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

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Review of Part 15 and other Parts of the Commission's Rules	)	ET Docket 01-278
	)	RM-9375
	)	RM-10051

Comments of Interlogix, Inc.

Interlogix, Inc. ("Interlogix"), by its attorneys, hereby files these comments in the above-captioned proceeding. Interlogix is a leading manufacturer of wireless electronic security products regulated under Part 15 of the Commission's rules and will be directly affected by the outcome of this proceeding. Interlogix supports the Commission's proposal to amend Section 15.231(a) to remove the restriction against the transmission of data. In addition, Interlogix urges other modifications and clarifications to Section 15.231 as discussed herein. Further, Interlogix responds to another proposal in this proceeding, the notion of imposing RF emissions standards on receivers operating above 960 MHz.

Background

Interlogix is a global technology leader, supporting the needs of the rapidly growing electronic security industry. Through its Security and Lifesafety Group, Interlogix develops and manufactures intrusion and fire protection systems for home, commercial and industrial markets. Products include, motion detectors, control panels, cameras, keypads, vibration sensors, smoke and carbon monoxide detectors – the full range of equipment required to safeguard premises of all types.

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List A B C D E

Interlogix Supports Removing the Data Transmission Restriction.

The Commission's proposal to remove the restriction against the transmission of data under Section 15.231(a) is most welcome and long overdue. Under the present rules, although a device may transmit "recognition codes" along with permitted control signals, other information, including information that may relate to the proper functioning of the device itself or which may be useful to the operator of the device may not be transmitted. This situation has led to the imaginative use of "recognition codes," often at extra cost, in an attempt to improve the utility of radio control devices. Amending Section 15.231 to remove the restriction on data transmissions will go a long way towards clearing up confusion over the permissible use of recognition codes as well as permitting the use of devices made "smarter" by their ability to transmit needed and useful data.

The Commission Should Address the Duty Cycle for Periodic Transmissions

Interlogix recognizes the necessary constraint of the duty cycle – one second per hour - imposed on periodic transmissions pursuant to Section 15.231(a)(3), but suggests that because devices will have the capability of providing more useful data (assuming the data prohibition is eliminated), the Commission should consider taking two additional steps to improve the services that many devices could provide. First, the Commission should permit a total of one second of transmission time over the period of one hour and second, should permit an additional one second of transmission time during each one hour interval. As to the first concern, the Commission should be indifferent to whether a longer transmission occurs only once or shorter transmissions occur more frequently as long as the total transmission "on" time remains as dictated by the Commission. Permitting shorter, but more frequent transmissions will offer manufacturers greater flexibility in the design and operation of devices with potentially less of an interference threat to other spectrum users than continuously transmitting devices.

As to its second concern, Interlogix requests that the Commission provide more flexibility by permitting two seconds of total transmission time over the course of an hour. This extra time may be used to transmit more useful information related to security that may require periodic reporting, such as the time of entry/exit from a building, the identity of the person entering or leaving, the cumulative number of people entering or leaving, their destinations within a building, etc. Again, the Commission should permit the two seconds of polling information to be spread out over the course of the hour interval.

The Five Second Rule

Section 15.231(a)(1) states that a manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than five seconds of being released." Section 15.231(a)(2) states, "a transmitter activated automatically shall cease transmission within five seconds after activation." Under (a)(1), while there is theoretically no time limit on transmission, devices tend to be designed so that transmissions, once activated, terminate within five seconds. Under (a)(2) the transmission length has an absolute five second limit. These rules were designed many years ago when it was assumed that control transmissions would be continuous (CW) in nature. Moreover, the five second time limit was somewhat arbitrary to begin with. Whatever the time limit, however, Interlogix believes that the Commission should amend both rules to take into consideration the transmissions of pulsed devices which, because of their inherent duty cycles, actually permitted less transmission time than devices that transmit continuously.

For instance, under the rules, a device transmitting with a 50% duty cycle is required, in the case of a manually activated transmission, to employ a switch that deactivates the transmission within 5 seconds of being released, which means only 2.5 seconds of actual on time. In the case of automatic transmissions, the actual on time transmission for such device would be only 2.5 seconds. Interlogix requests that the Commission recognize the inequity imposed on pulsed transmitting devices and amend

Sections 15.231(a)(1) and (2) to require deactivation after 5 seconds of actual "on time" transmissions. The effect of such an amendment would be to permit pulsed devices the same "on time" transmissions as continuously transmitting devices with no greater potential risk of interference.

Data Transmissions During Installation or Maintenance

Although for many purposes, the limitation on automatic transmissions of control signals is sufficient in order to accomplish the "set-up" procedures required for many security systems, sophisticated systems often require longer transmissions to initialize and/or install. The elimination of the restriction on data transmissions would make it possible to engage in manual transmission for a sufficient length of time, but often the set-up data is sent remotely over telephone lines from a central location and it is not clear from the rules whether the initiation of such a process would be considered a manual transmission. An automatic transmission, however, must cease after five seconds. In the past, Interlogix has obtained informal staff agreement to allow "set-up" transmissions that are under the control of professional installers or company computers, which are usually one time occurrences, to exceed the 5 second deactivation period. Interlogix requests, therefore, that the Commission clarify that initial set-up transmissions or transmissions to recalibrate a system, which are under the control of a security company, may exceed the time limits imposed by the rules.

In addition, the Commission should interpret a "manual" transmission as a transmission manually originated whether the point of origination is on or off the site of the system receiving the information. The important factor should continue to be that a manual transmission be under manual control, regardless of where the "switch" controlling the transmission happens to be, and that the transmission cease within five seconds after this "switch" is released. Although the Commission may originally have envisioned some proximity between the controlling switch and the system receiving the information, the growing nexus of wireless and wired communications systems makes it possible to initiate a manual transmission off-site.

Radar Receiver Standards

The Commission has proposed to adopt unspecified standards regulating the emissions of police radar detectors. The proposal is unusual since it appears to be based only on an undisclosed number of allegations and reports from operators of Very Small Aperture Terminal (VSAT) devices who claim interference from swept frequency oscillators of certain radar detectors. Interlogix has no way of knowing the extent of whatever problem may exist. Apparently, the Commission has not tested specific radar detectors to determine their emission characteristics. Nevertheless, the Commission has concluded that, "because radar detectors are mobile and can emit strong signals, their use has a real impact on satellite operations in many locations."

Against this backdrop, it is puzzling that the Commission has taken the unusually aggressive step of moving directly to rulemaking. It is even more puzzling that the Commission has gone further and invited comment on whether it should adopt emissions standards for other receivers operating above 960 MHz.

Interlogix believes that there is simply no reason to investigate, much less regulate, the emissions of all receivers that operate above 960 MHz. If the Commission is persuaded that certain receivers – police radar detectors – warrant regulation, then the rules should be limited accordingly. But the Commission should not cast its net so wide that manufacturers of other receivers, even radar receivers, are subjected to increased and costly regulation.

Interlogix manufactures Range Controlled Radar (RCR) transceivers designed as integral parts of security and alarm systems. These devices use a single oscillator at 5.8 GHz, transmitting and receiving on the same frequency. The operating frequency of the Interlogix transceivers is far removed from the frequencies used by police radar detectors and the downlink frequencies of VSATs. Nor does the RCR oscillator sweep through different frequencies that might affect other receivers. These devices pose no threat to VSATs and there has never been a reported instance of interference from these devices to

any licensed or unlicensed service. Indeed RCRs operating in close proximity do not interfere with one another, let alone some distant receiver. Clearly, Interlogix's RCRs (and indeed similar devices manufactured by other companies) pose no interference threat to any other spectrum user and should not be tarred with the same broad brush that the Commission is using on police radar detectors.

In addition, the Commission should realize the devastating impact that might be caused should it continue to contemplate broad scale regulations of all radar receivers operating above 960 MHz (let alone all receivers of any type operating above this frequency). By the very nature of the single oscillator, single antenna design of an RCR transceiver, isolating the oscillator from the antenna is, of course, not possible. Receiver emissions standards might well make continued manufacturing of these devices impossible. Interlogix is concerned that in an attempt to address a very limited problem, the Commission may, unintentionally cause mischief to devices where no problem otherwise exists.

Harmonize the 433 MHz Band

Interlogix notes with interest the Commission's proposal to adopt a new Section 15.240 that would permit operation of RFID devices in the 425 to 435 MHz band with extended operating time (but with power levels identical to Section 15.231(a). As the Commission may be aware, however under International Telecommunications Union rules, the 433.05 – 434.79 MHz band is widely used throughout Europe and other Region 1 countries for radio control and short range data operations with a permitted power level of up to 10 milliwatts. Interlogix believes it would now be appropriate for the Commission to consider revising upward, the power level permitted in this band in order to better harmonize its regulations with those of the ITU. The considerable savings to manufacturers of producing one device for sale in both the U.S. and Europe would enhance their ability to better compete in world markets. Even a 10 dB increase over the permitted power levels in Section 15.231(a) for the 433.05 – 434.79 MHz bands would

go a long way toward harmonizing a band that has created endless difficulties for control and security alarm manufacturers on the world market.

Conclusion

Interlogix supports the Commission's proposal to remove its restriction on the transmission of data under Section 15.231. In addition, Interlogix believes that the Commission should take this opportunity to address polling restrictions that are couched in terms of absolute operating time by permitting the operation of devices with duty cycles to be measured by total on time transmission over a one hour interval, and permitting an additional one second of operation during such interval. These actions would provide manufacturers much greater flexibility in the design of their products and result, ultimately in devices that are more useful to the public. The Commission should also amend Sections 15.231(a)(1) and (2) to remove the inequity that prevents pulsed transmission systems from operating with "on time" as great as systems transmitting continuously. The rules should permit five total seconds of on time regardless of whether a transmission is pulsed or continuous.

Interlogix also requests the Commission to clarify that transmissions made during "set up" or initialization of a device are not bound by Section 15.231. These transmissions occur only when a system is installed (or in some instances needs to be re-programmed) and are under the control of a professional installer. The Commission should also take the opportunity to clarify what is meant by "manual" transmission. As long as a transmission is controlled manually, it should make no difference where it is originating.

By its proposal to impose emission standards to all receivers operating above 960 MHz, the Commission is threatening unnecessary regulation. Interlogix urges that if there is concern about interference from police radar detectors, the Commission should restrict its attention to those devices without imperiling the continued (and interference free) operation of other receivers.

Finally, in the context of the Commission's proposal to address the needs of RFID systems in the 425 to 435 MHz band, Interlogix urges the Commission to begin the process of harmonizing its regulations for the 433.05 – 434.79 MHz band with ITU regulations governing the use of that band for low power devices in Europe. Harmonization would allow U.S. manufacturers to compete on a more even footing by doing away with the necessity for two product lines, one for devices to be sold in the U.S. and the other for Europe.

Respectfully Submitted,

Interlogix Inc.

Terry G. Mahn
Robert J. Ungar

Fish & Richardson P.C.
601 13th Street, NW
Washington, DC 20005
202-783-5070

Its Attorneys

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