



The WFD Frozen Feedline

Spring 2021
Issue #2

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WFD 2021.. 2200+ Logs! Tnx to our Helpers! *Tom W8WFD*

As many of you know, the WFD Committee is 100% volunteer and there are just 5 of us. However, there are others who volunteer their time behind the scenes. To them, we would like to say THANK YOU and acknowledge what you do.



Mel Marcus, NE9A, has helped to transcribe dozens of paper logs. He's an avid supporter of WFD and encourages many in his own area to participate in WFD.

Jerry Radcliffe, N8KLX, is our scoring software/programmer wizard. Ever since Jerry created the program, he has saved me 100's of man hours and STRESS! *(Editor: Prior to Jerry joining the team, Tom single-handedly did ALL the scoring for WFD)*

Andrew Kitchens, KD8YRA, is our map magician. Andrew has spent many hours creating and maintaining the WFD locator map. If someone puts a marker in

the wrong place, he usually has it corrected in a very short time.

Jennifer Bailey, N8JEN, is our latest behind-the-scenes volunteer. Jennifer volunteered to maintain and promote our WFD apparel and other items. This past year she was very creative with

hoodies and t-shirts. We've had a great response because of her tireless efforts.

Michael Bailey, N8MRB, has also assisted with the WFD apparel. Michael helps his wife, Jennifer, with the new WFD apparel creations.

Ray Stevens, KB9LGS, volunteered to provide written instructions for using the N1MM logging software

These hams, especially helped in making WFD 2021 a great success.

73, and thanks to all for participating!

Tom Phelps, W8WFD

WFDA Board:

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Shelby Twp, MI

Software and rules support:

Jerry Radcliffe N8KLX
Utica, MI

As you can see, we're spread all over the continent but we all share a passion for WFD and promoting preparedness for operating under less than ideal conditions.

Strange Signals



You'll miss *lot's* in the WFD News if you don't find the hidden links! Be sure to find 'em all!

WFD 2021.. A word from the Editor.. *continued*

you'll get discouraging results. I hate to bring up power, but operating QRP *will* mean making fewer contacts (*that's why the 4x multiplier*), especially with less than the best antenna you can possibly put up. If you're QRP, *your antenna is the single most important part of your set-up!* Choose wisely! I personally have always run near 100W on WFD.. that means **lots** of batteries and chargers. For me, it was never a big issue, as I owned an RV and a boat, so I always had several deep-cycle batteries hanging around on trickle charge all winter.

Sometimes, just changing how you *chase* contacts can make a big difference. If you're "hunting & pouncing" on contacts as you dial across the band and finding that you spend an inordinate amount of time waiting in a pile-up to work each strong station, you might fare far better scrolling up the band to a quieter spot and calling CQ instead. Remember, every single one of those other stations dialing around the band working him need *your* QSO just as much as you need them.. They **will** find you (*and bonus,.. you likely won't need to check each one for dupes!*)

I hope these suggestions will help your efforts on WFD 2022. Give them a trial in a couple of other contests and see if it helps.

Rules... As we get into late spring, I will be looking into some rules refinement and a couple of bonus/multiplier changes for 2022. I've had a number of requests for changes, but changes need to fit WFD's scoring structure and *not* make our contest require major logging or scoring software changes. One item I'd like to address is the QRP multiplier.. I'm thinking a 5x multiplier or possibly 6x. ARRL uses 5x for Summer FD, but has **no** multiplier for stations using 100W.. Hmmmm.

I'd also like to find a way to encourage "Mobile" stations to join in WFD fun. Right now, if a truly mobile station moves from one ARRL section to another and starts giving out a different exchange (*for instance, MI vs OH*), it will cause the scoring software to see those exchanges

as "busted", costing both sender and receiver points. Maybe bonus points for working mobiles that'd get added and placed in the "SoapBox" section of the entry log? Hmmmm.

I know there are some that'd like to see local or operator's position temperature back in the exchange, but to do that, and make it part of the *official* exchange required, would require logging *and* scoring software re-writes. Perhaps we could make it a part of the exchange that's "optional" and more common amongst us WFD ops? But.. *that's up to you!*

I've also been asked about bonus points for operating position temps, but as stated a few years ago, WFDA does not want to encourage or otherwise *incentivize* contestants risking hypothermia or frostbite to operate unprotected outside in winter conditions for extra points. That's why we allow for shelter and heat as needed and still call it "outside". Besides.. If you think about it, there's no temperature bonus or multiplier in ARRL summer FD for operators in southern Arizona where temps can be 100+ outdoors. WFD actually sort'a turns the tables on ARRL FD as northern ops have to deal with less pleasant weather and southern ops enjoy nicer weather. So.. I'm thinking that giving bonus points for temperature is really a non-starter for WFD.

I spent lots of time answering rules questions this year, prior to and even after WFD, something I actually enjoy doing. But, in quite a few cases, the questions asked *were* answered in the rules. **Please**, read them completely before emailing questions. I will try to make them easier to understand and more compact.

I hope you all enjoyed WFD 2021 as much as I did or more! 2022 WFD should be far more normal and Covid-free. I don't know about you, but *that's* something I *really* look forward to!

73, Ken N8KC



Why pay a middle-man (ARRL, QRZ, W5YI) for EZ and **FREE** on-line licensing tasks? Click the link.. DIY!



Morse Practice



Lessons

AA9PW.com



W1FYG WFD



AC0PR WFD/SOTA



N3WS Backyard WFD



Scoring WFD, what takes so long?

From the Scorekeeper

So... What's taking so long with the results? Why does it take so long to get the results for a contest?

Well, I can tell you. I'm the scorekeeper for the Winter Field Day contest. Here's what's involved with the scoring and reporting for this contest.

Right after the contest ends, the fun begins. Everyone has 30 days to submit their log. Most submit in the first week, and then the volume slows down until the deadline approaches. Near the deadline the volume picks back up continuing up to, and yes, even after, the deadline passes.

STEP1: screening the logs

The logs begin to arrive by email at WFD Intergalactic World Headquarters. First, the emails are examined to see if they conform to the required format: *log attached to email*. Then the Log itself is checked to see it has the correct filename (*callsign.log or callsign.txt*). **Most** log submissions are correct and the log file is then detached from the email and stored in a file folder. The rest have to be deciphered. Some have the log in the body of the email. Some of the log files are in the wrong format (ADIF, DOC, DOCX, XLS, XLSX, CSV, etc). All of these issues have to be addressed on a one by one basis. If there is a simple fix, we fix them, if not, the submitter has to be contacted asking them to resubmit in the correct format. Sometimes they do, sometimes they don't, *sometimes* they don't know how. This process goes on until the end of the log submission window.

Once the cutoff date/time is reached, the "good" logs are sent to me, the Scorekeeper. The first thing I do is to open each log in Notepad++. This program allows me to see all the characters in the log and check for the following things:

In the Cabrillo header:

The following lines are **REQUIRED!**

START-OF-LOG: 3.0

Created-By: the program you used to make this log

CONTEST: WFD

CALLSIGN: (callsign used in contest)

CLUB: (your club)

LOCATION: (your location)

ARRL-SECTION: (your ARRL section)

CATEGORY: (your category)

CATEGORY-POWER: (your power level) (QRP, LOW or HIGH)

CLAIMED-SCORE: xxxx (*your calculated total score including bonuses*)

The following lines are *optional*.

SOAPBOX: 1,500 points for not using commercial

power

SOAPBOX: 1,500 points for setting up outdoors

SOAPBOX: 1,500 points for setting up away from home

SOAPBOX: BONUS Total 4500 (remote location, outdoors and generator power)(example)

OPERATORS: Call #1, Call #2, Call #3, etc.

NAME: Your Name (contact person)

ADDRESS: ##### Your Street

ADDRESS-CITY: Your city

ADDRESS-STATE: Your State

ADDRESS-POSTALCODE: Your postal code

ADDRESS-COUNTRY: Your Country

EMAIL: The email address to contact you at

In the QSO section:

QSO: 3750 PH 2017-01-07 1911 W8D 1O OH WB9XXX 2H IL

QSO: 7030 CW 2017-01-07 2021 W8D 1O OH K8UO 14I MI

QSO: 14070 DI 2017-01-07 2131 W8D 1O OH K6XXX 4O LA

There **must** be at least one space between each field in the QSO information. More than one space is fine, but at *least* one. The date field **must** be *as shown*, year-month-day. There are **only** 3 acceptable modes: PH, CW and DI. If you chose to use something else, that's your prerogative... Just be aware that if your mode in a QSO doesn't match the other guy's, it becomes a "busted" contact and you **both** will lose points.

The log must end with:

END-OF-LOG:

The log has to be in ASCII. For those of you using APPLE or UNIX (linux, etc), each line **must** end in a CRLF. That's a carriage return *and* line feed. ASCII 13 and 10. For you folks who thought it would be easier to read if the log was double spaced, you were wrong.

As I look at each log, if I find a simple mistake, I fix it. That's a lot easier than sending it back to the owner, explaining what's wrong and then waiting for a reply, which may or may not come. I have a "3 strikes and you're out" rule. If I find less than 3 issues with a log and I can easily fix them, I fix them and move on to the next log. If the problem is more complex or just can't be fixed, it's rejected and it's on to the next log.

After examining all 2200 + logs, it's on to the next step: dupe checking.

STEP 2: dupe checking

Each log is examined, looking for duplicate QSOs. Each is checked on band, mode and callsign. The program takes each QSO and compares it with all the QSOs in the log. If it finds a match (*a dupe*) it notes it for summary. Sometimes there are triples and even quads. How

Scoring WFD ..continued

From the Scorekeeper

long does that take? Let's do the math... 50 QSOs = 50QSOs and 50 passes through the file. = 2500 loops... 100 QSOs = 10000 loops... 200 QSOs = 40000 loops. 500 QSOs = 250000 loops and so forth. My computer is no CRAY so it takes time... **lots** of time. And each log has to be started manually as there *is* the possibility that there is something wrong with that log that wasn't caught in the previous step. This year we received over 2200 logs...

Dupe checking can go on while the logs are still coming in as it only involves one log.

STEP 3: Contact checking

Once ALL the logs have been dupe checked, contact checking can begin. Each log, one at a time, is opened and each QSO is examined and a search for the corresponding QSO begins. If the corresponding callsign is *not* in the database of logs, the contact is considered an "orphan" contact. It counts as a good contact.

If the corresponding callsign *is* found in the database, that log is opened and searched for a matching QSO. That QSO is then checked for correct matching callsign, band, mode, date, and exchange. If there is a match, it counts as a "good" contact. If it *doesn't* match, it's a "busted" contact and doesn't count. The information is totaled for each QSO of each log and stored for the scoring section.

This process is *also* manually driven as there still may be problems with the log. Once all the logs have been contact checked, it's time for scoring.

STEP 4: Scoring

Scoring takes the information generated in dupe checking and contact checking and uses this to develop a score for that log. This process is *also* manually driven as there still might be problems with the log.

A score file and a one line summary are created for each log. The summary is stored in 2 files, an overall summary and a category file. The categories are Home, Indoor and Outdoor.

STEP 5: Reporting

Once scoring is complete, the log summaries are stored in a separate file folder. The files containing the Category summaries are imported into Excel, sorted by score, and saved as a text file. This year, due to the pandemic, there is also a sort by CLUB... this information is then split into groups and totaled by CLUB.

And this, folks, is why it takes so long to get the results...

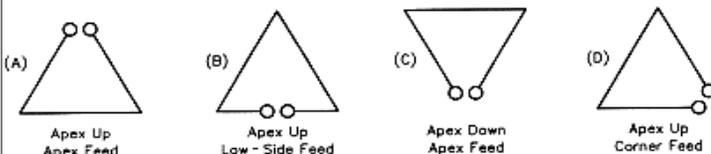
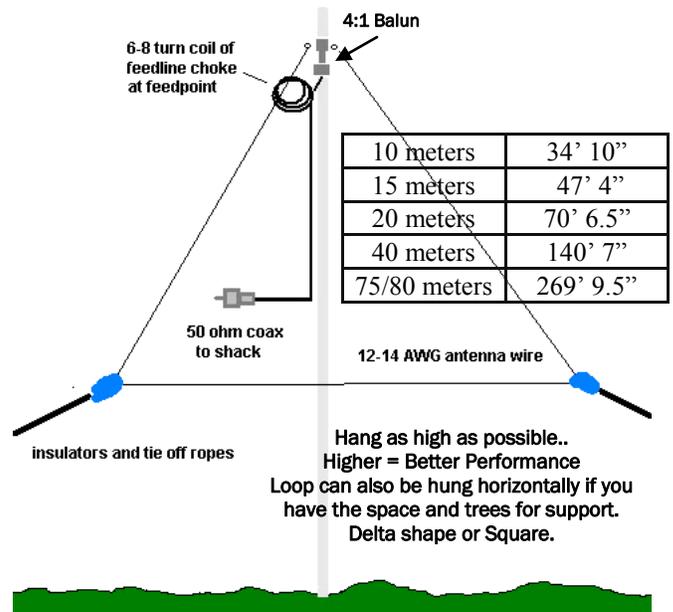
73, Scorekeeper

Editor: ...keep in mind that almost all other contests take some time to post results. ARRL June FD typically posts in November, for example.. They have a large staff and don't cross-check logs (they pretty much take your word on your score).. We don't have staff and do check logs.. Please be patient as Scorekeeper works his magic.

Got a mast or at least one tall tree? This might be a WFD winner..

Full size loops, whether in Delta configuration or hung horizontally (*square*), make an excellent choice as an antenna. Typically quieter than a vertical or dipole when it comes to man-made noise and offering some gain over a dipole.

Loops can be fed several ways.. One example is in the diagram at right (*likely in tandem with an auto-tuner*). Other feeds can be direct ladder line and a manual tuner or a matching stub of 1/4 wavelength of 75 Ohm coax (RG-6) and 50 Ohm coax from there to the rig. Some dimensions are in the diagram at right (*depending on height above ground and configuration, you may need to adjust*). Some configurations are below:



A, B, & C = Horizontal Polarization D = Vertical

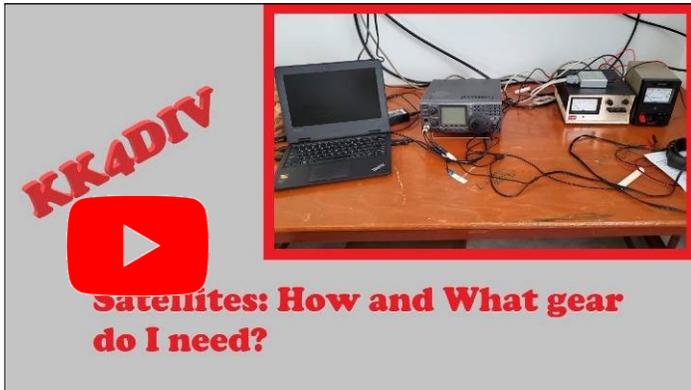
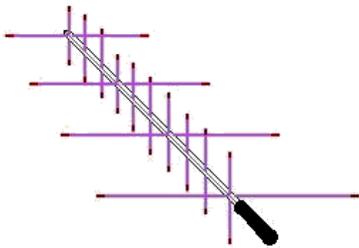
Working that Satellite for Bonus Points!

Working a satellite for the 1500 bonus points isn't as hard as you might think, and to those who haven't seen it done, it's awesome!

I know some think that it's only clubs, with lots of members operating WFD, that have the resources to work the satellites, but that's not true. Years ago, it might've been, with satellites being far fewer and more esoteric, but it's far easier now, and it's certainly a skill you might want to cultivate and have in your grab-bag. The antenna alone will draw others to ask what you're doing out at a park and spark an opportunity to pique someone's interest in the Amateur Radio hobby.

I've collected a few links, and placed them in the images in this article. Click them and you'll get a beginner's course and references for working the "birds".

Heck... if that young lady up on the right can do it, so can you! (Pretty sure that's KM4TXT, she's worked WFD last few years)



Two schools of thought on getting your antenna up...



Random Soapbox comments from WFD entrants..*Compiled by N8KLX***AA3K**

SOAPBOX: Operated in a tent in my backyard. Cold Saturday with a Nor'easter forecast for Sunday. The snow started about 10 AM on Sunday and made the event worthwhile! Bands didn't cooperate too much. Had to work to find contacts. BONUS Total 1500 (Outdoors)

AA4Q

SOAPBOX: First WFD Tailgate Portable, IC-7000, LiFePo Battery, Low Dipole, Paper Log.

AA4I

SOAPBOX: 1500 Bonus points for using non-commercial power. I did not operate seriously and opened up the shack to neighbors to see what was going on. This tied in nicely with our CERT communication activities in the neighborhood.

AI4WL

SOAPBOX: Planned to set up on picnic table near neighboring creek and run QRP with generator power. That plan failed as weather turned sour with rain and 35 degrees forecasted. Selecting warmth over wet, ended up in the home shack but still playing the QRP game with the little trusty Yaesu FT-817. Not many contacts but always great fun!

K0RJK

SOAPBOX: First WFD - worked it whenever I could

K0VH

SOAPBOX: BONUS 0 Why no N1MM software for this event. WFD home link didn't work.

K1AUS

SOAPBOX: Saturday conditions where quite poor, lots of QRN and weak signals. 20 meters died shortly after sunset and 40 died at about 0700 UTC. Sunday morning was much better with much less noise

but still couldn't be heard by many stations I could hear. Looking forward to Summer.

K2EKM

SOAPBOX: Fun contest. Ran QRP. good reason to be inside Sunday, as it was snowing in Northern VA.

K4JJW

SOAPBOX: IC-7300 powered by deep cycle battery + booster, Yaesu FT60 2m, UNUN fed inverted L

K4TRH

SOAPBOX: 5W QRP. Battery powered.

K5O

SOAPBOX: Great Time with Lots of NEW HAMS! Got cold in STX, 33 degrees and we didn't realize it would be that cold. We were not dressed for it... It had been near 80F, but a cold front came in. We had a great time, a great meal and wonderful fellowship. Praise the Lord.

K6MHS

SOAPBOX: Was not able to have the students participate this year-next year for sure!

K6NR

SOAPBOX: First time I've gotten in WFD. Lots of good activity. 73, Dana

K7FTQ

SOAPBOX: Using ICOM-718 with a QSO King end-fed antenna

K7JA

SOAPBOX: Better HF conditions than in 2020. Learned a lot about Microwaves and their wide-area capabilities. Expect to be Outdoors again in 2022!

K8CVM

SOAPBOX: Worked Club Station on Saturday and from personal QTH

on Sunday.

K8TS

SOAPBOX: Condx Sat were poor, but improved Sunday

K9EMP

SOAPBOX: Had a great time. The home stations seemed to dominate the contest. Would love to see a possible rule modification where home stations can't accrue points by working other home stations

K9PNP

SOAPBOX: Short operating time here. For a while, the CW portion looked like a few "rare DX" pileups. Limited to 40 M for now. Good time anyway.

KA0PQW

SOAPBOX: Fun contest. thanks for having it. 73 Matt ka0pqw

KA1VYJ

SOAPBOX: Covid-19 operations

KIA5D

SOAPBOX: QRP camping!

KB2M

SOAPBOX: made 3 SAT contacts, 2 by request

KC1KOO

SOAPBOX: Used generator during day time and shifted to battery during night Bioenno 12V 40AH

KC1KQZ

SOAPBOX: First time operator, bear with me. Operating alone in an un-insulated deer camp in Northern VT, max interior temp 42 degrees no power, no water, snow-shoed in dragging my gear in a sled. Pics avail.

K6ARK

SOAPBOX: 1,500 points for operating entirely off of battery power.

Soapbox ...continued

N8KLX

1,500 points for setting up outdoors on Palm View Peak, SOTA W6/CT-068, 7,160' elevation. 1,500 points for setting up away from home on a remote mountain top, 4 mi and 2k feet of elevation gain from the nearest trailhead. 1,500 points for Satellite QSO on the PO-101 pass QSO with KI7QEK.

KI4ASK

SOAPBOX: Operated at Chattahoochee Bend State Park with my IC-705. Outdoor: 1500. Battery: 1500. Remote: 1500.

KI4MZC

SOAPBOX: Kx3 to a long wire, 5w. I intended this to be a test of my equipment out of doors in a remote location (no electricity, save battery power, tent, expedient antenna, etc.) and things went relatively well. Rain was forecast to start about midnight local time, so I took my equipment back to the house and left the tent and the antenna. When I went back to the site later in the morning, the el-cheapo tent did not leak much, and the antenna (about 80 feet of speaker wire) stayed up. The home-made un-un outside of the tent seemed to be dry, but I'll check the insides later. I had more in-state contacts than I almost ever do, except for the QSO party - 6 stations and 7 QSOs, including two with KR4AE just up the road from me. Oh- I also had a small propane heater that worked pretty well, but my feet still kept getting cold. 4,500 bonus points (outdoors, not home, alternate power/non-commercial power) + 2,144 pts w/mults = total claimed score 6,644.

KI5YG

SOAPBOX: Forgot to tell N3FJP to poll Sunday morning! Had to guess when I switched from 80m to 20m. Many antenna/coax problems... ironing out the bugs took hours!

Had lots of fun.

KI7OAL

SOAPBOX: Don't be afraid of the snow!

KJ4OAP

SOAPBOX: Enjoyed this contest and doing it all on PSK31! Setup in my shed with putting up an inverted V dipole and using a 2kW portable gas generator. That generators has been an awesome birthday present from the XYL!

KOEBY

SOAPBOX: BONUS Total 4500 (outdoors, remote location, battery power). I set up a station in the "fort" on my daughters' swing set in my backyard. The swing set is approximately 60 ft from my home. I operated on battery power using a 28 Ah Li-ion battery made from 52 18650 Li-Ion cells. I hung a 73' end fed wire antenna (and 9:1 unun) as an inverted-V.

KO4KCB

SOAPBOX: First field day, first contest, first HF contacts. All my contacts were scribbled on sticky notes. Next time I will have an app for sure. I'm going for low score! Thanks for the fun day!

KU4WW

SOAPBOX: All contacts were made on JS8CALL. New mode for me and was fun. Band condx terrible.

N1IBQ

SOAPBOX: Alternate Power Bonus points = 1500. Power - one Group 27 Marine Deep Cycle Battery, Rig = Yaesu FT-891, Antenna - Diamond BB7V temporarily set up in back yard, operated from temporary table set up in attached garage. Paper log.

N2ELG

SOAPBOX: I suggest differentiating the different Voice Modes in the future, ie: SSB, FM, AM, DMR etc

N4MCC

SOAPBOX: Had a great time!! As good as Summer FD.

N4SZF

SOAPBOX: At Public Safety Center (EOC Parking Lot) All 911 Telecommunicators on shift visited site. Iredell County EM Coordinator on site.

N6HI

SOAPBOX: Activity picks up a bit each year, and this is becoming a fun contest. I ran QRP from home with a 20 Foot end fed wire and used only 20m CW. Single band/mode in this contest produces a low score, but no attempt was made to operate other band/modes, just had fun for about 4 hours.

N8DGD

SOAPBOX: Good turn out of ops. Nice QSO with AK4FA; Andrew near Nashville.

N8HKU

SOAPBOX: Limited op time, but got some contacts with tough band conditions overall.

VA3CJZ

SOAPBOX: Had fun working WFD and some DX and giving my points to the local club. Thanks to all that worked me. 73 Chuck VA3CJZ Log being submitted by VE3BK

VE2LJV

SOAPBOX: great time had to switch to vertical from dipole

VE3BK

SOAPBOX: A fun exercise for the winter months. There are more operators every year and am looking

Soapbox ...continued

N8KLX

forward to the next one. Thanks to all that worked me. 73 Rick VE3BK

VE3DCU

SOAPBOX: Good effort on 40m. I did great for the time I was on. Thanks to all that worked me. VE3BK submitting log for the Club.

VE5KS

SOAPBOX: This log is part of the Moose Jaw Amateur Radio Club entry

VE7KPZ

SOAPBOX: Used a crossbow to set the line for the 40m long EFHW and got the top of tree first shot - woo-hoo! Tried out a new Raspberry Pi 3B+ for JS8call - worked pretty good especially considering the QRN at my location. Great to work so many O-class stations! 73!

VE7KXZ

SOAPBOX: I was a Single Operator, operating in a park off battery

power. I am claiming the 1500 outdoor points, 1500 remote points, and 1500 no commercial power bonus. I made 11 contacts on HF with 100W of power. UTC Time

W1AST

SOAPBOX: Had fun but disappointed in my total Q's.

W1OH

SOAPBOX: Great fun! Hope to try 10 or 11 category next year!

W3OY

SOAPBOX: First WFD. Happy I was 10 the whole time, even with the snow!

W4CWO

SOAPBOX: This log is for LOW POWER contacts worked on 1/31/2021 during Winter Field Day. I worked 12 contacts this date all less than 90 watts from my station, therefore am claiming 24 points for my club Hampstead Hams, these are

in addition to the log I submitted for 1/30/2021 with 4 QRP contacts worked with less than 10 watts.

W5RZ

SOAPBOX: 52 QSO's on 3 different bands

W6SIY

SOAPBOX: All QSOs made with a Ten Tec Argonaut 515 at 5 watts or less power output, battery power (4x QRP multiplier + 1500 pts Alternate power.

W7TCT

SOAPBOX: very fun! thank you and 73 W8RTJ. Beat last years first time effort by about a hundred QSOs . Lots of fun 73 all

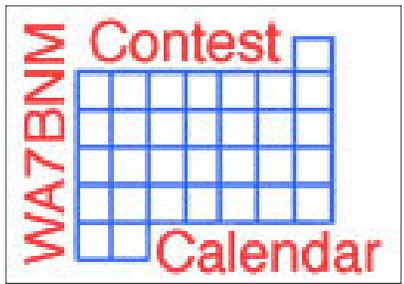
W9MCP

SOAPBOX: Used Tarp, Hedge, Buddi-Pole, Solar, Battery, FT891, SNOW Bonus Pts: 1500 Outdoor, 1500 Alt Power, 1500 Remote

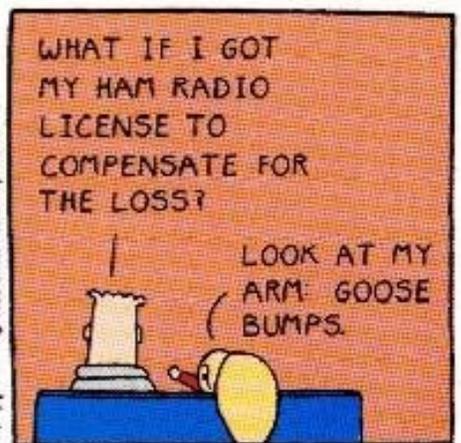
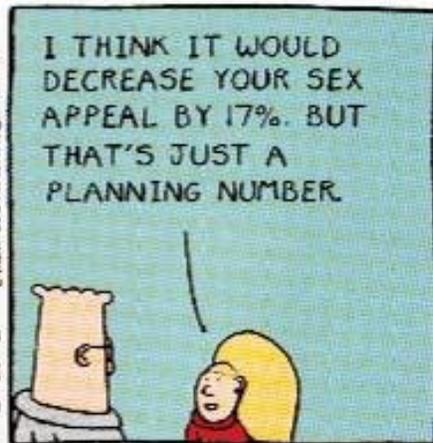
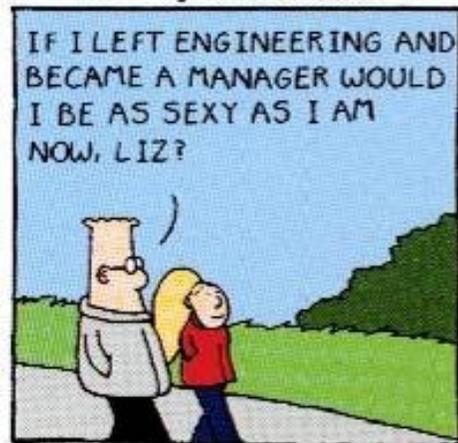


At left is the Reverse Beacon Network.. Wann'a know where your station is being heard? This is how.. Send CW CQ and see..

Loved WFD? At right is the best contest calendar on-line. Get your feet wet with a State QSO Party as an out-of-state entrant, or do one of the big ones. Links to rules, etc...



DILBERT® by Scott Adams



A few pics of 2021 WFD from around the world



Ham Word Search

courtesy of



Find the following words in the puzzle.
Words are hidden **↑ ↓ → ←** and **↘**.

- | | | | | |
|----------|----------|-------------|----------|----------|
| AMATEUR | LARK | POTA | STONEY | VERTICAL |
| BALUN | LOGBOOK | QUARTERWAVE | TOROID | WOMBAT |
| CANOE | METRO | RECEIVER | TORUS | |
| EXAMINER | NANO | RETORTS | TRANSMIT | |
| FEEDLINE | ONAIR | SHACK | TUNER | |
| HALFWAVE | OPTIMISM | SLOPER | ULTRA | |
| KNOB | OSAKA | SOTA | UPGRADE | |
| KWMTWO | POINTERS | STEEP | UPKEEP | |

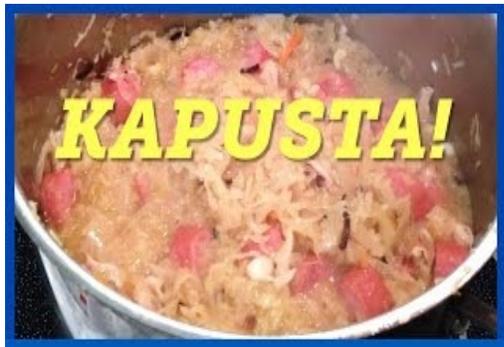
Crockpot Kapusta

- Ingredients:**
 2 Tbspns Butter
 2 Tbspns Bacon grease (or additional butter)
 2 1/2 cups chopped sweet yellow onions
 2 32 oz cans Sauerkraut (drained well)
 1 tsp salt & 1/2 tsp black pepper
 1/2 cup light brown sugar
 1 3/4 cups water
 3 lbs smoked kielbasa sliced

Directions:
 In large skillet, melt butter & bacon grease. Add onions & cook (med heat) till translucent and edges brown, about 10 minutes. Rinse and drain sauerkraut twice, add to crockpot. Add meat and all other ingredients, stir well & cover. Cook

on high for 1 hr, then reduce to low for 6 hrs. Serve with Pierogis or enhanced mashed potatoes.

Kapusta is a super easy dish to make and is a perfect pot-luck dinner item to bring to a group/club outing.



WFD pix!



NOMTN Colorado Ice station Eskimo!!

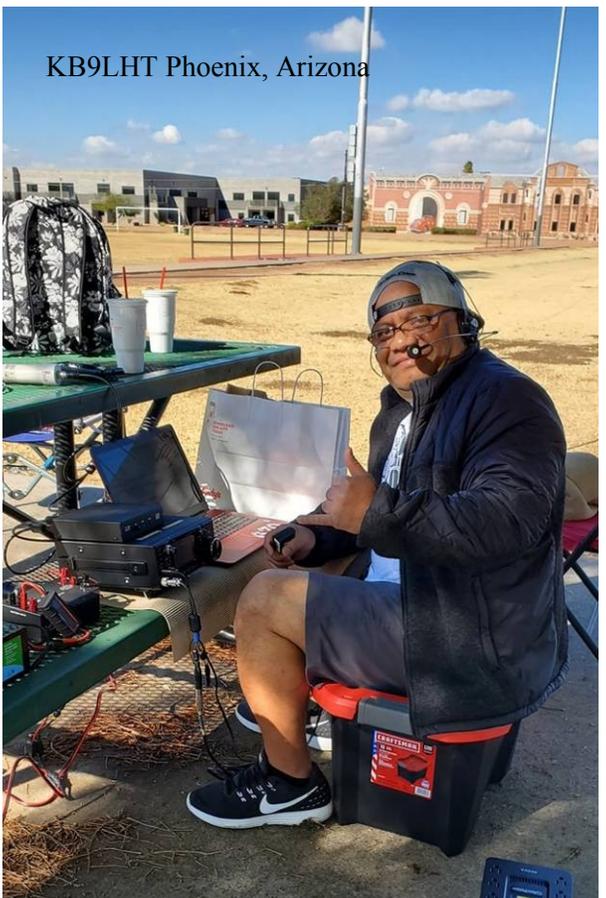


Alabama

WFD 2021



Missouri Outdoor Club
op: KE0OAP



KB9LHT Phoenix, Arizona



VE3KGC



VE3SKH

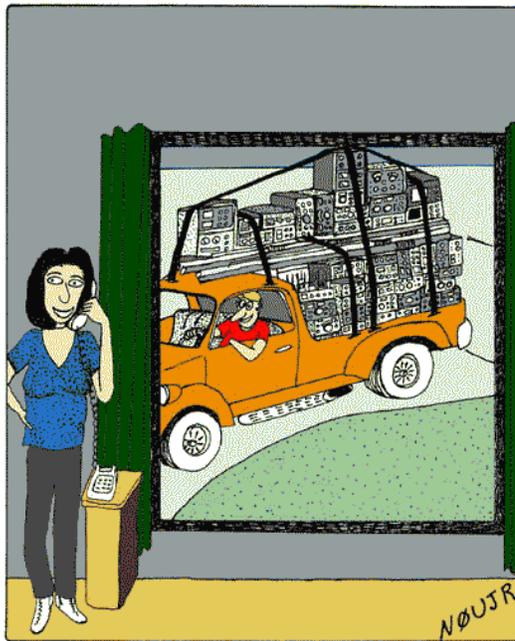


Columbus ARC WFD, Georgia W4CVY



A little Ham Humor..

Suggested by KC8HMJ



"No Greg went to the ham auction this afternoon, to get rid of a couple old radios that were cluttering up the place...Oh I think I hear him pulling in now!"



"Would you believe, my horoscope said that today I would have an unexpected close encounter!"

Crockpot Apple Butter

mybakingaddiction.com

Ingredients:

- 6 1/2 pounds apples - peeled, cored and sliced (combination of Granny Smith, Fuji and Honey Crisp)
- 1 cup granulated sugar
- 1 cup light brown sugar, lightly packed
- 1 tablespoon ground cinnamon
- 1/2 teaspoon freshly grated nutmeg
- 1/4 teaspoon ground cloves
- 1/4 teaspoon salt
- 1 tablespoon pure vanilla extract

Directions:

1. Place the apples in a slow cooker. In a medium bowl, combine sugars, cinnamon, nutmeg cloves and salt. Pour the mixture over the apples and mix well.
2. Cook in slow cooker on low for about 10 hours, stirring occasionally, until the mixture is thickened and dark brown.

3. Uncover, stir in vanilla and continue cooking uncovered on low for about 2 hours.
 4. Use an immersion blender to puree the apple butter until smooth.
 5. Spoon the mixture into sterile containers, cover and refrigerate for up to two weeks or freeze.
- Serve on breads & muffins (*WFD morning!*), pork chops or just eat it with a spoon.



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Emergency Comms aren't the only way that hams can provide a service to their community. Every year, major storm systems cause property damage, power outages, and casualties. Click on the links above and below to explore ways you might help your neighbors or become certified.



A blue banner with a white globe icon on the left. In the center, the call sign 'N3FJP' is written in large, bold, blue letters. To the right of the call sign, it says 'Recommended for WFD'. Below the call sign, it says 'Amateur Radio Software.' in a smaller, white font.

A Ham Crossword

Key on last page ..spcl tnx to Kirt Blattenberger KB3UON

ACROSS

1. * Ham's code for "Can you acknowledge receipt?"
3. 1E6 bits per second
5. * ___ Enterprises, a major Ham Radio equipment distributor and manufacturer
8. Chemical symbol for radon
9. * Morse _____
11. * The highest level Amateur Radio license rating
16. Color quality
18. The cell band above DCN
19. * International phonetic alphabet letter "N"
22. Image file format name extension
24. Programmable Logic Device (abbr.)
25. It can follow an MS (pl.)
27. Input intercept point (abbr.)
29. Type of current flow (abbr.)
30. Opposite of O.D.
31. 30 GHz to 300 GHz
32. Stock symbol for RF Micro Devices (now QORVO)
36. Key feature in a high level overvoltage protection device
38. Type of current
39. Display type
40. * Shortcut term for Ham radio operator
42. Direction of carbon fiber strands
44. Galilean moon
45. Satellite of Jupiter discovered by Galileo
46. Opposite of I.D.
47. Base of the decimal number system
49. Chemical symbol for radium
50. A BPF specification (abbr.)
51. Intermodulation (abbr.)
52. Advanced Research Projects Agency (abbr.)
56. Airport Surveillance Radar (abbr.)
58. BS__ - the degree held by many RF Cafe visitors
59. One component of a complex number (abbr.)
60. Part of this crossword puzzle's title
62. Chemical symbol for molybdenum
63. One port of an amplifier
65. Army-Navy specification prefix

1	2				3	4								5	6	7		
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		50			51			52	53	54	55		56		57			
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107	108		109		110					111	112				113			
114		115		116		117	118	119	120					121				122
	123		124		125								126	127				128
		129									130						131	

66. Metric system (abbr.)
68. Readability, Signal, and Tone (QoS report type)
70. Test point (abbr.)
72. Chemical symbol for einsteinium
74. Chemical symbol for scandium
76. * Radio Amateur Satellite Corporation (abbr.)
79. * "Calling any amateur radio station"
80. A common battery cell size
81. Enhanced Graphics Adapter
83. * World's foremost Ham radio organization (abbr.)
84. Chemical symbol for arsenic
85. Time delay (abbr.)
86. Title of an Amateur radio magazine
88. The Microwave Office software company (abbr.)
90. Chemical symbol for chromium
91. Write-Once (abbr.)
92. Multifunctional silicon devices (abbr.)
93. Half of DSB
95. * The mid-level Amateur radio license
99. Digital transmission figure of merit (abbr.)
100. Chemical symbol for selenium
102. Greek letter
104. Type of spread spectrum that does not use frequency hopping (abbr.)
105. Total radiated power (abbr.)
106. Yard (abbr.)
107. Chemical symbol for copper
109. 30 GHz to 300 GHz
111. Dual Tone Multi-Frequency
113. Part of a male connector
114. Radio Direction Finding (abbr.)

A Ham Crossword

spcl tnx to Kirt Blattenberger KB3UON

4. Chemical symbol for beryllium
6. Unit of inductance (abbr.)
7. Large transmitting tube such klystron, magnetron
9. Imaging device (abbr.)
10. Switch position
11. 1.602E-19 Joules
12. Chemical symbol for xenon
13. Chemical symbol for thulium
14. Chemical symbol for rubidium
15. Anatech Electronics Inc., (abbr.)
17. Electronics Industry Association (abbr.)
18. Programmable Logic Device (abbr.)
19. Chemical symbol for neodymium
20. Unix, Linux or Windows (abbr.)
21. * Slang for transmitter and/or receiver
23. * U.S. Spectrum allocation agency
24. 10E-12 numerical prefix
25. It can follow an MS
26. 3 MHz to 30 MHz
28. Programmable logic device (abbr.)
31. Engineering Change Order (abbr.)
32. Chemical symbol for radium
33. Unit of length (abbr.)
34. Akin to an EE, CE, AE, etc.
35. Device under test (abbr.)
37. Precision approach radar (abbr.)
38. * 2-element, 1/2 wavelength antenna fed at the center, a favorite of Amateurs
39. * Technician, General, and Amateur Extra are examples of this
40. Analog-to-Digital (abbr.)
41. Government program to bring electricity to farms (abbr.)
43. * Type of unidirectional antenna often used by Hams
46. Greek letter used for resistance
48. Stock symbol for National Semiconductor
50. Finite Element Analysis (abbr.)
51. International Reply Coupon (abbr.)
52. Chemical symbol for argon
53. Aircraft tracking system (acronym)
54. Chemical symbol for palladium
55. Powers pneumatic devices
57. * Device attached to an antenna mast which rotates it so that the antenna can point in different directions
61. International phonetic alphabet letter "O"
64. * A no longer used Amateur radio license level
67. Miniature threaded RF connector
69. Slang for when a professor hints at an exam problem (abbr.)
71. Attenuator
73. Miniature RF connector (pl.)
75. Early computer display screen resolution (abbr.)
77. Chemical symbol for strontium
78. Chemical symbol for thallium
82. Conductor size unit (abbr.)
87. * ARRL's flagship magazine
89. Positive voltage lead color
90. Chemical symbol for chlorine
91. Wired Equivalent Privacy (abbr.)
92. Integrated Services Digital Network (abbr.)
94. The UK's largest defense electronics contractor (abbr.)
96. Unit of time (abbr.)
97. Chemical symbol for einsteinium
98. Type of flip-flop
99. Notch type filter (abbr.)
101. Special diode type that can be switched (abbr.)
103. Ultra High Voltage (abbr.)
105. Chemical symbol for thulium
106. Compound used as the frequency determining element in microwave oscillators
108. User Datagram Protocol
110. Finite-Element Model
111. 10E1 numerical prefix
112. Chemical symbol for thallium
113. Printed Wiring Board (abbr.)
115. Heatsink feature
117. One component of a complex number (abbr.)
118. Chemical symbol for tantalum
119. One port of an amplifier
120. Chemical symbol for cesium
121. Chemical symbol for aluminum
122. Below ELF
124. Electromagnetic (abbr.)

Thanks to Cruciverbalist Kirt Blattenberger, KB3UON!!

This August 9th 2020 Amateur Radio Engineering crossword puzzle contains many words particular to Amateur Radio (labeled with an asterisk *). Each week for two decades I have created a new technology-themed crossword puzzle using only words (1,000s of them) from my custom-created lexicon related to engineering, science, mathematics, chemistry, physics, astronomy, etc. You will never find among the words names of politicians, mountain ranges, exotic foods or plants, movie stars, or anything of the sort. You might, however, find someone

or something in the otherwise excluded list directly related to this puzzle's technology theme, such as Hedy Lamarr or the Bikini Atoll, respectively. Avid cruciverbalists amongst us: the gauntlet has been thrown down.

Cruciverbalist: [noun] cruci- ("cross") + verbal ("words") + -ist ("agent, person") -- A person who constructs crosswords.

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Clues: acr. = acronym, abbr. = abbreviation, pl. = plural, wds. =



words

Editor's note: Kirt Blattenberger KB3UON is the author of RFCafe online.. Many thanks to him for allowing use of his material in our Newsletter. **Note: Solution to this puzzle is on page 12.**

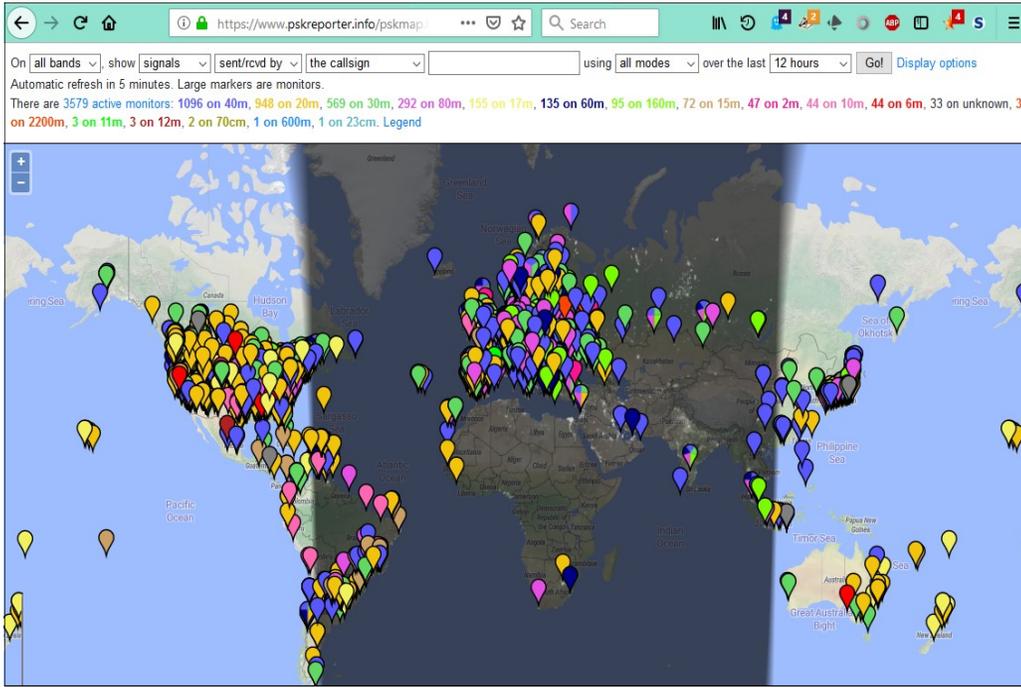
Wanna' know who's on the air?

Rich KC8HMJ, sent this link along. It's called PSKMap and will display (depending on your selections) activity on dozens of different HF modes.

After looking it over, it appears to heavily favor FT8 and other similar

modes, likely due to their web connectivity. Checking for other modes like CW, SSB, SSTV, PSK, etc, seems to offer far less in the way of results vs one of the other popular skimmer apps..

Click the image..



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F	D	R	S	W	S	I	N	N	I
L	B	L	B	U	S	M	E	P	I
S	G	A	V	A	L	C	A	L	V
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C	W	O	C	R	A	W	A	C	O
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V	A	V	C	O	A	M	S	A	T
O	T	P	L	R	S	T	C	G	S
N	I	O	M	O	I	O	R	A	D
G	A	S	R	A	R	P	A	M	A
R	A	N	T	E	N	D	O	I	O
L	A	Y	R	E	U	R	A	M	A
C	G	A	P	D	F	M	D	C	L
A	C	I	P	I	R	D	S	P	H
F	G	I	F	E	M	B	E	R	N
E	H	U	E	X	T	R	A	C	O
M	F	J	I	T	M	B	I	T	S