

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)
)
Revision of Part 15 of the Commission's) ET Docket 98-153
Rules Regarding Ultra-Wideband)
Transmissions Systems)

REPLY COMMENTS OF INTERLOGIX INC.

Interlogix Inc., through its attorneys, hereby submits these brief reply comments in the above-captioned proceeding.

Interlogix develops and manufactures Part 15 motion detectors for commercial and industrial markets. One of its products, marketed as a Range-Controlled Radar device ("RCR"), uses very high pulse rate emissions derived from an oscillator circuit tuned to the 5.8 GHz ISM band. This device complies with all Part 15 regulations and has been so certified by the Commission pursuant to Section 15.249 of the rules. Although the device transmits over 150 MHz of spectrum and uses very short pulsed emissions, it does not begin to fall within the proposed definition of Ultra Wide Band.¹ Further, as explained in our comments, the RCR's technical characteristics are not at all those of an UWB system.

In any effort to clarify that its existing Part 15 rules do not apply to UWB devices, the Commission proposed to amend Section 15.215(c) to state that "intentional radiators

¹ Under the Commission's proposal, a device whose fractional bandwidth is greater than 0.25 or occupies 1.5 GHz of spectrum is an UWB device. Even commenters concerned with the Commission's proposals did not suggest that an Interlogix-type device be considered Ultra Wide Band. Indeed, we note that in comments seeking to further classify UWB systems, no device using less than 200 MHz was considered even a "partial" UWB device. (See comments of Multispectral Solutions, Inc.)

operated under the provisions of Sections 15.227-15.255 or Subpart E of the current regulations must be designed to ensure that the main lobe or the necessary bandwidth, whichever is less, is contained within the frequency bands designated in those rule sections under which the equipment is operated.

As Interlogix noted in its comments in this proceeding, the Commission's existing rules for determining "necessary bandwidth" are not at all clear. And since the main lobe of an unmodulated pulsed emitter like the RCR will always be equal to or less than the necessary bandwidth, it is also not clear how one would go about measuring the main lobe of any given emission.

To resolve these concerns and to make certain that in its efforts to amend existing Part 15 rules so that they will not apply to UWB devices, the Commission does not inadvertently disadvantage existing Part 15 devices, Interlogix suggested that the Commission focus its concern on a device's fundamental spectral energy and adopt a 20 dB bandwidth requirement. In other words, if 20dB down from its peak, the signal is within its authorized band, the device will be considered compliant. This represents a straightforward, easily obtained measurement, and coupled with the application of pulse desensitivity correction factors, will satisfy the Commission's concerns that UWB devices not take advantage of existing Part 15 standards that permit higher power levels.

No comments were filed adverse to Interlogix's proposal. Interlogix urges the Commission to adopt its proposal to ensure that there will be no doubt that Interlogix and others will continue to comply with Part 15 emission limits.

Clearly, the Commission did not intend by its proposed amendment to change the playing field for existing Part 15 devices, but merely to distinguish these devices from UWB devices that will also be regulated under Part 15. The Commission must make certain that unintended consequences of any new UWB regulations do not limit or complicate the ability of non-UWB devices to continue to thrive in the Part 15 environment.

Respectfully submitted,

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