REPORT TO BCARCC AGM ON ISSUES OF INTERNET-LINKED STATIONS

The committee has held much dialog and also presented several papers at RAC2002 on this subject. RAC has not proceeded with any policy, and we have not fully formulated a strategy. This report outlines the progress to date.

1. Background

Coordination Councils in North America have historically not coordinated Simplex stations. Until recently, packet operators have done an excellent job of managing the digital Simplex spectrum, and the B.C. Amateur Radio Coordination Council has simply recorded and published current usage of Simplex and other Packet frequencies. FM voice simplex stations have also not been coordinated, although most of the Emergency Program (EP) groups in south-western B.C. now conduct regular nets on the 2 M simplex channels.

In the last three years, new internet-linked stations are appearing in the VHF and UHF amateur radio bands - some on regular repeater duplex channels, and others on simplex channels. The simplex internet-linked stations are appearing without coordination, and we believe it is important to establish guidelines for frequency use.

2. Current RAC Bandplans and existing Simplex users

The current RAC band-plans have no specific allocation for Internet-linked repeaters, and thus, such stations have been popping up on random VHF Simplex voice channels, causing complaints from other Simplex users, and particularly from Emergency Program (EP) groups in south-west B.C. Such EP groups, during their weekly emergency nets, are using most, if not all, of the available VHF Simplex voice channels, and are upset when an IRLP station competes with their net. VECTOR's Emergency Frequency List (www.qsl.net/ve7vct/tox.htm), prepared in April 2000 by Tom Cox VE7VCT, reveals this extensive use of the 2 M Simplex bands. To lessen this conflict, the Council is proposing that EP groups reduce the number of Simplex channels used for their emergency nets, and that Internet-linked stations be restricted to certain portions of the band.

3. Reduction in Digital Simplex allocations

With the decline in Packet operations, and the increasing number of Internet systems, we suggest the 2M band-plan be revised to create more space for Internet systems (which are a voice FM system). We have suggested to Packet groups that the 147 MHz digital Simplex band be made available to Internet systems.

4. Proposed changes to 2M Simplex Allocations

The RAC national 2 M Band Plan, as illustrated by the attached Bandplan "A", includes 24 digital Simplex channels in four groups, and 20 FM voice Simplex channels in two groups. The upper Simplex block (in 147 MHz) consists of six digital and six voice channels interleaved at a 15 kHz interval in the range 147.400 - 147.585 MHz.

If EP bodies confined their Simplex Net operations to the 14 channels in the 146 MHz FM Simplex block, then the 147 MHz Simplex band could be allocated to other Simplex voice, packet and IRLP operations, without conflict.

5. Proposal for Internet-linked Simplex Operations

We propose that:

(A)Internet-linked simplex stations be confined to the 147 simplex bands, as Internet-PRIMARY;

(B) Permanent stations, requiring coordination, start at the top of the band and work down, ie 147.585, 147.570 MHz, etc;

(C) Spectrum for Experimental stations be allocated as the first two channels in each of the present 147 MHz blocks ie 147.420, 147.435, 147.450 and 147.465 MHz. These channels are to be Shared-Non Protected (SNP), not requiring coordination, but low-power and CTCSS mandatory;

6. Operator's Qualifications for Internet-Linked simplex stations

We note that many of these stations are operated by BASIC qualified operators. Should such operators hold the ADVANCED OPERATOR certificate? We have requested that Industry Canada provide an opinion on this issue.

7. Reflector Mode

Some simplex internet-linked stations are being operated in the "reflector" mode in which multiple nodes are bridged in a party-line operation, the repeater remains active for many hours, with no control possible by area amateurs. Some have expressed concern that this is "broadcasting" and thus not legal. We have likewise requested that Industry Canada provide an opinion on this issue.

8. Summary

The recent and forecast popularity of Internet-linked stations indicates a need to review the use of simplex frequencies in the 146 and 147 MHz bands. The recommendation of this committee is that arrangements be made with the other users of these simplex frequencies, emergency groups and packet node operators, in order to develop sub-bands that more clearly reflect current traffic volumes.

This Committee recommends that:

(a) The 146 MHz simplex band be allocated to emergency and other voice traffic while the FM simplex frequencies in the 147 MHz band be made Internet-linked Primary.

(b) Packet operations confine their operations to the 144 and 145 MHz digital groups, and that the current 147 MHz digital band become Internet-linked Primary.

(c) Internet-linked simplex stations confine their operations to the 147 MHz simplex band, FM or digital; that permanent stations be coordinated and start at the top frequency and work down; that four channels be established for uncoordinated experimental stations (SNP), starting at the bottom of the 147 MHz simplex band.

(d) Upon a consensus being achieved by the AGM, that the Committee propose this plan for adoption by R.A.C and neighboring coordination councils.

(e) The Committee urges new users to install Internet-linked services in the 220 and 440 MHz bands to avoid the issues brought about by crowding in the 2 M band.

(f) the committee solicit an interpretation from Industry Canada regarding the legality of internet-linked simplex stations by BASIC-qualified operators, and of reflector-mode operation.

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