

# **BIG SKY SURPRISE**

May 2020 found DX'ers quarantined inside their homes, facing the threat of the largest pandemic to strike the globe since the 1918 "Spanish Flu." Many of us were thrilled when broadcaster and radio hobbyist, Paul Walker announced that he had arranged for a late-season DX Test from KBOZ in Bozeman, Montana.

Just days after the announcement swept out onto the various e-mail news groups and onto Facebook, our hopes were dashed faster than you can spell "Hydroxychloroquine" when we learned from the station's lawyers that KBOZ had fulfilled their legal requirement for broadcasting hours necessary to maintain the station's license pending a sale to new owners. The KBOZ test was cancelled...and most of us had resigned ourselves to watching the bonus episode of *Tiger King* on Netflix instead of listening for a new station from the Treasure State.

Just as all hope seemed lost, engineer Todd Clark read about the disappointment of radio hobbyists on social media and offered one of the station's in his care to "stand-in" for the cancelled DX Test. He reached out to Paul Walker and asked if hobbyists might be interested in a test from KJJR, 880 in Whitefish, Montana instead.

Normally at night, KJJR covers the town of Kalispell with 500 watts but for a single hour on Saturday, May 2, Todd would do some transmitter maintenance while they broadcast special test material at their full daytime power of 10 KW, into a non-directional antenna.

The Courtesy Program Committee (CPC) raced to assemble a new audio file containing the necessary elements for the broadcast. A few years ago, we conducted a series of tests with an audiologist to determine what types of audio material could be best heard by the human ear when mixed with both atmospheric news, and a louder station broadcasting on the same frequency. Here is a breakdown of the content transmitted during the test:

00:-00:53 Opening Voice Announcement 00:53-01:48- Morse Code ID at 10 WPM 700 Hz 01:49-02:49- Sweep Tones 02:50-03:01- Telephone "Busy Signal" 03:02-03:35- Sweep Tones 03:36-04:36- "Laser Gun" Sweep Tones 04:37-05:29- Theme from Netflix Series "Stranger Things" Synthesizer Heavy 05:30-05:54- Telephone "Busy Signal" 05:54-08:01- Sweep Tones 08:02-08:13- Telephone "Busy Signal" 08:14-10:03- Morse Code ID at 10 WPM 700 Hz 10:05-11:03- COVID19 Patch--Original Synthesizer Composition (Mostly low tones. Whale song type sounds) 11:31-14:05- Sweep Tones 14:06-16:01-1 Khz Continuous Tones in Since, Saw, Square, and Triangle waveforms. Similar to old Frequency Tests. 16:03-16:47- Test Continues Voice Announcement. Thanking Todd Clark and Paul Walker. 16:50-18:39- Morse Coide ID at 10 WPM 700 Hz 18:50-19:57- Stairstep Tone. Starts low and climbs rapidly in frequency. 19:59-21:34- Sliding Scale Tones. Step from 500 Hz to 3,000 Hz every few seconds. 21:35-21:59- Telephone "Busy Signal" 21:59-25:42- Sweep Tones 25:44-27:32- Morse Code ID at 10 WPM 700 Hz 27:33-33:55- Telephone Touch Pad and Video Game Sounds 33:55-34:27- British Police Siren 34:30-35:45- Stairstep Tone. Starts low and climbs rapidly in frequency. 35:48-37:42-1 Khz Continuous Tones in Since, Saw, Square, and Triangle waveforms. Similar to old Frequency Tests. 37:43-41:33- "Frankenstein" by Edgar Winter Group. Synthesizer heavy. 41:35-42:20- Test Continues Voice Announcement. Thanking Todd Clark and Paul Walker. 42:22-44:11- Morse Code ID at 10 WPM 700 Hz. 44:12-45:47- Sweep Tones 45:48-46:10- Telephone "Busy Signal" 46:11-47:11- Sweep Tones 47:12-48:05- Theme from Netflix Series "Stranger Things." Synthesizer Heavy 48:06-49:31- COVID19 Patch--Original Synthesizer Composition (Mostly low tones. Whale song type sounds) 49:31-50:10- Stairstep Tone. Starts low and climbs rapidly in frequency. 50:11-52:00- Morse Code ID at 10 WPM 700 Hz 52:01-53:37- Sweep Tones. 53:38-55:33-1 Khz Continuous Tones in Since, Saw, Square, and Triangle waveforms. Similar to old Frequency Tests. 55:33-55:45- Telephone "Busy Signal" 55:46-58:43- IRCA Theme Song. "Hands Across the Seas" Marching Band Music 58:44-59:37- Morse Code ID at 10 WPM 700 Hz 59:37-59:59- Closing Voice Announcement

For those in the East, our audiology test bed certainly fit the conditions on 880 KHz, with NYC powerhouse WCBS blasting out it's 50,000 watt signal from the Hudson Valley. While those in Canada would need to contend with CHQT and CKLQ. In the Western US, KRVN serving rural Nebraska would also be a barrier along with a smattering of other stations broadcasting at low power levels to their local audiences.

To counter these strong signals, we provided the engineer with an hour long recording of Morse Code identifications, sweep tones, telephone "off hook" sound effects, and other noise-busting sounds including some synthesizer based music that was certain to stand out from the normal clutter.

Stand out it did! The DX Test from KJJR was widely heard across North America, and even as far away as New Zealand. A true "Big Sky Surprise" for socially distant DX'ers. Here is a smattering of the reports received from Paul Walker, who handled verifications of the test via e-mail:

Very strong into Victoria with CW, then sweep tones and then phone off the hook sounds, then back to sweep tones starting at 06:01 UTC. Well overpowering KIXI. Thanks, Paul!

- Walter Salmaniw, Victoria, British Columbia, Canada

WCBS mostly dominant during test period with C&W music a second. Strongest and most noticeable was Sweeps and Staircase waves, tones heard and phone off hook noise. Morse code at 00:43 and 00:51, will have to play code back to get the message. Thanks to Paul for arranging this test.-**Tom Jasinski**, Joliet, IL

Sweeps and code easily heard here too. This is a new one for my logbook. Thanks to all those involved in arranging this test.-**Tim Tromp, West Michigan** 

Have heard some sweep tones so far at a fair level into SoCal beneath a strong KKMC. -Mike Sanburn Lakewood CA

Fair to good in Seattle with local KIXI phased down. Voice & code IDs, sweeps, busy signals, etc. are mixing with CHQT and KIXI. The Misek-Lankford-Ratzlaff phaser is needed for me to hear it. I'm about 7 miles from KIXI's tx site and in its main lobe.-Bruce Portzer

Hearing Morse Code followed by sweep tones, busy signal followed by more sweep tones, more Morse Code on 880 kHz in KRVN null!! Audible on all three antennas, best on the ALA 1530In which is aimed NW/SE. Great signal!! Thanks to all who helped arrange this test!

-Craig Barnes Wheat Ridge, CO

Happy to report that the KJJR DX Test was easily heard in Central Alabama, near Birmingham tonight. Got a nice null on WCBS using my Wellbrook Loop, and the Clifton Active Whip…then the sweep tones came through easily. Towards the end of the hour, I was amazed at how well the 1KHz tones came through. After all the talk about frequency checks, I thought it would be fun to insert some continuous 1000 hz tones in sine wave, square wave, saw wave, and triangle. These were easily heard—coming through nearly as well as the sweep tones. Morse code made it through well too. Even heard some of the IRCA theme song (Marching band music) near the end. No voice ID's however. Test seemed to get out very well. New log for me! Thanks for Todd Clark and the unflappable Paul Walker for arranging this late-season, last minute treat!

Heard some sweep tones at 12:06 MT. 1:06 CDT -William Burrows, Lees Summit, MO

KKMC Gonzales Cal seemed stronger than usual tonight but after some effort, I was able to null their signal. At times, I may have heard the CW and the 1000 Hz tones but not clearly. Did hear the sweep tones twice. My thanks to Lee, their CE and to Paul for arranging this test. My first MT station since moving here. -Joe Miller Desert Hot Springs, CA

GOT EM! Came up very nice again with CW ID right at 0258 EDT. Heard the 1 kHz tone and sweep tones earlier as well around 0234-0235. Have some nice audio on the RSPdx recording to put up on YouTube. Getting the audio files and video files ready for upload but wanted to share this nice shot (BELOW) from the RSPdx IQ recording of the CW ID right around 02:59 EDT.

Makes it a bit easier to spot! Sweep tones and the 1 kHz tones showed up nicely on the waterfall too. What I wouldn't give to have had this back in 1993. MT #2 lifetime and #1 from CHS. Thank you all who helped set this up! - Loyd Van Horn, W4LVH Charleston, SC https://www.youtube.com/watch?v=wb1ixISA9Ng&feature=youtu.be



Loyd Van Horn Captures CW ID Visually

As e-mail lists crackled to life with reports of receiving the KJJR 880 test, users also congregated on the various online bulletin boards and "Chat" rooms. These included the granddaddy of all web spotting networks, The BCB Propagation Logger:

# http://dxworld.com/bcblog.php

The real-time reports of hearing the DX Test began on this web based spotting network just after 06:01 UTC:

May02 06:08 880 KJJR Whitfish, MT -- Sweeper tones heard loud here through I have something else on 880 on top - Kyle / Kaylon Sphere DN07 (136.143.144.181) May02 06:05 Also hearing them on Token's KiwiSDR in Ridgecrest CA > Ellensburg CN97ra (216.210.8.227) May02 06:03 880 KJJR heard in East Central MN. Morse at 01, followed by sweep and telephone at 02. 73, Mike, NM7X (45.56.151.55) May02 06:03 880 KJJR Whitefish, MT -- Making it through at fair strength with repeated "KJJR" in Morse Code at the start of DX test. Stayed up just long enough to hear this, I'm headed to bed, gotta be up early in the morn for work -- Rick in South Omaha EN21af (174.71.76.228) May02 06:03 880 KJJR MT loud here with phone off the hook, sweep tones - over everything else > Ellensburg CN97ra

Meanwhile Don Moman, VE6JY lead a discussion about the DX Test on the SLACK application, which is a phone based app—popular for many of us who are working from home during the pandemic. Download it on your phone, then join the MWDX group using the invitation link below.



Hearing swept tones, busy signals etc on 880, covered by local 50kw'er but tones coming through quite well at 0602.

Seems to be getting out well, there are several us on the MWDX Slack chat group commenting on it as well... I created a permanent link, if any one wants to join: https://join.slack.com/t/mwdx/shared\_invite/zt-e1eik4dv-0bB1TOQxeivsaO38cS3inA

This is the same text chat group that has been mentioned here before, starting to get a reasonable number of DXers using the application at night.

#### - Don Moman, VE6JY Lamont, Alberta, Canada

As reports spread on the real-time networks, e-mail reports of the test also picked up as more and more DX'ers reported their luck in hearing the "Big Stick from Big Sky:"

Hearing sweep tones @ 0204 EDT and 0206 EDT, and 0212 EDT. Under WCBS talk and CKLQ C/W Music. Using an ELAD FDM-S2 and WELLBROOK ALA-1530LNP- Imperium Loop. -Robert Ross VA3SW, London, Ontario, Canada

*KJJR* 880 12:01 AM MDT Morse code, sweep tone, busy signal. Good atop KWIP Dallas, OR. Thanks Paul. -Dennis Vroom, Kalama, WA

KJJR-880 Clear code Ids at 02:09 EDT. Sweep tones before and after. WCBS dominant with CKLQ in second place. KJJR in third. Montana #18 received here in Learnington Ontario (near Detroit MI) -Charles Reh, Learnington, Ontario, Canada

I used a CCW Witness radio and did a timer recording (23:54 on the 1st of May to 01:36 on the 2nd of May -- my time). I didn't notice that you said mountain time in the e-mail, so I set it for central time. Because of this--I got only the first 36 minutes.

This is what I thought I heard (give or take a minute). My recorder may have been 1 minute off (behind). It was a very weak signal and more static than anything...

00:17 - sounded like a sweep tone 00:19 - sounded like a tone or old style telephone ringing 00:32 - another sweep tone. Like a siren - woo-woo type of sound -Ron Rader, Chariton, Iowa

Not everyone got the invitation to the Big Sky Surprise Party, unfortunately. With any DX Test some folks go away disappointed. Like Jim Renfrew, who just couldn't overcome the all-powerful WCBS.

Not even a hint of nothing in western NY. Manitoba is often in under WCBS, but not tonight. I can get a fairly good null with the Quantum Phaser, but there's nothing in the null. I'll stick with it til 3am, just in case. Thanks for the test! - Jim Renfrew, Clarendon NY

I got absolutely nothing in Central Indiana. Might've had a tone and maybe one or two bits of code but nothing countable. As big a flop as KBOI ID Boise several years ago. Maybe that's what I get for trying it barefoot. Congratulations to all who managed it. -Dave Hascall

I woke up late and missed most of the test. Between 0240 and 0255 EDT all I could hear deep in the mud were bits of a 1 kHz tone. Certainly not enough to call it anything but a possible tentative.

#### -Rob Keeney, Goose Creek SC

Luck was better in the Southwest, where Bob managed to overcome his QRM and log the station on his main receiver and even an ultralight!

KRVN from one direction and KKMC from the other, but sweep tones and CW are cutting through. Main receiver is an Airspy HF+ and also audible on a barefoot CC Skywave ULR. -Bob Coomler W7SWL, Tucson, AZ

Also in the Southwest, Bob Wien checked in from "The Land of Enchantment" with a successful reception on his C Crane Radio. Nice catch, Bob!

Good into Albuquerque, NM over/under KHAC with KRVN nulled, C Crane Radio. Sweep tones, code IDs, 1 KHz tones at various periods. Logged on rs on 1400 and 880 from San Jose, California many years ago. -Bob Wien Albuquerque, NM

As the test progressed, e-mail reports began to pour in from all parts of the country...

Montana DX test coming in fair with KKMC QRM into Lakewood CA even audible on my Sangean DT160 Ultralight. And there is the Morse Code that makes it all very official! -Mike Sanburn KG6LJU

Please see the clip of my reception on YouTube. Not bad, for a barefoot radio and WCBS on the side. https://www.youtube.com/watch?v=RBxWtlSsV4Y&feature=youtu.be -Chad Bryan, NW Ohio

[Editor's Note:] I'd say that's an understatement Chad. As you can hear in the YouTube clip above, while WCBS is still dominating the frequency even after being nulled, the sweep tones can be faintly heard underneath.

The KJJR DX Test made it to Austin, Texas as well - new state for me! Drake R8B Receiver and Terminated Delta Antenna (17ft apex and 28ft base) Appreciate you conducting this test - Thanks to Todd, Paul and Les! -Mike Beu, KD5DSQ, Austin, Texas

Was heard, barely, but confirmed, in north NJ. Definite code ID's and laser sweep tones were the difference. Big thank you to Paul for putting on the test. Thank you, Les, for your help too. -Bob Galerstein WB2VGD, Morris Plains, NJ

Heard Morse code followed by sweep tones, and more Morse code on 880 kHz under KRVN, heard here with fair signal!! There was another station underneath KRVN playing oldies. Since I recorded 3 hours, one hour before and then one hour after the DX test, I will see if I can ID the station.

Thanks to all who helped arrange this test, a New one for the log book! -James Niven, Austin, Texas

For many of us, KJJR represented an ATNO (All-Time New One) in the logs, including Shawn Axelrod who used his impressive shack which features the best of old and new receivers: An SDRPlay RSPduo alongside a Drake R8. Shawn uses a variety of antennas including a 3 foot box loop, a Quantum QX Loop V2, and a 155 foot outdoor wire to snag the DX.

880 KJJR MT Whitefish 05/02 0206 Good signals under CKLQ with lots of Code ID's and sweep tones at 0202, 0206 and 0210. Easy copy even with mega pest CKLQ on with their country music. Thanks for the DX test. NEW! Did not think I would get this one but those sweep tones and Code ID's made it so easy. New catch for me never been heard here before. You have to love new DX in May.

# - Shawn Axelrod VE4DX1SMA, Winnipeg MB Canada

Got 'em here in Waynesburg, PA (SW corner of PA, 50 miles from Pittsburgh). Unbelievable to me, my first Montana station, in 62 years of on/off/casual BCB DXing! Very faint, but there, at 1,800 miles, In May! No QRN or lightning crashes at all . . . it felt like a winter's night, acting more like December than May.

Out on our deck with the ICOM 7300, I aimed the MFJ loop to 300 degrees for Kalispell. I had powerhouse audio from WCBS, plus splatter from WLS-890 sidebands. But for my QTH, WCBS is offset 45 degrees, so I could weaken them a bit with the loop, and I used the 7300's PBT (pass band tuning) to skew toward lower sideband, eliminating the WLS splatter.

And there were the sweeps, faintly under loud WCBS news-talk. Then a phone busy sound, some rapid beep-beep-beep, and faint Morse (I could pick out - - -, presumably the dashes in the "J's.") I logged minute-by-minute until 0020 EDT, when I was freezing (41 degrees) and went to bed. Sending report to Paul Walker for verification.

The 7300 and the loop made it possible. Imagine if we had those power tools back in the 1950s-1960s, when the band was open! THANK YOU to Paul Walker and KJJR for making it possible! **-Fred Schroyer, Waynesburg, PA**  Many medium wave enthusiasts have echoed Fred's praise of the Icom IC-7300 SDR Transceiver has fine AM band DX receiver. It has an attenuator for signals below 1.8 MHz that is "ON" by default (to prevent overloading issues on 160 Meters) but it can easily be switched off in the menu. Once that is accomplished, the Icom comes alive with signals on the broadcast band. If you're in the market for a new receiver that can do double-duty as a ham rig, look no further.



ICOM IC-7300 SDR TRANSCEIVER IS ALSO HOT ON BCB!

Thank you for conducting a DX test while performing maintenance at 880 KJJR. The test may have been received at my monitoring post in Nashua, New Hampshire. It sounds like Morse code was received under co-channel WCBS New York, between 12:01 to 12:02 a.m. Mountain time, May 2. An audio clip is at <u>https://www.bamlog.com/880code.mp3</u> Otherwise, only Radio Progreso from Cuba was received under WCBS during the test period.

Reception was on the WiNRADiO Excalibur software defined radio with a SuperLoop directional broadband loop antenna. The antenna was counterintuitively aimed northeast to maximize a null on WCBS signal strength. The bandwidth was set to 1.1 kHz to reduce interference from WCBS modulation. -Bruce Conti, Nashua, NH

Other DX'ers found success with slightly more vintage gear, like Roy Barstow in Cape Code, MA who managed to overcome WCBS also using a loop antenna. In this case, a big one! Other reports from New England also confirmed some very distant reception of KJJR.

I have 4 clips. First clip of unknown playing music and possible ID but WCBS strong. Maybe someone has heard the female announcer? The 2nd. clip is of Morse code identification. and last 2 clips of tone.

Using 10X16ft. Loop and G-33 w/out amps. Location at, Fort Hill, Eastham, Cape Cod, MA. Montana # 6 -Roy Barstow, Eastham, Cape Code, MA

Review of first 10 minutes of 880 audio (0600-0610 UTC) has a weak sweep tone sequence around 0602:30. WCBS, of course, is very strong and dominant. R. Progreso Cuba with vocal music is well under. More things on there than on a '60s Radio Shack sound effects record. The sweep tones and 1 kHz around 53-54 min. are what made the >2100 mile trip here. Not an easy trick with WCBS blasting away at under 200 miles on a largely salt water route. Thanks to Paul and all the others who set up the test. -Mark Connelly, WA1ION, South Yarmouth, MA

KJJR MT received here via recording made off of Icom R75 - sweep tones, Morse Code ID & telephone busy signal made it through on a very cluttered frequency. 880 here has semi-local KIXI Seattle, KWIP OR, CHQT AB & last night country music either from CKLQ MB or KRVN NE. Signal strength diminished to the point of being almost inaudible but think I heard a few more test items in background. Signal was best here 0600 - 0615Z - Mike Cherry, Salt Spring Island BC

Thanks to Morse code and the sweep tones, KJJR blazed its way through the KIXI/KWIP mush promptly at 11:01pm PDT last night. It was a welcome addition since MT stations don't exactly overwhelm my logs. Thanks for setting it up, Paul Walker. This was pulled in on the HQ180 and Kiwa loop. (Wouldn't that be a great name for a rock group - "Morse Code & the Sweep Tones...)

### -Pete Taylor, Tacoma, WA

Late to the party. I tuned in at 10:38 PM PDT and heard a station playing music. I think that was KHAC. I did record it for about 10 minutes. 10:50 I heard ads, most likely KRVN. This was all on my loop in a "null" of KKMC. ToH I heard what sounded like a KRVN SID (sung ID for some of you). :20 after ToH I heard a KHAC ID. Sweep tones heard starting 11:01:50, weak. Listened until 11:26 and heard sweeps, CW, 1 kHz tone, phone off hook. At 11:27 I switched over to my 75' wire that is more directional up thru central California. KKMC was in strong but a Spanish station faded up briefly and I think there is an ID. I've heard this station recently but it's in/out and I haven't really concentrated on an ID. I think it's KWIP. I need to review my recording. Thanks Paul and everyone else. Nice to hear a DX Test and a new station (or two).

### -Martin Foltz, Mission Viejo CA

KJJR-880 MT Test tentatively heard at 0237:36 am EDT Saturday May 2. At 6.3 seconds 1 sweep tone can be heard under WCBS just as Norah O'Donnell pronounces the last syllable of "consumers." At 15.4 seconds a Spanish female vocal can be heard, probably from Cuban R. Progresso.

PAUL WALKER: What do you think? And thanks for arranging the Test on short notice. WCBS is difficult to null here, especially at night.

# -Marc DeLorenzo, South Dennis, Cape Cod, MA

[Editor's Note:] Paul Walker was able to listen to the audio clip that Marc submitted and verify the reception. CPC Chairman concurred with the QSL. Great catch, Marc!

Thank you very much for taking the time to run this special DX test. I hope you receive many e-mails and that you will enjoy reading them.

I am a former 40 year veteran radio guy, Programming Side, I started my journey in 1975 at 1080 KNDK Langdon, North Dakota. From there I traveled the US with stops in Chicago, Detroit, Kansas City, Indianapolis and 20 more.

I am a casual DX'er. Love AM radio Dxing. On the morning of Saturday May 2nd, Here's what I heard on my Tabletop C.Crane Radio with no external antenna from Westerville, Ohio, which is just Northeast of Columbus, Ohio the center of the state. Atmosphere condition were perfect for this test in the Ohio Region, Clear skies, a cool 51 degrees, zero atmospheric noise; Barely audible, High tone at roughly 2:14 eastern time. Tones again with Morse code Id at roughly 2:27 eastern time. Signal was very weak fighting WCBS New York, I had a pretty good null on them for a few minutes. I could also barely hear CKLQ. I tuned in at the top of the hour and really didn't hear anything until about 2:14 and it was definitely there, barely audible , until just before the bottom of the hour then WCBS started to dominate the frequency. I not sure if you did anything else besides sweep tones and Mores Code, but those two thing were the only things that cut through.

#### -Gregg Cassidy, Westerville, Ohio

Here's how the KJJR DX Test sounded in Mesa, Arizona. The recording starts out with KRVN, then I nulled KRVN as best as possible, you then hear a KHAC ID. The code then starts. Note there is a Mexican station mixing, that most likely is XEPNK despite what other say about XEPNK being off the air for 9 years. -- John Johnson DXing from Mesa, Arizona

[Editor's Note:] John submitted a clip to the IRCA E-mail List, and the test sounded great. Morse Code ID's and sweep tones where easy, armchair copy. He uses the combination of a Wellbrook ALA 1530LNP loop antenna, and an SDRPlay RSPDuo to great effect. The theme from the Netflix series, "Stranger Things" came in perfectly clear.

Below is my reception report for the KJJR DX Test on May 1:

My location is Moses Lake, Grant County, WA, 406 km (252 miles) from the KJJR transmitter. Receiver used was my Eton Elite Executive, and I received it both indoors and outdoors. Here's the first video of the DX test - I have more coming after the test is done with: <u>https://youtu.be/YEmI3ELhI10</u>

-Kyle, Moses Lake, WA

1201 Sweep tones continuing to 1204.
1205 Phone sounds
1206 Sweep tones, weak, probably my best reception, audio clip enclosed
1208:30 Morse Code, poor, only got bits and pieces
1210 Possible voice, very poor under huge KRVN
1211:35 Sweep tones, poor/weak
1214:30 Steady high pitched tone to 1216:05
1217:25 Morse code, very poor/poor only bits and pieces
1220:50 Octave low pitch tone, then high pitch tone over and over
1223:30 Sweep tones
1225:50 Morse code
1232:20 High pitched steady tone
(Conditions got worse, KRVN wouldn't fade now, stopped recording 1236. Thanks for arranging the DX Test!
Steve Ratzlaff, Sahuarita, AZ

I'm happy to report the reception of most all of the DX-Test. I was trying to overcome or listen through, KRVN Lexington, NB, KHAC Tse Bonito, NM and I suspect KJOZ, Conroe, TX.

My reception report is as follows and times are Mountain.

At 0000 Morse tones, 0007 high pitched sweep, 0009 low pitched, psychedelic sounds 0012, flute & chanting 0015, pips & Morse 0017, flutters 0018 into sweeps & seems to be out at 0024, high beeps 0028, rhythmic noise 0029, brush sound 0030, tones 003, Electronic music sounds 0034 into sweep tones until 0036 into beeping 0036 until 0037, Morse 0043 until 0044 into high sweeps 0045, busy phone back to high sweeps ending 0046. Steel drums & clock ticks 0047, middle tone & clock ticks 0048, 0049 into beeping sweeps low to high. 0050 Morse. KRVN & KJOZ take over from here until, possible spoken word 0054 -Ward Elliott, North East Dallas TX

Well I fell asleep but woke up about 15 minutes before the test started. I wasn't set up with a recorder but I used my Sangean PR-D15. With WCBS New York(news) and what I believe was KRVN in Nebraska(country music) dominating the frequency I could faintly hear the test underneath. When I heard the signals they were very faint. If there was any voice I could not make it out. With fading I probably didn't receive everything. WCBS was strong the whole hour. What I believe was KRVN had a good signal underneath WCBS from @0615z to 0640z then faded almost all the way out up to 0700z. I also have some transformer noise on a power pole near my house. Fortunately it was toward the end of my ferrite rod on my receiver. I was going to use my Palstar R-30 and its outside antenna with a noise canceller but stuck with the Sangean portable.

QRM from WCBS (severe QRM) and Spanish singing (slight QRM) on 880 kHz. Also, noise or a het (severe QRM) in the lower side-band of 880 kHz forced me to only use the upper side-band to listen. Copied Morse Code ID briefly at 12:12 AM MST. Using a WinRadio G33DDC SDR Excalibur Pro receiver with a Wellbrook ALA1530S+ Imperium Loop antenna. -Kraig Krist, Manassas, VA

Thanks so much for arranging this DX test. This was my first one in over 40 years! I was looking through my old 70's log recently and I was amazed at some of the exotic stations I was able to hear via this method, and this will be one more! Here are the program details I was able to log and record. I've stated the times in Mountain.

12:22 - 12:24 - sweep tones

12:25 - 12:27 - Morse Code IDs

12:30 - 12:31 - steady tone

12:42 - 12:43 - Morse Code IDs

The station was coming through at other times during the test period that I did not get recorded, but these were the portions I was able to document and time stamp. I had no problem nulling out WCBS and with that the frequency was fairly wide open. I didn't ID any other stations during this time. My biggest problem was adjacent frequency splash from either WLS or WWL. I logged out around 1:45. My equipment is an Airspy HF and a Space Magnet amplified ferrite core loop. -Wayne Murphy, Nashville, TN

I was using a Drake R8B receiver with 3 beverage antennas and a loop antenna. WCBS in New York was giving me a 40 over S9 signal so I had to pull you out of that. This test was nearly covered by WCBS. I could hear sweep tones, and Morse Code but couldn't distinguish it. I was a CW operator in the US Navy during Viet Nam. I have been a member of the National Radio Club since the 60s. It has been a long time since we have had a test. Thanks for having the test. -Bill Swiger, KB8IJC, Bridgeport, WV

I heard the KJJR DX Test from 12:01 AM to 12:31 AM Mountain Time on Saturday, May 2, 2020, here in Spokane Valley, WA, about 10 miles east of Spokane and 8 miles west of the Idaho border. I had to head for bed after that because I had to work in the morning. I don't know Morse Code by heart and it was kinda weak here so I couldn't decipher all of it but I'm sure I copied the KJJR calls in there. Here's what I heard:

12:01 Women announcing that this is a test sponsored by the International Radio Club of America and that it can be heard from thousands of miles away. Morse code followed, including KJJR calls, then ascending sweeping tones, followed by telephone "off the hook" repeating tone.

12:02 More ascending sweeping tones, some slower this time, continuously to at least 12:04.

12:05 Telephone "off the hook" tones, then more ascending sweeping tones.

12:08 Telephone "off the hook" tones, then Morse code, including KJJR calls, I think.

12:10 Tones that reminded me of an elephant's call, then low tones followed by higher pitched tones.

12:11 Ascending sweeping tones continuing to 12:14.

12:14 Steady tone, with occasional pause of silence for a about second about 3 times.

12:16 Announcement by a woman: "You are listening to a special DX test from KJJR, Whitefish, Montana..."

My receiver is a Drake R8 with a Kiwa Loop. I also use a Sangean DT400W ultralight when I'm checking conditions in bed at night. Radio has been in my blood since I was little. I've been a member of the IRCA and NRC for many years. Thanks for arranging this test and handling the reception reports! -Stan Weisbeck, Spokane Valley, WA

I had the great pleasure of hearing the KJJR 880 DX test on the 2nd of May 2020 and have attached a copy of my reception report for this test broadcast along with 2 (two) mp3 audio files of my reception. I first heard the test broadcast for a seconds with a tone sweep for a few seconds while listening on the New Zealand Radio DX League's Kiwi SDR located at Russell in the Bay of Islands. Dene Lynneberg, Russell Bay of Islands, New Zealand

The KJJR 880 KHz test is just the latest example of some amazing opportunities that Paul Walker has made available to his fellow DX'ers. In the heyday of our hobby, the Courtesy Program Committee enjoyed close relationships with many station engineers. In those days, nearly all Chief Engineers were also amateur radio operators, and understood the allure of DXing. But things have changed radically in the broadcasting industry now.

In 2020, engineers themselves are in short supply. Most manage several stations and spend a lot of time travelling between sites to do maintenance. Rarely are they hams, and many are not even familiar with the hobby. Those that are may have very negative views, brought about by over-zealous DX'ers who have reported a station for problems with their automation, or similar offenses.

Resources are tight, with many stations operating on paper-thin profit margins. Engineers are under a lot of stress—so staying up late or travelling to a remote site to switch over transmitter power is a major "ask" these days. To help translate our hobby, we need people who speak the language of both enthusiasts and broadcasters—something that Paul Walker does very well.

We're also very much in the debt of Engineer Todd Clark, who so graciously volunteered to run the test with very short notice, and convinced the owners to allow it. Thank you both, gentlemen.

Looking forward to a great 2020-2021 season. Hope we have many DX tests to fill those cold evenings. Until then, remember to wash your hands, and practice social distancing.

73,

Les Rayburn, N1LF Courtesy Program Committee (CPC) Chairman