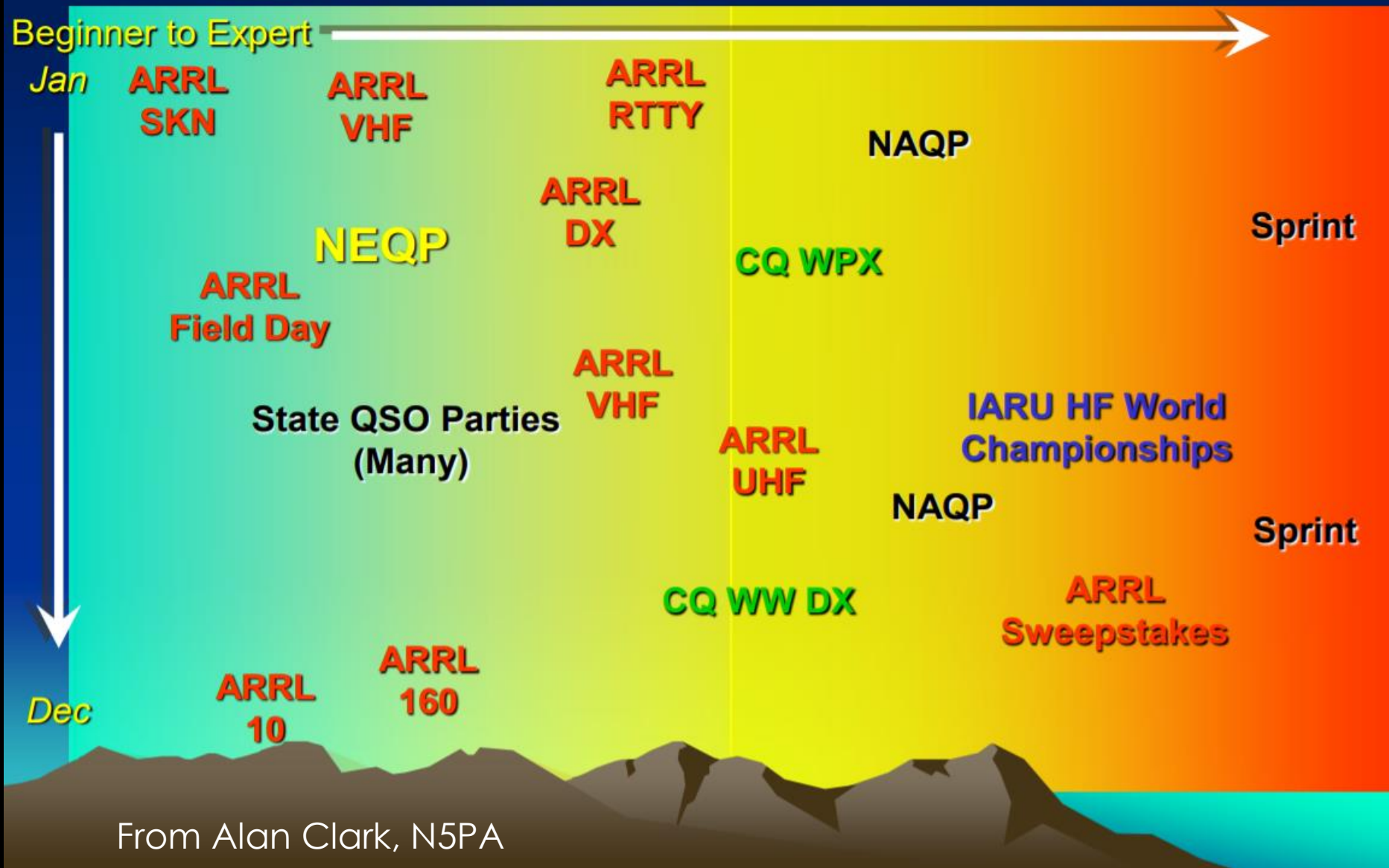
(ZL6QH confirms reception of MY exchange, sends a signal report of 59, and is in Zone 32 (South Pacific).)

**ME: 73 (or thanks for the Zed Ell). November four Victor Lima Kilo QRZ?**

(I confirm ZL6QH's exchange and am now listening for new stations.)

If I don't get an immediate response, I start the sequence over again with a CQ contest....

# A Contest for All Seasons/Tastes



From Alan Clark, N5PA

# DO I HAVE TO SUBMIT A LOG?

Logging software is very important in contests if you want a score. Although the FCC no longer requires you to log every QSO, it is very helpful to submit a log for a contest. It is not necessary that you submit a log if you work a contest, but if you don't submit a log, try to make at least several contacts on each band you work. This will allow the contest robot checker to verify for other operators that the contacts they reported with you were valid contacts. By using a logging program specifically designed for contest, submitting a log is a simple process.



# CONTEST LOGGING SOFTWARE

There are dozens of programs to log contest, but some of the most popular are:

N1MM – free and the one I use

N3FJP

DXLog

These packages are modified specifically for the particular contest you are participating in. It will prompt you for the required information and some cases will actually fill the info in for you.

When the contest is over, it will create a file in the proper format for you to submit.

# Online Resources

- DX Summit - <http://www.dxsummit.fi/#/> DX spotting - useful for searching spots to correct calls you may have logged incorrectly)
- DX Coffee - <http://www.dxcoffee.com/eng/> (Stories and news related to DXing; free newsletter)
- DX Heat - <https://dxheat.com/> (DX spotting resource that displays a "heat map")
- DX Watch - <https://dxwatch.com/> (Web-based DX spotting network)
- DX World - <https://dx-world.net/> (Stories and news related to DXing)
- DXScape - <http://www.dxscape.com/> (Web-base DX cluster)
- Daily DX - <http://www.dailydx.com/> (Subscription news site for DX run by Bernie, W3UR)
- Club Log - <https://clublog.org/loginform.php> (Popular web-based logging platform with OQRS for QSLing)
- DX News - <https://dxnews.com/> (News related to DX and ham radio topics)
- LOTW - <https://lotw.arrl.org/lotwuser/default> (Online electronic QSL system operated by the ARRL)
- eQSL - <https://www.eqsl.cc/QSLCard/Index.cfm> (Online electronic QSL system)
- QRZ - <https://www.qrz.com/> (Online callsign lookup and logging system)
- 1x1 Callsign Lookup - <http://www.1x1callsigns.org/> (resource to lookup special callsigns not in QRZ)
- Site sponsored by Universal Radio - <https://www.dxing.com/>
- SVOCAP Guide - <http://www.voacap.com/>

# QSL CARD COLLECTING

- What Cards do you want to collect?
  - Every contact ?????
  - Special Events
  - Special Locations
  - Special Interest
- How do you design your own QSL card?
- What about postage and mailing? Or do you even have to Mail cards today to exchange cards...
- Fringe benefits of QSL card collecting.
- Direct – Bureau – OQRS - Greenstamps - What do these mean?



# COLLECTING SPECIAL EVENTS

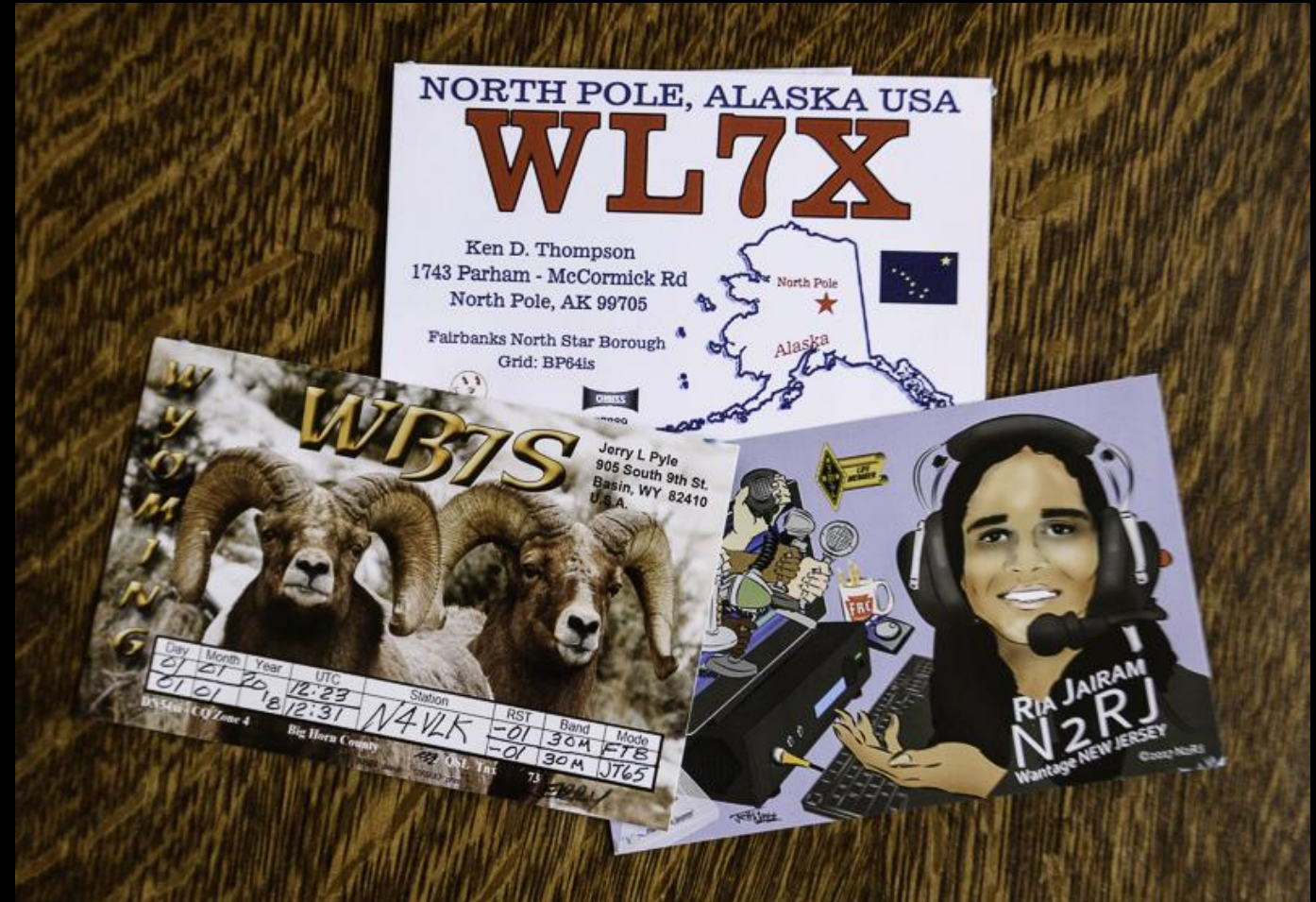
- Some special events are one-off, others occur each year.
- I have included W1AW in this category although it is not a special event, but a full time “special station”.
- Many special event stations have a special temporary 1x1 call.





# COLLECT CARD WHICH HAVE A SPECIAL INTEREST FOR YOU

- I had to have a card from North Pole, Alaska!
- WB7S was a special QSL because it allowed me to finish my WAS on JT-65. This was after the mode was almost completely supplanted by FT-8.
- Some of you might be familiar with N2RJ, Ria Jaiam. Ria is a very active forum participant with a deep technical knowledge. She was recently elected the Division Director of the ARRL Hudson Division.





- 
- A collection of QSL cards for various amateur radio stations, including 3B9FR (New Caledonia), FK8CE (Falkland Islands), VP8LF (Falkland Islands), J5T (JST DXpedition), VK7AC (VK7AC), RI1ANL (Guinea Bissau), OX3XR (Greenland), T88TH (T88TH), and VK2XC/VK2ZXC (Tasmania Island).



# WHAT TO PUT ON YOUR QSL CARD?

- The types and varieties of QSL cards are endless. I will present just a few suggestions, but there are no bounds on what your card can picture or depict as long as it has the required information to document the QSO.
- Your card must contain the following:
  - Your call and locator
  - Date and time of the QSO
  - Frequency and or band of the contact
  - RST report
- Most hams also include
  - Their address
  - Their equipment
  - Their other interest
  - Their Amateur Radio affiliations

# PERSONAL CARDS

- Your card can reflect something you have a passion about, your hobby or your vocation.





- Some cards are whimsical or humorous.
- Some cards defy explanation!





# DESIGNING YOUR QSL CARD

- Your card can be basic, such as NN50's
- It can be on glossy card stock with a full color image, My card, N4VLK, shows my QTH on a map image. I received and decoded this image from a NOAA satellite.
- WG4R, a friend of mine (and Bob, N4RFC) was a commercial airline pilot and used to QSO from the cockpit, and his card reflects this!



# WHERE TO PURCHASE YOUR QSL CARDS

There are many resources you can find on the internet for QSL cards. Here are a couple to get you started.

Cheap QSL Cards - <https://www.cheapqsls.com/>

You can design and purchase 100 cards for \$9.99 and up

RadioQTH - <http://www.radioqth.net/qslcards>

Here you can design your own card, save it to a PDF file with 3 to a page and print them as needed on your home printer – doesn't get any less expensive than that!

Using RadioQTH's card creator website, I created this sheet of cards in about two minutes. You can do a lot of customization and even add images. Best of all its FREE!

UNITED STATES  
**N4VLK**  
Wendell Abernathy  
643 Laurel Crossing  
EM74rg  
Canton, GA 30114

CONFIRMING CONTACT

RADIO	DATE	UTC	MHz	MODE	RST
FLEX 6600M					

Pse QSL Tnx 73,

UNITED STATES  
**N4VLK**  
Wendell Abernathy  
643 Laurel Crossing  
EM74rg  
Canton, GA 30114

CONFIRMING CONTACT

RADIO	DATE	UTC	MHz	MODE	RST
FLEX 6600M					

Pse QSL Tnx 73,

UNITED STATES  
**N4VLK**  
Wendell Abernathy  
643 Laurel Crossing  
EM74rg  
Canton, GA 30114

CONFIRMING CONTACT

RADIO	DATE	UTC	MHz	MODE	RST
FLEX 6600M					

Pse QSL Tnx 73,



eQSL is a very easy and inexpensive way to exchange QSL cards and earn awards. The basic membership is free, but for a few dollars a year you can create very distinctive QSL cards and earn awards.

System Stats	
Users online:	223
Total Unique Users:	293,323
Total eQSLs:	643,244,911
eAwards Issued:	153,848
Load Factor:	0%
Page Wait:	0.0 secs



**HamTestOnline™**  
exams that focus on most-often-missed questions



# eQSL Cards

**D4C** MonteVerde Contest Station  
Mindelo, CAPE VERDE  
Loc: HK76MU ITU: 46 CQ: 35  
IOTA: AF-086

CQ ZONE: 35  
ITU ZONE: 46

To: N4VLK This confirms our 2-way SSB C  
Date: October 27, 2018 Time: 18:54 UTC  
Band: 15M UR Sigs: 59

Powered by momo BEAM

**VK4KW**  
Phil Smeaton  
PO Box 185  
Toogoolawah QLD, 4313  
Australia  
Loc: QG62 ITU: 55 CQ: 30  
IOTA: OC-001

ITU ZONE 17 GREETINGS FROM ICELAND "THE LAND OF ICE AND FIRE" CQ ZONE 40

**TF5B**

QTH LOC: IP05WQ IOTA EU-021 DIG 3711 10-X #3714  
Brynjólfur Jónsson, Engimýri 8, IS-600 Akureyri, Iceland

To: N4VLK This confirms our 2-way FT8 QSO  
Date: October 14, 2018 Time: 09:33 UTC  
Band: 40M UR Sigs: -11  
FT8 Sent: -11 Rcvd: -05

**HK37**  
José Alejandro Garcia Rosq  
Cra. 18C 121-09 Apt  
Bogotá, 11C  
Colo:  
Loc: FJ24XR ITU: 12  
Yag3el 40m 6el 20

**UA4S**  
Victor Vasilenko  
Bajdukova, 53  
Volzhsk, Marij-El  
425000  
Loc: LO46BE ITU: 29 CQ: 16  
MR-06 for RDA

To: N4VLK This confirms our 2-way SSB QSO  
Date: October 28, 2018 Time: 13:31 UTC  
Band: 20M UR Sigs: 59

an Electronic QSL from eQSL

**4M6R**  
CESAR RAMIREZ  
PO.BOX 224  
EL TIGRE, 6050  
6050  
Loc: FJ78VW ITU: 12 CQ: 9

To: N4VLK This confirms our 2-way SSB QSO  
Date: October 27, 2018 Time: 10:44 UTC  
Band: 40M UR Sigs: 59

**UN1L**  
Gennadiy Gleyzer  
Turgenieva 25/1  
Rudny, 111500  
Kazakhstan  
Loc: MO22 ITU: 30 CQ: 17

To: N4VLK This confirms our 2-way FT8 QSO  
Date: December 13, 2017 Time: 13:09 UTC  
Band: 40M UR Sigs: -23



# ENVELOPES

- Here you see the envelope sets I use to increase the likelihood that I will get that needed QSL card.
- On ones on the left are for domestic mail.
- On the right are the ones for International postage.





# SAVE ON POSTAGE

- Surprisingly, you can purchase older stamps for as little as 70% of face value.

You do have to calculate, select and apply more stamps, but the savings can be substantial if you do much card exchanging.

- An added advantage is that many hams are also stamp collectors, so it might just increase your chances of getting a reply.





# ADDED BENEFIT OF QSL CARDS – YOU GET STAMPS TOO! AND POSSIBLY A NEW FRIEND.

- Most QSL cards you receive have a wealth of local postage. If you are not a stamp collector, the chances are you have a child or grandchild who is.
- Another benefit is possibly making a new friend. I have received hand written letters and even brochures along with my returned QSL card.



# HOW DO I GET MY CARD TO GABON, AFRICA?

There are basically two way to send a QSL card:

1. Direct – you mail the card just like any other piece of mail. The international letter rate postage is currently \$1.15 for the first ounce. If cost is no object, this is the preferred method. I always use direct for cards that are important for me to get. Direct is also the fastest method.
2. Bureau – Many countries have QSL bureaus. Bureaus accept QSL cards and aggregate them into packets destined to specific countries. When these bulk shipments reach the designated country, the local bureau then segregates the cards by call area. These are then sent to the area bureau representative who files the cards by call sign. When you have accumulated a quantity of cards the representative will then forward the cards to you, provided you have supplied him with stamped envelopes or a cash deposit. Using the Bureau is the least expensive method provided you are sending a large number of cards. The downside is that it might take months or even years to send and then receive a reply.



# HOW DO I GET MY QSL CARD RETURNED?

1. Direct – Just as in sending, the receiver will mail the QSL card to you. Many (most!) foreign hams require that you pay the return postage. This is understandable since they receive many, many more request for cards than we do. Always check their QRZ page, often the specifics are listed there. Some will ask for perhaps 3 “greenstamps”, translated, US dollars. Some do not require return postage and occasionally the wanted contact will have a QSL manager located in the United States. In this case you save on postage both ways!
2. Bureau – This method was discussed earlier.
3. OQRS – What the heck is that?? OQRS is a newer method operated mainly by Club Log. Many Dxpeditions and some individuals, especially in rare locations are now using OQRS. The way this works is you visit Club Log’s website and under your contacts logbook you enter your call sign. It will show all contacts. You can then select to receive a QSL card through the OQRS system. There is usually a \$2 to \$4 charge. This might seem expensive, but you save postage both ways, envelopes and time. Dxpeditions are not interested in receiving your QSL card anyway and you usually get their card in a matter of days or a couple of weeks at the most.



# WHY DO WE DX, CONTEST AND COLLECT QSL CARDS?

Fun –

- The excitement of the chase

- Adds variety – each contact, contest and card is unique

Fulfillment –

- Accomplishment of beating yourself or others

- Reaching a goal

- Learning new techniques and improving yourself and your station

- Awards

- Helping Amateur radio – Keep the bands active “Use it or lose it”

- We don't want to have any frequencies deallocated.

Friends – Make new friends both online and at hamfests and conventions



**You own Ham Radio. Don't sell  
yourself short by limiting your  
experiences. Challenge yourself,  
try something new,. You just  
might like it!**



