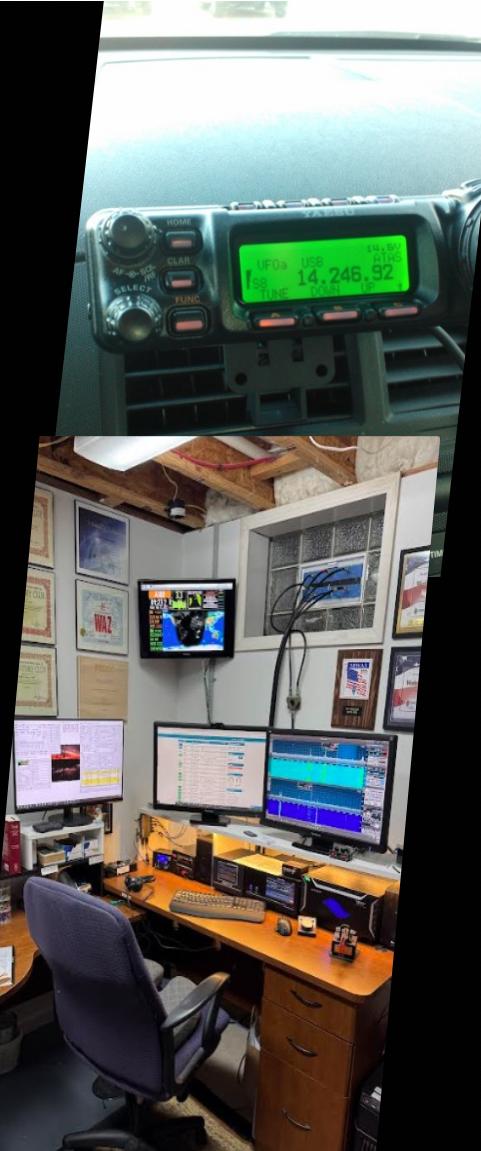




DX Hints & Tips

By Joe Pater, W8GEX,
(w8gex@aol.com) &
Bill Salyers, AJ8B
(aj8b@arrl.net)

The DX Mentor - AJ8B



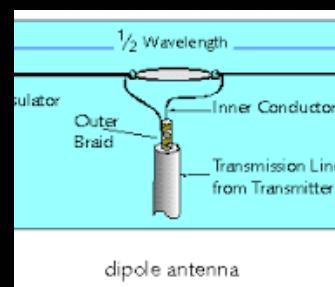
Who is AJ8B?

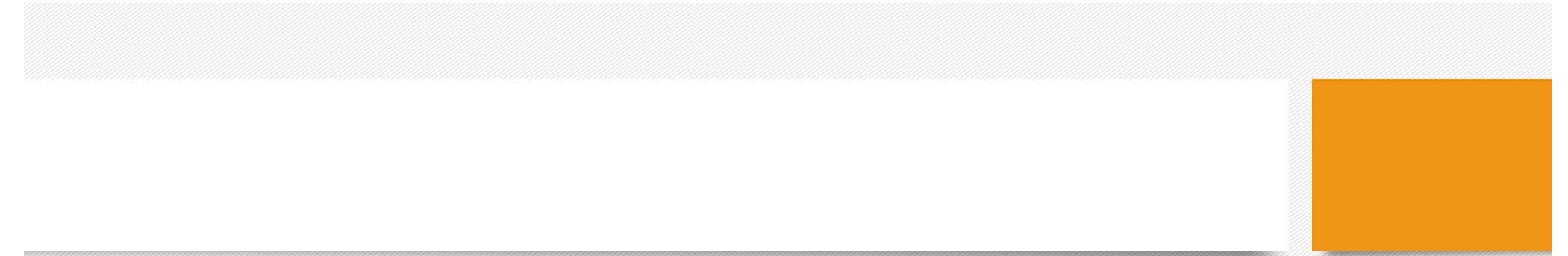
- ▶ First Licensed in 1971
- ▶ DXing since 1980
- ▶ Mixed 326, Phone 257
- ▶ CW 292, Digital 269
- ▶ WAZ, Mobile DXCC
- ▶ ARRL Triple Play
- ▶ ARRL Trident Award (200)
- ▶ Challenge 1806
- ▶ 8 Band DXCC, WAZ



Extracurriculars

- ▶ CWOPs Instructor
- ▶ SWODXA President
- ▶ SWODXA Newsletter Editor
- ▶ OH Section Journal DX Column Editor
- ▶ Twin City DX Assoc. Newsletter Editor
- ▶ QSO Today #319
- ▶ ARRL 8th Area Bureau “N” sorter
- ▶ Host of the “DX Mentor” podcast
- ▶ Weekly contributor of the “Dose of DX” section of “This Week in Amateur Radio” podcast
- ▶ Weekly “This Week in DX” on YouTube





Should You be HERE today?

Or

Do Any of These
Apply to You?

I TEXTED HIM
“ME OR CHASING DX”



HE REPLIED “73” AND LEFT

He claimed he was a DXer

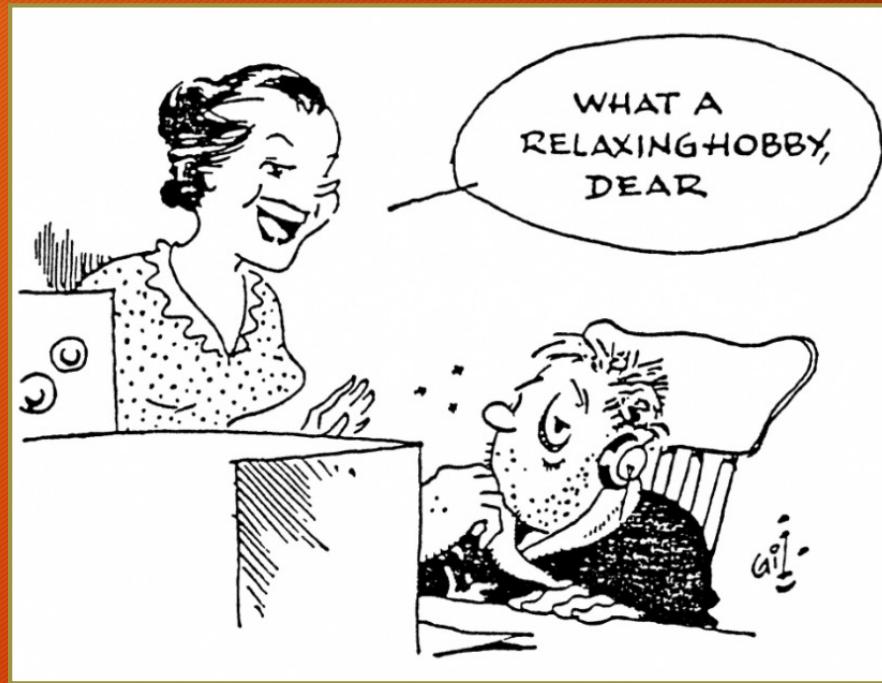


**..but he only operates on
Contest Weekends**

DX is Always on Your Mind!



Balance IS Important



Some Tips, Tricks, and Techniques to get the DX in your log

- Logging Software
- Spots
- Splits & Filters
- Tail ending / Partial Calls / Timing
- Lists (WHAT???)
- Potpourri
- The SILVER Bullet



Let's Start with
Logging Software

I Use DXLab

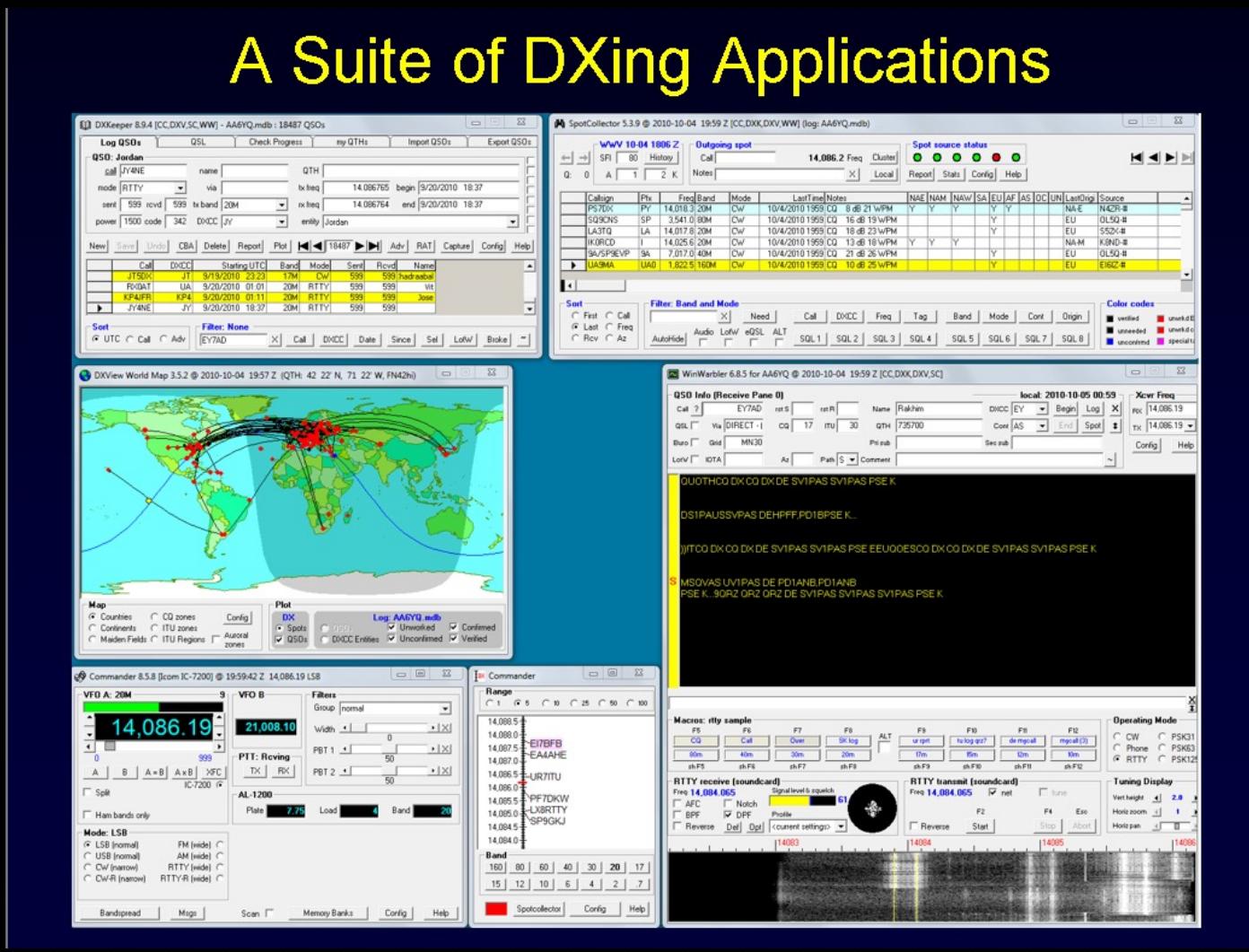
This is not an Ad for
DXLAB

The Software is FREE

There is a Huge Support
Community

Written by AA6YQ - Dave
Bernstein of LoTW fame

A Suite of DXing Applications



DXLab Features

- Transceiver & Rotor Control
- Logging
- DX spot collection & aggregation
- Digital mode operation
- Propagation prediction
- Automatic uploads to LoTW, Clublog, QRZ.com, and eQsl.
- Custom Reports
- The suite's components can operate independently but seamlessly integrate, automating tasks and providing information to improve contacts.

Reports as well as Real-Time Award Tracking

DXKeeper Realtime Award Tracking: M0MLS

Award Progress: 402 all-time DXCC entities [Filter: by progress]

	Prefix	Entity	Phone	CW	DIGI	PSK	160M	80M	40M	30M	20M	17M	15M	12M	10M	6M	2M
	JA		V	V	V	V		C	V	V	V	V	V	V	V	V	
	JD1-M		V	V	C									C	V		
	JD1-O		V	V	V	C						C	V	C	V	V	
	JT		V	V	V	C					C	V	C	V	V	V	
	JW		V	V	V	C					V	V	V	V	V	V	
	JX																

Award Progress Filter

Band: ANY Unworked Worked Requested Confirmed Verified

Mode: MIXED Include deleted DXCC entities

G (England) Progress Details

	160M	80M	40M	30M	20M	17M	15M	12M	10M	6M	2M
PHONE		C	C		V	V	C	W	V		
CW		V	V	V	C	C	V		C		
DIGI	C	C	C	C	V	C	C	C	C		
PSK					C	C					

10,100 000

Summary



What About Spots
(or Where is the DX?)

Check Your Own Logbook/Spotting Cluster Client

“Selected Bands and Modes”

WWV 04-16 1805 Z - Outgoing spot

Call: 14,085.0 Freq: Cluster

Notes: Local

Report Stats Prop Config Help

Need	Call	Prefix	Band	Mode	FirstTime	LastTime	Freq	QSO	Pri	CQ	IOTA	DXGrid	ODX	EU	AF	SA	NA-E	NA-M	NA-W	AS	OC	SP	SNR	SP P	LP	SNR	LP P
	TA7I	TA	20M	CW	16 1919	16 1919	14,027.4		20		KM63	3830	Y									29	82	-40	1		
	HB20MDC	HB	20M	SSB	16 1915	16 1919	14,216.0		14		JN47	515		Y	Y							28	65	-62			
	HA7JIV	HA	30M	CW	16 1918	16 1919	10,138.0		15		JN97	3931	Y									13	55	-155			
	PY1IJ	PY	10M	CW	16 1914	16 1919	28,035.0		RJ	11	GG87	4137		Y								-5	23	-56			
	N2MM	K	20M	CW	16 1911	16 1919	14,028.8		NJ	5	FM29	3727	Y									14	63	-103			
	CE7VPQ	CE	10M	SSB	16 1909	16 1919	28,445.0			12	FE33	4311		Y								15	41	-61			
	5K4R	HK	20M	SSB	16 1839	16 1919	14,214.0			9	FJ15	2304	Y	Y								35	92	-66			
	KM4TVU	K	20M	SSB	16 1919	16 1919	14,316.5		GA	5	EM73	3727	Y									43	86	-88			
D	3Y0RY	3Y-B	20M	RTTY	16 1920	16 1920	14,085.0			38	AN-002	JD14	1	Y								11	52	-50			
	KC1YL	K	20M	SSB	16 1903	16 1920	14,315.0		CT	5	FN31	319	Y		Y							27	70	-73			
	HI8/KB1KK	HI	20M	RTTY	16 1920	16 1920	14,074.0			8	FK49	3830	Y									44	100	-82			
	8Q7VB	8Q	30M	CW	16 1717	16 1920	10,107.0	10,108.0		22	AS-013	MJ64	3486	Y								Y	-5	1	-117		
	PU2KOB	PY	10M	RTTY	16 1920	16 1920	28,076.0		SP	11	GG57	1047		Y								-8	18	-63			
	V31MA	V3	15M	CW	16 1920	16 1920	21,004.1			7	EK57	2503										37	91	-49			

Sort: First Call Last Freq Rcv Az

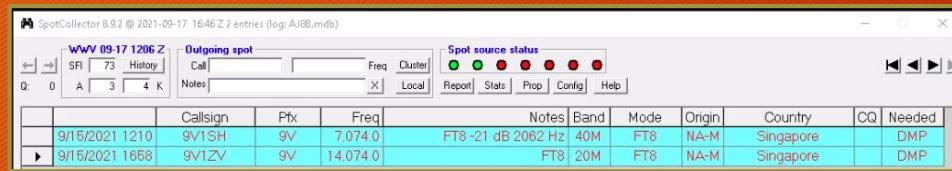
Filter: Band and Mode and Origin

Color codes:

- verified
- unverified B or M
- LotW
- unverified
- unverified counter
- QSL AG
- unassessed
- unverified tag
- QSL & QSL AG
- unconfirmed

Any recent Spots for 9V?

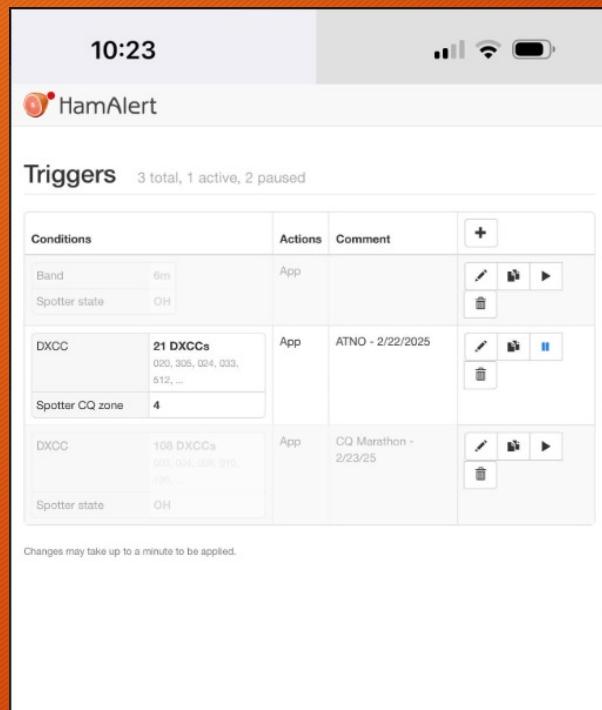
Search YOUR Spotting client Database



	Callsign	Pfx	Freq	Notes	Band	Mode	Origin	Country	CQ	Needed
9/15/2021 1210	9V1SH	9V	7.074.0	FT8 -21 dB 2062 Hz	40M	FT8	NA-M	Singapore		DMP
9/15/2021 1658	9V1ZV	9V	14.074.0		FT8	20M	FT8	NA-M	Singapore	DMP

2 different 9V stations were spotted in past
several weeks *from my region.*

Heard of HamAlert?





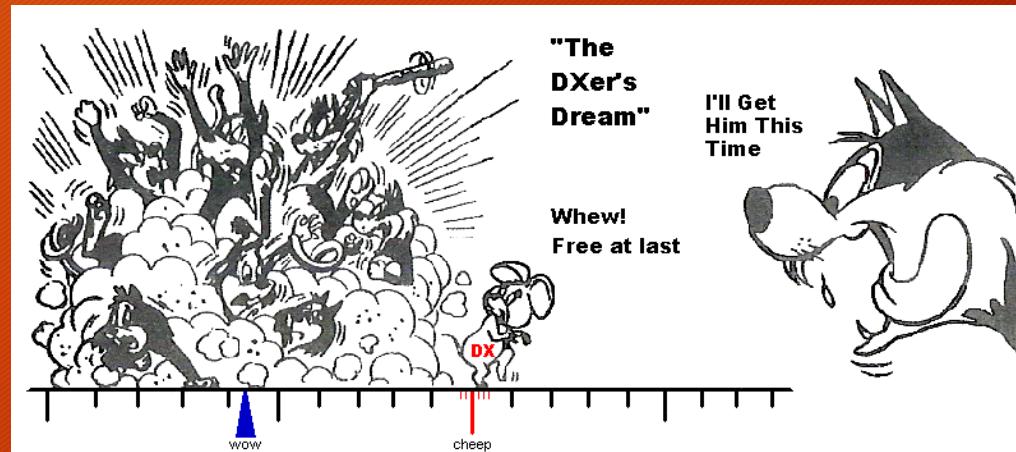
What about
Splits & Filters?

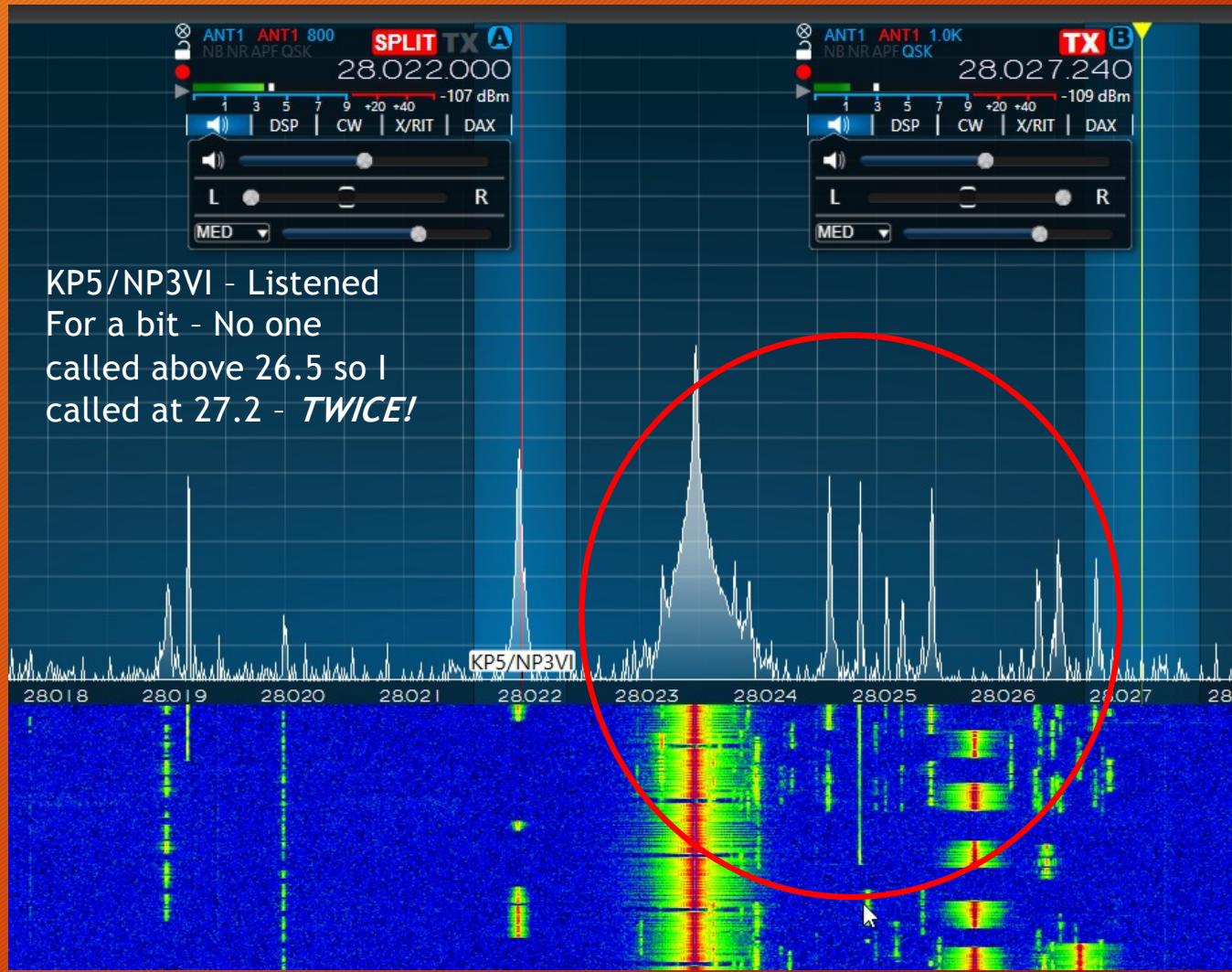


What about
Splits & Filters?

Split Operation - Transmitting & Receiving on Different Frequencies

- I need a Volunteer
- Operator says “Up 5” or perhaps “Listening 155 to 215”
- I have split enabled **ALL** of the time





Split Operation - Example

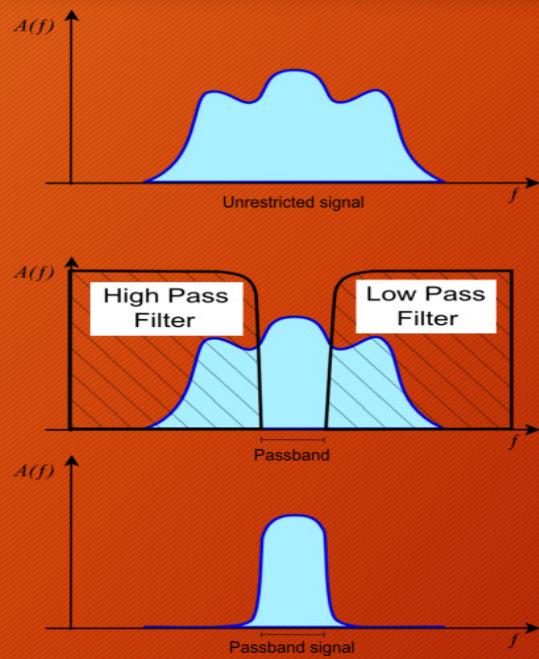


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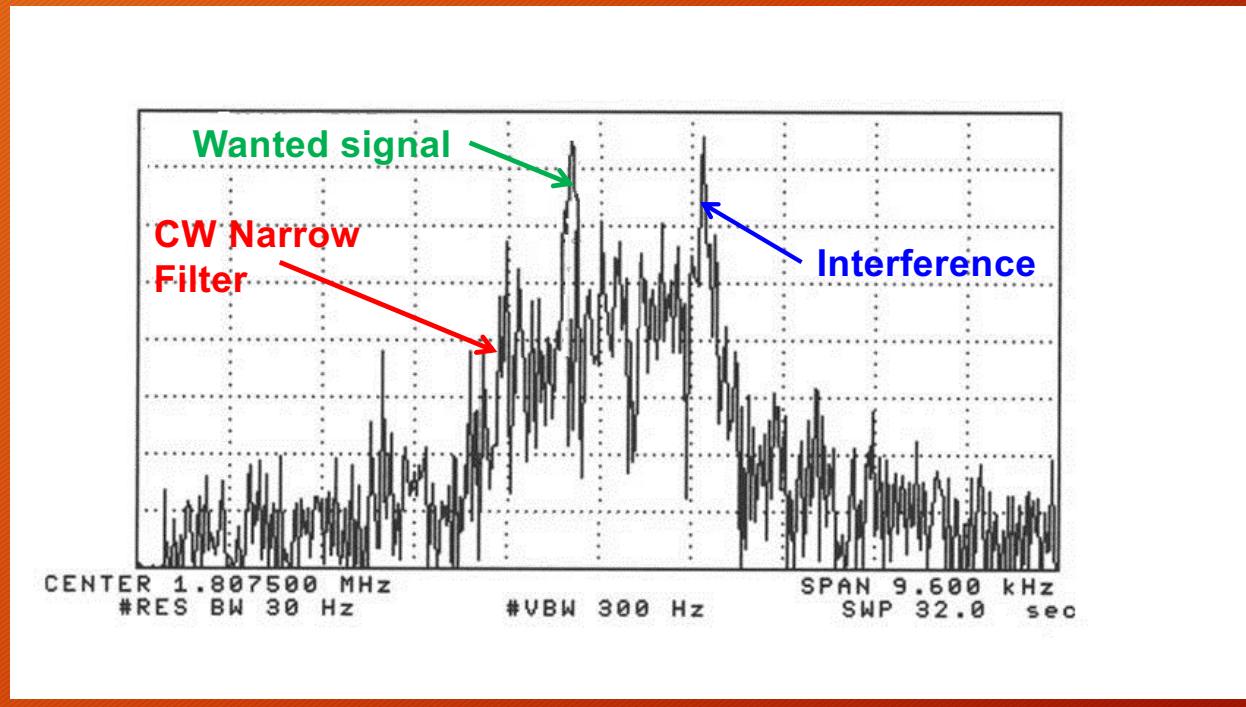
What about
Splits & Filters?

Passband tuning

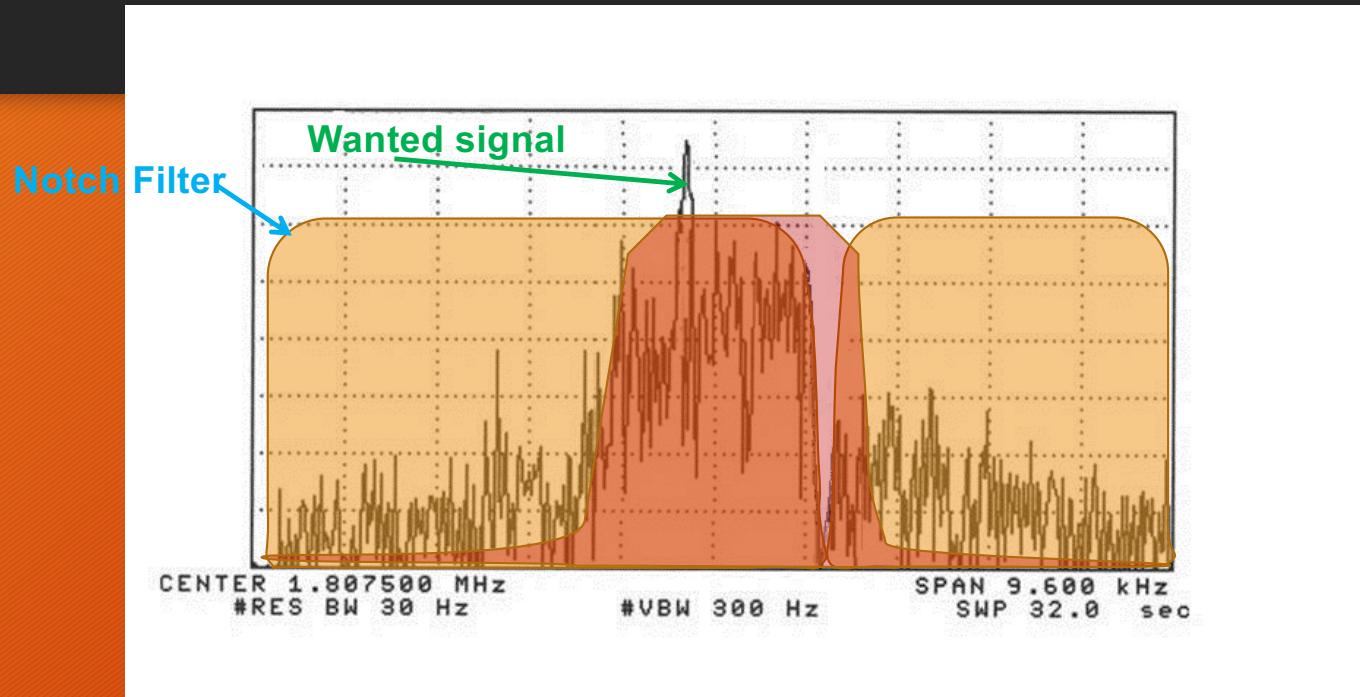


Use it – if you have it!

Applying CW Narrow Filter

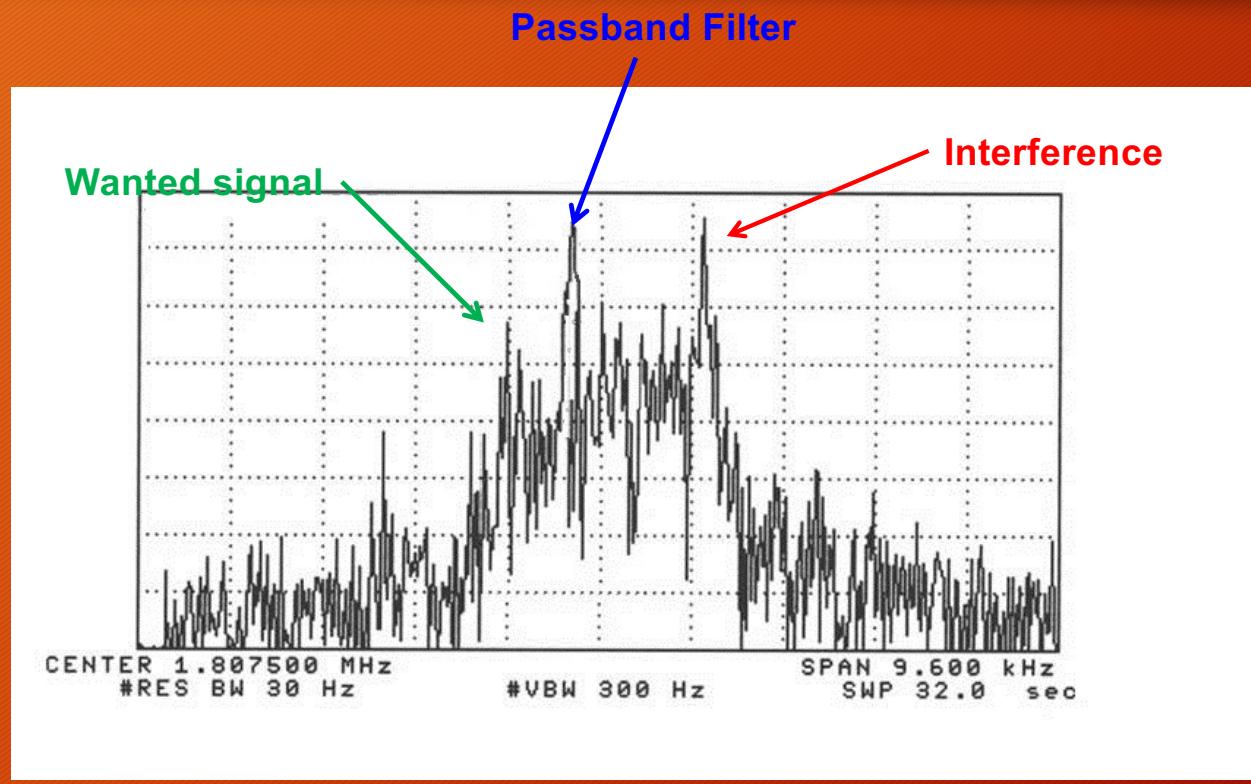


Enabling the Notch Filter...

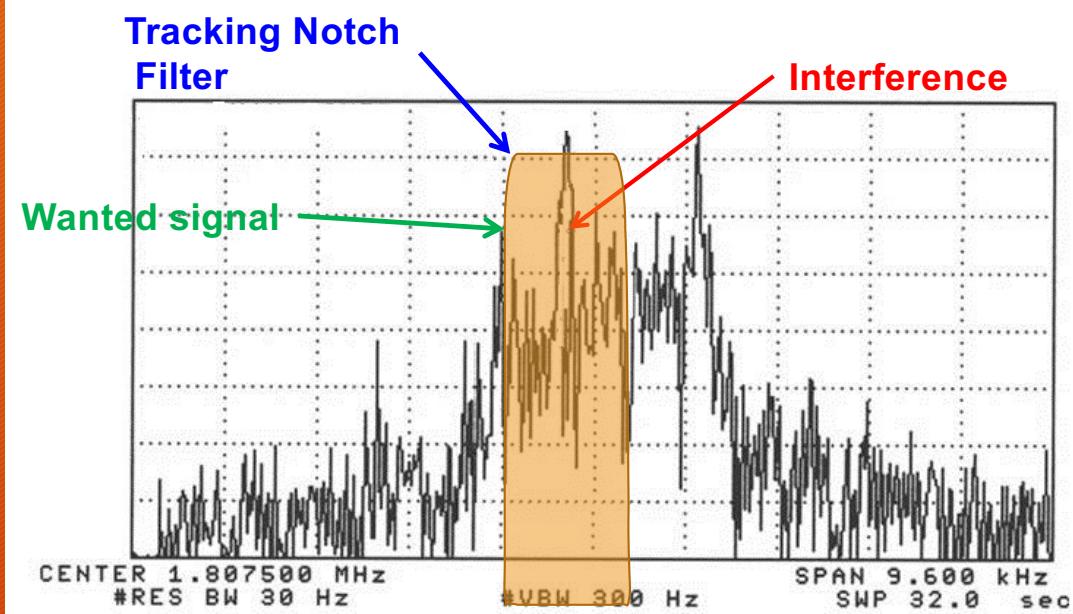


...interfering signal has been
“notched” or filtered out.

Filtering interference (using the Passband tuning / IF Shift)



Filtering interference (Tracking Notch Filter) - Filter moves with the interference



When to use what features? (general guideline)

- RF Gain - Low bands.
- CW Filter - When trying to work a weak one.
- Speech Processor - Contesting and DXing.
- Pan-Adapter - Contesting and DXing.
- Second RX Antenna - Low bands, Contesting
- RX Notch Filter - Whenever you need to get rid of constant carrier (continuous tone)
- AUTO RX Notch Filter - When in SSB mode

What About

→ Tail Ending

→ Partial Calls

→ Timing?

Tail Ending / Partial Calls / Timing

- Must be able to hear the other station
- Must practice this
- Some DX Stations don't appreciate these practices!

Tail Ending / Partial Calls / Timing

- Tail ending
 - P5DX: K1FJ 59
 - K1FJ: TU 59 OHIO
 - AJ8B: (At the end of K1FJs transmission) AJ8B
 - P5DX: K1FJ TU AJ8B 59

Tail Ending / Partial Calls / Timing

- P5DX: K1FJ 59
- K1FJ: TU 59 OHIO
- AJ8B: (At the end of K1FJs transmission) 8 BRAVO
- P5DX: K1FJ TU Who is the 8 BRAVO?

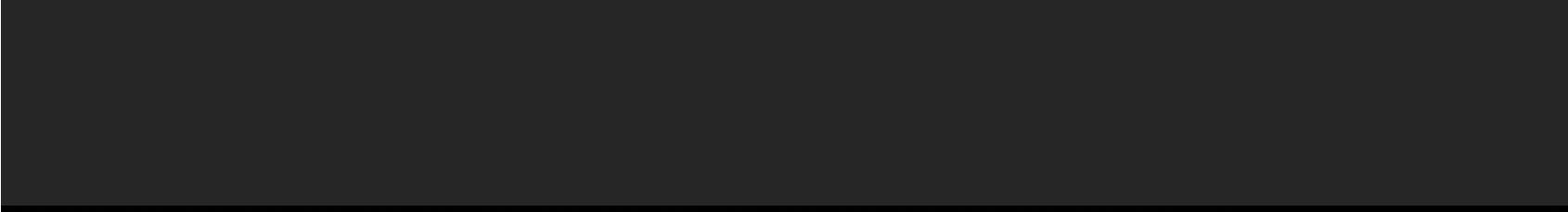
Tail Ending / Partial Calls / Timing

- I need a Volunteer
- P5DX: “QRZ?”
- Everyone in the world calls
- K4ZLE: waits several seconds and then calls
- P5DX: K4ZLE, 59

List Operation (WHAT???)

List Operation (WHAT???)

- An operator with a better than average station invites DX stations to call him
- The operator keeps a list of available stations
- Operators can contact the net control and then contact one of the DX Stations and make a QSO
- Great way to overcome microphone jitters
- I used this to test the rig in my car
- Not every ham operator favors this method of working DX



Potpourri

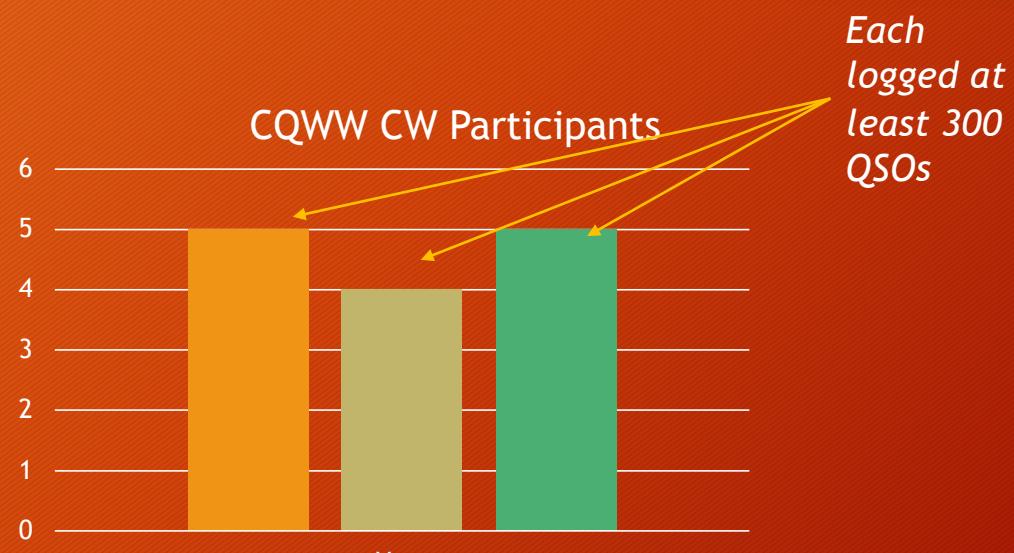
If You are looking for a specific entity, Is it even available?
i.e. Any DXPeditions to 9V during my “stay-cation”?

Check with the NG3K.com website

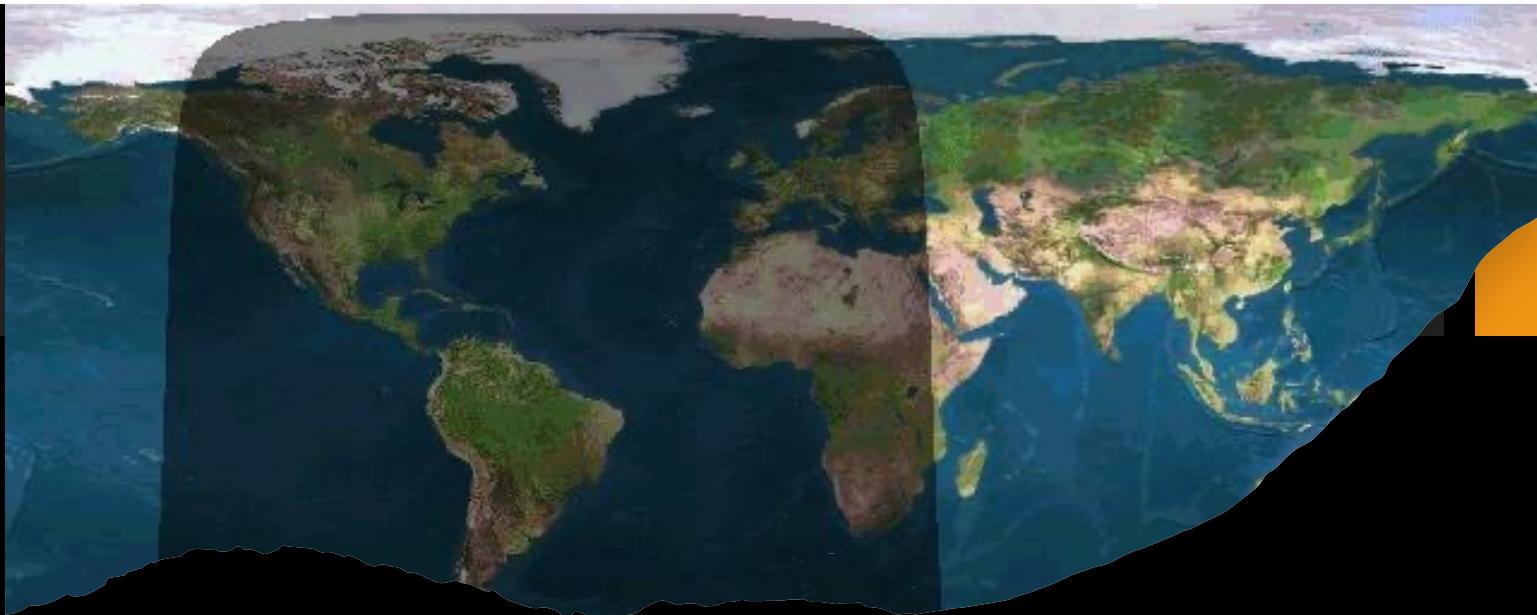
November		NC3K	NC3K	NC3K	NC3K	NC3K	NC3K		
2021 Nov19	2021 Nov24	St Barthelemy	FK	KP4DO	DXW Net 20210909	By KP4DO as FJ/KP4DO; 40-10m	NC3K	NC3K	NC3K
2021 Nov24	2021 Dec01	Rwanda	9X4X	4Z5FI	QPDX 20210801	By 4Z4KX 4X6YA 4Z5FI 4Z5LA 4Z1DZ 4X1VF; 160-10m; CW SSB RTTY FT8; QRV for CQWW DX CW	NC3K	NC3K	NC3K
CQ WW DX Contest, CW (Nov 27-28, 2021) Check here for pericontest activity too.									

None listed

Any Previous 9V Activity in the CQWW CW Contest in 3 prior years?



<https://www.cqww.com/results/>



Don't Forget the Gray Line

9V is +13 Hours UTC

As a side note...In a contest, you can always ask for another Band!

- Needed Alaska on 80 for WAS and a new DXCC entity.
- Worked them on 40 and asked if they were running on 80.

Sure enough....

How do you ask?

- AJ8B: 599 04 80M?
- KL7RA: QRX 3503
- AJ8B: TU QSY



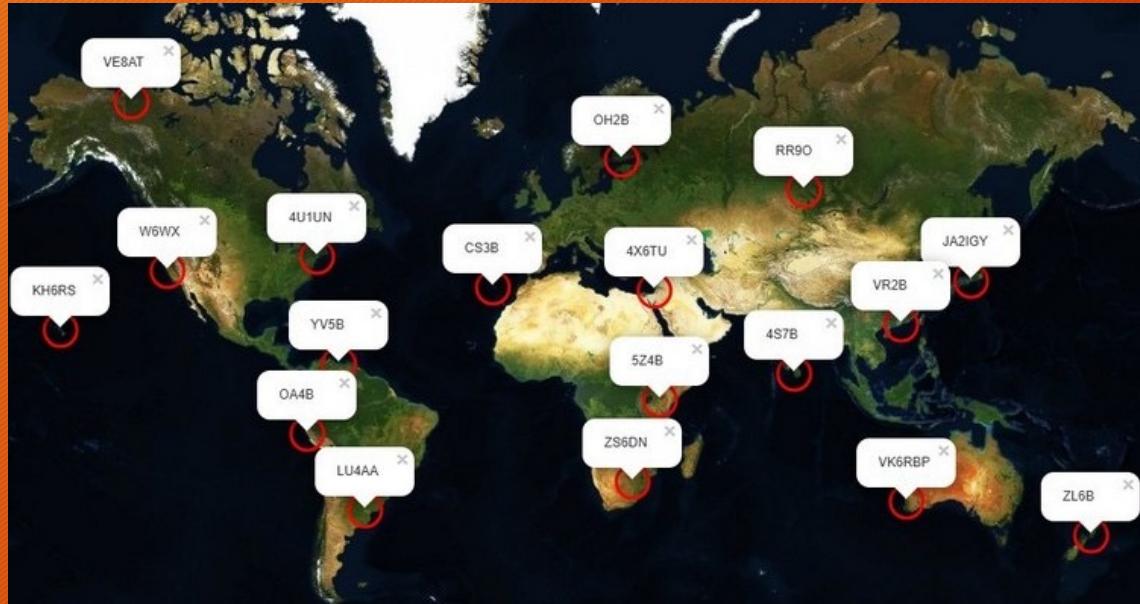
Got em!

Check the WARC Bands during a Contest!

- Normal but “rarer” DX may not like pileups every time they are on
- Contests help them to cut down on the traffic and work the little pistols
- i.e. 9J2B0



NCDXF Beacon Network



- ▶ The NCDXF, in cooperation with the IARU, constructed and operates a worldwide network of HF radio beacons on 14.100, 18.110, 21.150, 24.930, and 28.200 Mhz.
- ▶ Each beacon transmits once on each band every three minutes, 24 hours a day.
- ▶ A transmission consists of the callsign of the beacon sent at 22 words per minute followed by four one-second dashes.
- ▶ The callsign and the first dash are sent at 100 watts. The remaining dashes are sent at 10 watts, 1 watt and 100 milliwatts.
- ▶ At the end of each 10 second transmission, the beacon steps to the next higher band and the next beacon in the sequence begins transmitting.

Breaking it all Down

The DX Mentor - AJ8B

Let's Divide the DX Chase into 3 Levels

- Level 1 - Countries 340 - 220
- Level 2 - Countries 219 - 100
- Level 3 - Countries 99 - #1

What does it take to move to the next level?

Level 1 - Thoughts

- Don't Be Timid
- Embrace CW
 - www.cwops.org
- DX University
 - <http://www.dxuniversity.com/>
- Find an Elmer



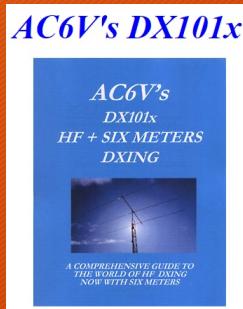
Level 1 - Thoughts

- North Alabama DX Association
(<https://www.nadxc.org/>)
- Southwest Ohio DX Association
(<https://www.swodxa.org/>)
- Twin City DX Association
(<https://tcdxa.org/>)
- Northern California DX Association
(NCDXF) (<https://ncdxf.org/>)
- Join International DX Association
(INDEXA) (<https://indexa.org/>)
- Use Web Resources
- HAVE FUN!!!

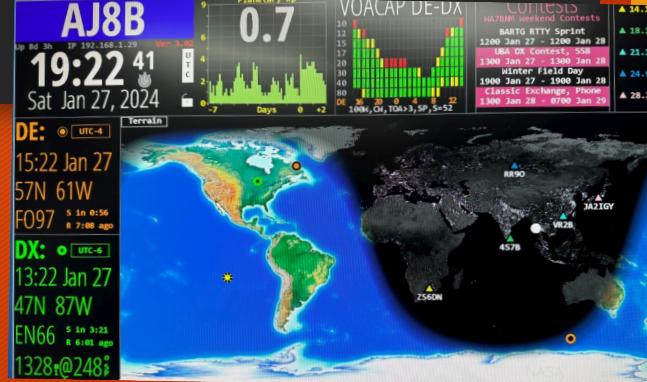
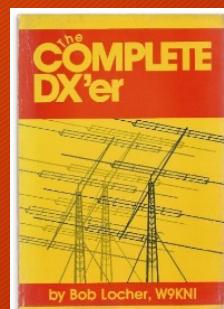
Level 1 - Thoughts

(Thanks Paul - N6PSE) <https://n6pse.wordpress.com/>

- Use the Grey Line
 - Propagation Changes
Know How, Why & When
- Learn Your Rig
 - Splits and Filters!
- READ!



The DX Mentor - AJ8B

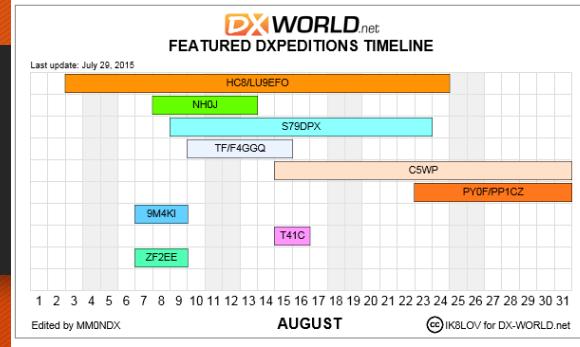


Level 2 - Take it up a Notch

- Equipment -
 - Antenna(s), Transceiver, Amplifier, Headphones
- Multi Modes - K0MD
- Know Your Equipment - K4ZLE
 - Split is CRITICAL
 - Filters

Level 2

- Tactics (cont.)
 - Know Who is On & When
 - WA7BNM Website
(<https://www.contestcalendar.com/>)
 - Tune the Bands
 - Learn Propagation
 - Learn your Equipment
- Resources
 - DXClubs
 - DXForums
 - READ
- Real Time DX Info (DailyDX) (<https://www.dailydxdx.com/>)
- DX World DXPedition Timeline (www.dx-world.net)



Level 3

- Equipment
 - Audio Equipment
 - Enhanced Headphones
 - DSP Speakers
 - Tailored Microphones
 - Stress Hi Frequencies
 - Rolloff Low Frequencies
 - Amplifiers
 - No Tune
 - Full Power
 - Long Duty Cycle

Level 3

- All Modes
- All Bands
- All Tactics
- Longevity



The DX Mentor - AJ8B

Antenna Selection

General Ham Population (per ARRL Survey)

Antenna Type	%
Multiband Vertical	24.4%
Triband Yagi	19.5%
Other	17.8%
Low Band Dipole (3.5 -> 10.1Mhz)	17.5%
High Band Dipole (14 -> 30 MHz)	13.7%
Monoband Yagi	4.3%
Quad	2.7%

DXers (per 425 DX News Survey)

Antenna Type	%
Beam / Yagi	52%
Vertical	16%
Dipole	15%
Quad	9%
Loop	4%
Other	2%
Sloper	1%

Common Elements to All Levels

- QSO Confirmation
 - “Work ‘em First, Confirm Later” – K8DV
 - QSLs
 - LOTW
- S/W
 - DXLab or similar
 - Clusters
- Contests
- “Air” Time

The Silver Bullet

What is the #1 component needed to break a pileup?

- Full Power?
- Great Receiver?
- Great Antennas?
- ???

Survey Says...



Of the 63 DXers that I have interviewed for our club newsletter, 57 stressed that listening is the #1 skill needed to break a pileup.

Listen, Listen,
Listen





Questions and Answers