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November 28, 2001

Ms. Magalie Salas, Secretary
Federal Communications Commission
445 12th Street SW
Washington DC 20554

**Re: ET Docket No. 98-153 -- Revision of Part 15 of the Commission's Rules Regarding
Ultra-Wideband Transmission Systems
*Ex Parte Communication***

Dear Ms. Salas:

Pursuant to Section 1.1206(a)(2) of the Commission's Rules, on behalf of XtremeSpectrum, Inc., I am filing this letter electronically to report an oral ex parte communication in the above-referenced proceeding.*

Yesterday, Martin Rofheart of XtremeSpectrum, Inc., Michele Farquhar, Esq., of Hogan & Hartson, L.L.P., Veronica Haggart, Esq., and I met with Peter A. Tenhula of Chairman Powell's staff.

Our presentation reviewed the attached draft rule and explanation.

XtremeSpectrum is confident that our approach not only meets the concerns of both the Commission and NTIA, but also accommodates all ultra-wideband communications manufacturers (based on their public filings).

If there are questions about this submission, please call me at the number above.

Respectfully submitted,

Mitchell Lazarus
Counsel for XtremeSpectrum, Inc.

cc: Peter A. Tenhula

* XtremeSpectrum, with 67 employees, conducts research in ultra-wideband communications systems as its sole business. XtremeSpectrum intends to become a ultra-wideband communications manufacturer once the Commission authorizes certification of such systems. XtremeSpectrum takes no position on ultra-wideband radar applications.

15. ____ Protection of other services.

(a) An ultra-wideband communications device may not be mounted on an outdoor surface or support.

(b)(i) Under no circumstances may the emissions from an ultra-wideband communications device exceed these limits:

Frequency (MHz)	Field strength (microvolts/meter)	<i>[NOTE IN DRAFT]</i>
960-1574.92	125	<i>[Class B - 12 dB]</i>
1574.92-1575.92	45	<i>[Class B - 21 dB]</i>
1575.92-1990	125	<i>[Class B - 12 dB]</i>
above 1990	500	<i>[Class B]</i>

(ii) In the table above, the measurement distance is 3 meters. The tighter limit applies at band edges. Measurements shall be performed using a resolution bandwidth of 1 MHz.

(iii) In addition to the provisions of paragraph (b)(i), emissions limits in the band 1574.92-1575.92 MHz measured using a resolution bandwidth of 10 kHz shall not exceed 15 microvolts/meter measured at 3 meters. *[NOTE IN DRAFT: This represents a 10 dB additional attenuation for spectral lines.]*

(c) The provisions of this section apply to a battery-powered ultra-wideband device in communication with another battery-powered ultra-wideband device.

(i) The following emissions limits apply in lieu of those set out in section (b):

Frequency (MHz)	Field strength (microvolts/meter)	<i>[NOTE IN DRAFT]</i>
960-1610	10	<i>[Class B - 34 dB]</i>
1610-3100	80	<i>[Class B - 16 dB]</i>
3100-4200	160	<i>[Class B - 10 dB]</i>
above 4200	500	<i>[Class B]</i>

(ii) A battery-powered ultra-wideband device must be designed so that it cannot commence communicating with another battery-powered ultra-wideband device unless the user affirmatively initiates the transmission, as by pressing a button.

(iii) As an alternative to compliance with paragraphs (i) and (ii), a battery-powered ultra-wideband device can be made incapable of communicating with another battery-powered ultra-wideband device outdoors.

[NOTE IN DRAFT: The last provision allows "full power" peer-to-peer operation where the device can establish it is indoors -- e.g., by detecting a nearby AC-powered unit.]

XTREMESPECTRUM ULTRA-WIDEBAND PROPOSAL

Dual-Option Approach to Safeguard Outdoor Receivers

The Commission has proposed to protect outdoor receivers in part by limiting ultra-wideband operation to indoors. *XtremeSpectrum has no objection to indoor-only operation.* But the specific mechanism proposed to enforce it – detection of a nearby AC-powered ultra-wideband unit – would actually rule out most indoor operation.

Instead, Xtreme urges the Commission to **ban outdoor infrastructure for ultra-wideband**, and also give manufacturers the choice of complying with either option (1) or (2) below:

(1) peer-to-peer operation only indoors, enforced as above, at the NPRM emissions levels, OR

(2) peer-to-peer operation at greatly reduced emissions levels (see below), and only when affirmatively initiated by the user (*i.e.*, no automatic peer-to-peer operation).

For peer-to-peer operation under option (2), we suggest the following emissions limits that we understand NTIA has proposed for all ultra-wideband operation, including outdoors, which are considerably more stringent than the Commission's proposal:

960-1610 MHz	34 dB below Sec. 15.209(a) levels
1610-3100 MHz	16 dB below Sec. 15.209(a) levels
3100-4200 MHz	10 dB below Sec. 15.209(a) levels
Above 4200 MHz	Sec. 15.209(a) levels

(While the record does not justify limits tighter than Sec. 15.209(a) values in the 3100-4200 MHz band, Xtreme will accept this limit if necessary to resolve the peer-to-peer issue.)

Xtreme's proposal will protect all other spectrum users. Xtreme's proposal fully resolves all interference issues raised by parties that have documented their concerns, including those relating to Government systems.

Xtreme's proposal accommodates all ultra-wideband proponents. Xtreme advocates a solution that we believe will foster competition, technology neutrality, and a wide range of public safety and consumer applications, making room for all ultra-wideband manufacturers (based on public filings in the proceeding).

The proceeding need not set a technical precedent. The Commission may find it advisable to adopt emissions limits more conservative than are justified by the technical record, due to the special circumstances surrounding ultra-wideband. If so, the Commission should plainly state that the rules adopted intentionally err on the side of caution, and for that reason have no precedential value in future proceedings.