

It is hoped that the upcoming '**Crystal Radio DX Contest**' will generate interest in the design, construction and operation of crystal radios while giving entrants the opportunity to discuss and compare the design and operating capabilities of their radios. Using unpowered 'passive' receivers to detect stations hundreds of miles away is both an exciting and enjoyable pastime ... hopefully participants will also learn something new while having fun. Although '**contest**' is in the name, points earned are mainly to provide a method of gauging your overall system's performance against others in the same entry class. All participants are in fact winners!

In order to give participants plenty of time to build or to improve their crystal radio systems, the contest is scheduled for early January, 2022, and will hopefully coincide with favorable propagation!

In the interim time leading up to the contest, I encourage everyone to post their ideas, their plans for any new construction, their latest catches or to just ask questions ... let's get some good discussion going about anything related to Crystal Radio DXing and the contest!

Contest operating period:

Start: 6PM (1800 hrs) local time Saturday, January 1, 2022

End: 12PM (2400 hrs) local time Saturday, January 8, 2022.

RULES:

1. This operating event is open to anyone, anywhere.
2. Frequency range: **530 - 1710 kHz**
3. Only passive receptions may be logged. No electronic or power amplification is permitted in ANY part of the receiving system. The only exception is for those requiring the use of hearing aids due to hearing impairment.
4. Detector junctions as found in bipolar transistors, JFETs or MOSfets may be used in any configuration providing they are not used in a way that will amplify a detected signal.
5. A separate spotting-receiver may be used to seek out target signals, to confirm frequencies or to provide confirmation of a positive reception match of an intelligible signal heard by ear using the crystal radio. The use of a spotter radio is encouraged as a useful DXing technique but it may not be used in any way that might enhance actual performance of the crystal radio itself.

ENTRY CLASS:

Participants may enter either or both classes as long as class requirements are met.

OPEN CLASS: Anything goes regarding antennas, number of tuned circuits, wave traps, antenna tuners etc as long as the system is completely passive.

HOBBY CLASS: This category is for those wanting to use a simpler more basic tuner and as such, criteria are more restrictive. The receiver must be a '**single-tuned**' set. Only one capacitor-tuned (L-C) coil is permitted whether it be in the antenna or in the detector circuit. Separate untuned coils are permitted for coupling purposes between the antenna and detector but must not be of the variometer type. Antenna coils may be used along with taps as long as they are untuned or not of the variometer style.

The use of a single separate tuned circuit is permitted only for use as a coupled wavetrap or QRM 'rejector circuit' anywhere in the circuit. However, the wavetrap may not be used between stages as an 'acceptor circuit' to enhance the selectivity in a bandpass tuning manner.

A second crystal radio (either class) may be used but will require a separate entry.

SCORING:

Points for either entry class earn **points based on distance** of an identified (logged) station.

Each station **within 99 miles** earns **10 points**.

Each station **between 100 and 499 miles** earns **15 points**.

Each station **between 500 and 999 miles** earns **25 points**.

Each station **greater than 1000 miles** earns **50 points**.

Over and above the distance points, **bonus** points can also be earned:

Each new (unique) **U.S. state** or **Canadian province** heard earns **50 bonus points**. [*ex. 6 different (unique) states heard = 300 bonus pts*]

Each new (unique) 'radio-country' heard earns **100 bonus points**. [*ex. 4 (unique) radio-countries heard - Canada, USA, Mexico, Cuba = 400 bonus pts*] Note that Alaska and Hawaii will count as radio-countries and **not** as U.S. states.

After the first logging, any **new stations** heard on that same frequency earns **50 bonus points** per station.

[*ex. 3 stations logged on 1240kHz = 100 bonus points. The first station logged on 1240 cannot be claimed for bonus points*]

The final score is the **sum total of all station-distance points, all state-province bonus points, all radio country bonus points** plus **bonus points** earned for **multiple loggings on the same frequency**.

Distances may be quickly determined by the Google Maps distance measuring function. It is a simple 3-click process with instructions found via Google. **Measure the distance between your**

location and the dot marking the city of the transmitter's location. Use this distance to determine basic distance points earned for each station logged.

Logs must be **posted by January 15, 2022 to the Facebook Crystal Radio DX Contest Group** or can be e-mailed to a group moderator for posting.

Each log submitted must contain the following information in the order presented below:

ENTRY CLASS.

DATE of logging.

TIME of logging (local or UTC).

STATION FREQUENCY (kHz)

CALL LETTERS of station logged.

LOCATION of station logged [city, state/province]

DISTANCE in miles to city of station logged.

DISTANCE POINTS claimed for each station logged.

STATE or **PROVINCE** points claimed.

SAME FREQUENCY logging points claimed.

TOTAL POINTS CLAIMED.

Strongly encouraged but NOT required: A description of your contest experience and strategies, receiving system(s) used, antenna(s) used, schematic or picture(s) of your receiver(s) or station set-up.