

BRITISH COLUMBIA AMATEUR RADIO COORDINATION COUNCIL

BCARCC Radio Frequency Coordination Policies

COORDINATION REQUIRES COOPERATION!!

The effectiveness of the British Columbia Amateur Radio Coordination Council (BCARCC) depends upon the respect and cooperation of those it serves. The BCARCC is supported by its members. One of our functions is the coordination of Amateur Radio fixed-frequency station operations. Although our Amateur sub-bands are a finite resource, they can support a large amount of fixed-frequency activity if shared in a harmonious manner; abuse can destroy the resource for everyone. The BCARCC needs input from all users of the resource and will function most effectively when all users participate actively in BCARCC's decision-making process. The BCARCC is a democratic and cooperative association of Amateur Radio clubs and station licensees in British Columbia making coordination decisions for the benefit of all our community. All potential operators of fixed-frequency stations are encouraged to seek coordination through the BCARCC prior to operation.

Frequency Coordination Policies

Applicable to All VHF and UHF Bands

General

1. The BCARCC does not "grant" or "approve" coordination of fixed frequency Amateur stations but does register coordination. The final decision regarding operation of a fixed-frequency Amateur radio station lies with the federal government licensing authority, currently Innovation, Science and Economic Development Canada (ISED), and ultimately involves only the licensing authority and the licensee. However, the BCARCC exists as a voluntary coordinating body set up by and for Amateurs, whose purpose is to gather and make available information regarding current and proposed use of fixed frequencies for operations in the Amateur service in and adjacent to British Columbia. The BCARCC, through its appointed Coordinators, is able to provide advice and assistance regarding the selection of frequencies, sites, antennas and other technical details relative to establishing a fixed-frequency Amateur radio station in a manner which will avoid or minimize interference between Amateur operations.
2. BCARCC Coordinators are appointed by the directors of the Council on the basis of the Coordinators' knowledge and experience in spectrum utilization, including propagation of radio signals at VHF and higher frequencies, knowledge of the geography and terrain of the area for which they are responsible, and their ability to manage a complex database. That knowledge, experience and ability is made available for the benefit of all Amateurs. Amateurs wishing to operate fixed-frequency stations are encouraged to take advantage of the services of the Coordinator in their area before applying for a licence, both to minimize the potential for interference to existing operations and to provide a basis for avoiding future interference to their own operations.

3. Frequency coordination is a process through which the licensee of a radio station proposing to operate on a fixed frequency agrees to use a selected:
 - a. transmit and receive operating frequency;
 - b. location (geographical coordinates and ground elevation above mean sea level);
 - c. coverage pattern (antenna elevation above ground level, expected coverage area,
 - d. mode of operation (voice, packet, digital mode, etc.); and
 - e. access coding, if applicable such that the potential for interference between users of the coordinated radio station and users of other stations using the same or adjacent frequencies is minimized.
4. From time to time, the BCARCC will publish a list of stations which have already been coordinated, with their frequencies and general locations. Amateurs desiring new or changed coordination may request coordination of any frequency not on that list in their coverage area. Coordinators may help to select a frequency, if requested to do so and if they have time available. Coordination is granted by the Coordinator based strictly on technical merit. Neither the number of potential users, club affiliation or other factors are taken into consideration.
5. A successful frequency coordination will be evidenced by email confirmation.
6. Coordinations remain valid for five (5) years if all the conditions listed in paragraph 13. and described in the accepted Request for Coordination remain unchanged. Holders of a Coordination are encouraged to update their coordination within five years and to apply for a revised Coordination if any listed condition is changed, in a spirit of cooperation so the coordination data base can be kept up to date and accurate.
7. Coordination is based on the best data available to the Coordinator at the time a Coordination is issued. A Coordination is not a guarantee of a clear frequency. The licensee of a coordinated fixed-frequency station, like all other Amateurs, is responsible for avoiding interference and has a duty to cooperate with other users to mitigate interference if it occurs. YOUR BEST PROTECTION AGAINST UNINTENTIONAL INTERFERENCE IS ACCURATE INFORMATION IN THE COORDINATION DATABASE.
8. The boundaries for coordination activity of the BCARCC are the boundaries of the province of British Columbia. The BCARCC makes a best effort to communicate with Amateurs in Alberta and the north-western U.S.A., but cannot give any assurance regarding frequencies in use in those neighbouring areas at the time of coordination or in the future.

Request for Coordination

9. A request for coordination may be submitted to the BCARCC Coordinator by submitting the Request for Coordination form available on the BCARCC website, <http://www.bcarcc.org>.

10. For new repeater coordinations, frequencies are reserved by BCARCC once the initial coordination process is completed for up to 90 days. When BCARCC is advised that the repeater is on air, then the coordination will be published. If the 90-day period is exceeded, the frequencies are considered available to others and the coordination is rescinded.

Conditions Applicable to Coordination

11. The BCARCC will process requests for frequency coordination of fixed-frequency stations from individuals or from sponsoring organizations. However, the individual or licensee of the sponsoring organization must hold an Advanced Amateur operating certificate or approved equivalent and be appointed by the organization to be the coordination holder. The Coordination will be issued to the individual or the sponsoring organization.
12. All registered coordinations are for a specific:
 - a. Transmit and receive frequency.
 - b. Transmitter location (latitude, longitude, and ground elevation above mean sea level (AMSL)) (AMSL is shown on standard topographic maps).
 - c. Antenna elevation above ground.
 - d. Estimated effective radiated power (ERP);
 - e. Mode of operation.
 - f. Method of repeater access; and
 - g. Sponsoring organization and station licensee.
13. Only essential information, such as frequencies, location and access method will be published.
14. The BCARCC recommends that all new coordinations use continuous tone coded squelch systems (CTCSS, DPL, etc.) as a means of repeater access. However, the BCARCC recognizes that in many cases carrier-operated-squelch will not result in undesirable station or system operation or complaints of interference and does not intend to require CTCSS for coordination in the foreseeable future. It remains the responsibility of Amateur Radio licensees to avoid creating interference, and to take all reasonable steps to avoid being interfered with.
15. The BCARCC is not concerned with the ownership or control of transmitter or receiver sites.
16. It is the responsibility of the coordination holder to notify the BCARCC immediately when the coordinated frequency is activated (put into use), and to submit a revised request for coordination if any of the coordination conditions is changed subsequently.
17. FOR THE PROTECTION OF YOUR COORDINATION, YOU MUST KEEP US INFORMED. The licensee of a coordinated station (the coordination holder) is advised to keep the BCARCC

informed as to the status of the station and any associated system by having an up-to-date Request for Coordination on file with the BCARCC. A change of any of the parameters listed on the Coordination without prior coordination by the BCARCC may cause the Coordination to become invalid because of incorrect information in the coordination data base, which could lead to other stations being coordinated incorrectly. The BCARCC recommends that updated Request for Coordination forms be submitted about every 5 years. COORDINATION REQUIRES COOPERATION!!

18. Except in special circumstances, all correspondence from the BCARCC will be directed to the coordination holder. To facilitate this correspondence, the email address used must be that of the coordination holder.

Trial Period

19. Normally there will be a two-month "trial period" during which other users of the coordinated frequency who experience interference will advise the coordination holder and the BCARCC Coordinator, and those users and the coordination holder are expected to make best efforts to resolve the interference during that period, using common sense and in a spirit of good will. The BCARCC has no authority to resolve interference issues, but may offer mediation if requested by the parties involved. If substantial interference to a previously coordinated station or system occurs and cannot be resolved, the Coordination for the new station may be withdrawn (cancelled), on the principle of "first in has priority".
20. During the trial period the coordination holder may find it necessary or desirable to make changes to the conditions of the station from those under which the original coordination request was made (e.g., change location, antenna pattern, add filters, reduce transmitter power, etc.) These changes may be made without immediate reference to the BCARCC if they do not result in harmful interference. The coordination holder should keep a log of hours of operation (by date and time), of all complaints received, and of all changes, including the time and date when the changes were activated or cancelled. If changes are made, the coordination holder should protect the coordination by submitting a revised request form to the BCARCC Coordinator within a reasonable time (preferably within a month) after the end of the 2-month trial period.

Guidelines for Sharing Frequencies

21. The following general principles apply as guidelines for coordination:
 - a. fixed separation distance cannot be used as a criterion for re-use of co-channel or adjacent channel frequency assignments -- natural geographic barriers and terrain characteristics must be taken into account.
 - b. receiver coverage may be a significant factor in determining system coverage, but systems using multiple voting receiver sites, or using receiving antennas sited higher than the transmitting antenna need not be given extended coverage protection, unless the system fits within the definition of a "wide-coverage system" (to be defined);

- c. receiver coverage overlap will be based on the 50% probability of a mobile with omnidirectional ERP of 25 watts causing a response; i.e., producing a received signal greater than 0.5 microvolt at more than one repeater over a significant area;
 - d. repeaters operating with transmitter ERP greater than 100 watts may be requested to reduce output if required to provide reasonable coordination with other systems, either co-channel or adjacent channel; and
 - e. although repeater DX'ing by users may cause unintended interference to co-channel systems, such operation is not a matter for BCARCC action;
 - f. Where the coverage of two repeaters may overlap, both parties are strongly urged to use CTCSS or alternate forms of repeater access.
22. Where it appears that a proposed new coordination may result in interference between the new or modified station and an existing station or system, the Amateur requesting coordination should make a reasonable attempt to obtain, and submit with the request for coordination, letters of concurrence from current holders of Coordination Letters for the desired frequency. This requirement may be waived by the Coordinator if the Coordinator is convinced there will in fact be little or no interference. If harmful interference is likely and no letter of concurrence is submitted with the application, the Coordinator may recommend an alternative frequency or other parameter or decide the new request cannot be coordinated.

Conflicting Requests

23. Requests for coordination will be dealt with in the order of receipt of completed requests (i.e., the earliest complete request for coordination has precedence). However, conflicting requests received during any 24-hour period will be treated as though received simultaneously. The BCARCC does not accept responsibility for resolving conflicts between requests when a second or later request is received while an earlier application is pending.
24. Interference issues may be brought to the attention of the Coordinators, who will try to facilitate communication between the parties, and if appropriate, to resolve the issue. If the issue cannot be resolved at this stage, then the coordinators will pass the issue to the Interference Committee for resolution. If the Interference Committee cannot assist in resolving the issue, it may refer the issue to ISED, if appropriate.

If asked to mediate between parties in a case of mutually conflicting requests for coordination, factors raised by the Coordinator for consideration may include, but are not necessarily limited to:

- a. limiting the potential for interference with other Amateur operations;
- b. giving preference to serving a larger number of potential users, including proposed operation of an open rather than a closed system;
- c. avoiding duplication of coverage of an existing system in the same band, or providing new coverage for an area not presently covered;

- d. preferring diversification rather than concentration of coordination holders except where there is substantial benefit to the community from concentration;
- e. giving preference to applicants with a satisfactory record for resolution of previously reported problems; and
- f. recognizing any potential for enhancement of the hobby through use of advanced technology or operating features.

The Coordinator may suggest that greater weight be given to items in the order listed (e.g., more weight to avoiding duplication than to potential for enhancement of the hobby).

Transfer of Coordination

25. Coordination of an existing frequency can be transferred to another individual or organization provided:
- a. the party wishing to have the coordination transferred requests the BCARCC to register the transfer, and includes notification from the current coordination holder agreeing to the transfer;
 - b. there will be no changes to the operating parameters of the station, or that any changes requested receive prior coordination from the BCARCC. If the changes include a change of frequency or a change of station location which will cause a significant change of coverage area, the request for transfer will be treated as a new request for coordination, subject to any prior request for coordination in the same general coverage area.

Denial or Limitation of Coordination

26. The Coordinator may decide that the BCARCC should not register coordination as requested, or may recommend one or more of the following as a condition for coordination:
- a. use of a less congested band for operation;
 - b. limitation of antenna height;
 - c. limitation of antenna gain and ERP, generally or in specific directions;
 - d. use of a special access code or other limited means of access; and
 - e. such other technical requirements as deemed necessary to limit interference to existing users.

The Amateur requesting coordination is under no compulsion to accept any or all of the recommendations of the Coordinator. However, if the Amateur proceeds to operate contrary to the recommendations of the Coordinator, the BCARCC will record the existence of the station in its data base with the notation "Not Coordinated".

De-registration of Coordination

27. Under any of the following circumstances the BCARCC may elect to de-register the coordination of a fixed-frequency station, and/or to record the station as "Not Coordinated" in its data base:

- a. non-operation of the coordinated station or system for any period longer than 3 months unless the BCARCC has been advised in writing before the end of the 3-month period of the reasons for non-operation and the expected date (within 6 months of the original shutdown) when operation of the station or system is expected to resume;
- b. non-operation of the coordinated station or system for any period longer than 6 months;
- c. failure to provide notification to the BCARCC of any substantial change to any of the parameters set out in the Coordination Letter or of the operational status of the station or system within 3 months of such change;
- d. persistent refusal to cooperate with another holder of a Coordination or other licensed radio user over a period of 3 months, or refusal to take reasonably prompt steps to mutually resolve harmful interference; or,
- e. operation not in accordance with the Radiocommunications Act or General Radio Regulations, or cancellation by ISED of the station license or operator's certificate of the coordination holder.

28. Harmful interference, which endangers the functioning of a radio navigation service or of other safety service, or seriously degrades, obstructs or repeatedly interrupts a radio communication service (including Amateur Radio) operating in accordance with the General Radio Regulations. Hearing the output of another co-channel repeater or radio on the frequency of a repeater or system not in use is not harmful interference.

29. In the event of a perceived cause for de-registration of a coordination, the secretary of the BCARCC will notify the coordination holder of the perceived cause by email. If a satisfactory reply stating the action which will be taken to maintain coordination is not received within 2 months after the notification date, the coordination will be de-registered automatically, and the coordination holder will be notified, again by email.

Appeals

30. In the event that a coordination is de-registered, or a Coordinator denies a request for coordination or suggests technical or operational limitations as a condition of coordination, the Amateur requesting coordination or the coordination holder may appeal that action through an informal appeal procedure by sending a letter to the secretary of the BCARCC setting out the reasons why the Amateur believes coordination should be registered or maintained. The secretary will inform the directors and the policy committee of the contents of the letter. Within a reasonable time thereafter, the policy committee will consider the reasons for appeal and may confer with the Amateur and/or the Coordinator involved, after which the appeal will either be upheld and the request for coordination returned to the Coordinator for action, or refused and referred to the directors for confirmation or further review if appropriate. However, the BCARCC expects most disagreement to be resolved at the Coordinator or Policy Committee level without intervention by the directors.

Confidentiality of Information

31. The BCARCC recognizes and respects the right and the desire of many licensees of fixed-frequency Amateur stations to keep most of the information about the station confidential. For that reason, published data will be limited and the following information will not be made public unless the coordination holder agrees to having it published: location, including elevation, height, latitude and longitude. This information, however, may be passed to neighbouring coordination bodies to facilitate the coordination process.

The sponsor's personal information, other than the name and call, will not be published

The foregoing policy of confidentiality applies only to information obtained from requests for coordination. Information about non-coordinated stations obtained in any manner not related to a request for coordination may not be protected and may be made available to others in any manner deemed appropriate by BCARCC.