3.4 Computation of Distance and Azimuth

Where transmitting antenna sites have been established the distance and azimuth shall be determined using the coordinates of the transmitter sites. If a transmitter site has not been established the community's reference coordinates (the post office or if not existant, the coordinates of the centre of the city) shall be used. Refer to Annex III for the method of calculating distance and azimuth.

3.5 Directional Antennas

Directional antennas may be used by stations on limited allotments to render protection to other stations or by stations on unlimited allotments to provide better service. The radiation from a directional antenna must not exceed the notified radiation pattern value in any direction where protection is being provided. In all other directions, the radiation may not exceed the notified pattern value by more than 2 dB. Moreover, the ratio of maximum to minimum fields of a directional antenna shall not be greater than 20 dB except where terrain will present a reception problem due to signal reflections. Where beam tilt is used, the effective radiated power shall be that calculated using the maximum radiation from the antenna in the plane of maximum radiation. Use of a directional antenna on an unlimited allotment shall not change the location of the protected contour (as defined in Section 3.1.1), which remains based on operation with an omnidirectional antenna.

3.6 Circular or Elliptical Polarization

All TV stations shall normally use horizontally polarized antennas; however, circular or elliptical polarization may be employed. The maximum ERP in any plane of polarization shall not exceed the maximum permissible ERP.

4. TABLES AND FIGURES

4.1 Allotment Tables

Tables A and B of Annex VI contain all Canadian and U.S. allotments, respectively, on Channels 2 through 69 made to communities within 400 km of the common border.

4.2 Table I

Table I specifies the minimum separations and the maximum interfering F(50,10) field strength value permitted at the protected contour for VHF and UHF co-channel allotments and assignments, based on channel offset and non-offset operation.