

Exhibit B

Response to Form 312, Schedule B, Question E15

Re: 3.8 Meter Transportable Earth Station
Temporary - Fixed Earth Station
Ku-Band: 14000.0 – 14500.0 MHz

Dear Sirs:

The antenna pattern contained with this application, exceeds the CFR 25.209 sidelobe specification for the sidelobe envelope in the $\pm 1^\circ$ to 7.0° region by a maximum of 6.6 dB, at 14 GHz.

Below is a statement by the manufacturer concerning the compliance of the antenna in that portion of the sidelobe envelope between the $\pm 1^\circ$ to 7.0° region:

FCC Standard (25.209)

The FCC Standard employs a similar sidelobe envelope to the ITU-R S.580-6, including a section defined by $29-25\log(\theta)$ for angles between 1 and 7 degrees. From 7 degrees to 26.3 degrees, the FCC curve allows larger excursions; essentially 3 dB (up to the $32-25\log(\theta)$ curve). From 26.3 degrees. The FCC and ITU-580 curves are identical. Even though the FCC envelope is relaxed relative to the ITU-580 curve, the FCC criteria is more stringent, in that there are strict limitations on the magnitude of the peaks, as well as the percentages of peaks that are allowed above the curve. Beyond 7 degrees, the FCC standard allows 10% peak excursions, with peaks no more than 3 dB above the curve in the principle geostationary plane (eg: azimuth). There is also a recognition of reflector spillover energy in the FCC standards, and there is an allowance of 6 dB for energy in these areas (around 105 degrees for the 3.8m TLRCT). Furthermore, there is an allowance of up to 2 dB additional overage for "measurement tolerance".

Given the allowances for sidelobes beyond 7 degrees, there are no issues for the 3.8m TLRCT antenna in these regions. However, there is "no allowance" for sidelobes above the 29-curve between 1 and 7 degrees (in the AZ plane) and the 3.8m antenna has AZ pattern excursions up to 5 dB over the curve. Therefore, the TLRCT 3.8m antenna performance is **NOT COMPLIANT** with FCC 25.209.

As noted above by the manufacturer, the antenna is only non-compliant between 1° and 7° . The maximum RF power density normally licensed by the Federal Communications Commission for smaller diameter antennas, utilizing Ku-band digital traffic is -14.0 dBW/4 kHz. This license application is being filed by Telesat to operate with a RF transmit power density of -24.4 dBW/4 kHz.

ANTENNA STATEMENT (Continued)

A review of the antenna pattern envelopes from 1° to 7° for the Vertex/RSI 3.8 meter Ku-band antenna (included with Exhibit D) indicated that the antenna exceeds the CFR 25.209 sidelobe specifications by 6.6 dB at 14 GHz. A comparison of the FCC's maximum authorized RF transmit power density (-14.0 dBW/4 kHz), and the actual transmit power density of the proposed earth station (-24.4 dBW/4 kHz), indicates that the applied for transmit power density is 10.4 dB lower than the specified power restrictions. When the Vertex/RSI 3.8 meter antenna pattern envelopes are considered, the applied for transmit power density is still 3.8 dB, lower than the maximum RF power density normally licensed by the FCC. This reduced RF transmit power will result in acceptable performance for the antenna, with respect to adjacent satellite interference.

If the use of this antenna should cause interference into other systems, Telesat will terminate transmissions immediately upon notice from the FCC offended parties.