

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)
)
CellAntenna Corp. Request for Special)
Temporary Authority for Demonstration of) WT Docket No. 09-30
Equipment to Block Wireless Calls By Inmates)
at Pine Prairie Correctional Center)
)

**Petition to Deny of
CTIA-The Wireless Association®**

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TABLE OF CONTENTS

INTRODUCTION AND EXECUTIVE SUMMARY.....1

I. THE PROPOSED DEMONSTRATION IS PROHIBITED BY THE COMMUNICATIONS ACT.....3

II. THE PROPOSED DEMONSTRATION IS LIKELY TO CAUSE SUBSTANTIAL HARM TO LICENSED, LEGITIMATE USES OF WIRELESS TECHNOLOGY.....6

III. CELLANTENNA’S STA REQUEST SUFFERS FROM NUMEROUS ADDITIONAL FLAWS10

IV. THE COMMISSION SHOULD EXERCISE ITS ENFORCEMENT AUTHORITY TO INVESTIGATE AND REMEDY CELLANTENNA’S PAST OFFENSES AND PREVENT FUTURE ILLEGAL CONDUCT AND HARMFUL INTERFERENCE11

A. CellAntenna Has Operated its Jamming Equipment on at Least One Occasion, and Has Stated that it Plans to Operate it Again Imminently12

B. CellAntenna’s Actions Violated Sections 301 and 302(b) of the Communications Act and Section 2.803 of the Commission’s Rules.....17

V. CONCLUSION.....19

Attachment A

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Pursuant to 47 C.F.R. § 1.939, CTIA-The Wireless Association[®] (“CTIA”)¹ respectfully submits this Petition to Deny the request by CellAntenna Corp. (“CellAntenna”) for special temporary authority to conduct a demonstration of jamming equipment designed to intentionally block wireless telephone calls.² As explained below, the proposed demonstration violates the Communications Act of 1934, as amended (the “Act”), and CellAntenna’s request suffers from multiple flaws. In addition, pursuant to Section 1.41 of the FCC’s rules and Sections 4(i) and 403 of the Act, CTIA respectfully requests that the Federal Communications Commission (“FCC” or “Commission”) investigate and take appropriate enforcement action against CellAntenna for violating

¹ CTIA – The Wireless Association[®] is the international organization of the wireless communications industry for both wireless carriers and their suppliers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers, including 700 MHz, cellular, Advanced Wireless Service, broadband PCS, and ESMR, as well as suppliers of wireless data services and products.

² See Letter from Howard Melamed, CEO, CellAntenna, to Marlene H. Dortch, Secretary, FCC, dated March 3, 2009 (“STA Request”).

Sections 301, 302, and 333 of the Act.³ CTIA believes the Commission’s investigation will support a finding that CellAntenna knowingly and willingly has offered for sale and operated equipment that blocks wireless communications in a manner that violates Sections 301, 302, 333, and the Commission’s rules.

CTIA understands that the problem of the illicit possession and use of wireless devices by inmates in correctional facilities is a genuine and important issue, and is in favor of working toward a lawful solution. As referenced in a recent letter from the Association of Public-Safety Communications Officials-International, Inc., interference caused by CellAntenna’s illegal conduct, poses a serious threat to licensed wireless networks and critical communications, including the possibility of impairing public safety and consumer use of the network in emergency situations.⁴ A comprehensive approach that incorporates input from all stakeholders—including corrections officials, public safety officials, the FCC, wireless carriers, and equipment manufacturers—is the best way to prevent the use of contraband cell phones in prisons. CTIA has already met with numerous corrections officials and is currently in the process of scheduling additional discussions between corrections officials and the wireless industry. This goal of developing a well-considered solution to controlling prison contraband is undermined

³ 47 C.F.R. § 1.41; 47 U.S.C. §§ 154(i), 154 (j), and 403.

⁴ See, e.g., Letter from Chris Fischer, President, Association of Public-Safety Communications Officials-International, Inc. to Acting Chairman Michael Copps, dated Mar. 13, 2009 (“APCO is deeply concerned that the use of these [‘cell phone jamming’] devices will block 9-1-1 calls from wireless telephones, creating a serious threat to the safety of life and property.”); Device blocks students' cell phone use, KXAN.com, Mar. 9, 2009, available at http://www.kxan.com/dpp/news/education/device_blocks_students_cell_phone_use (last visited Mar. 11, 2009) (reporting incident of jammer installed in a school that disrupted the local sheriff’s radio used for ordinary police activity and swat team deployments); *Illegal Wireless Devices*, Andrew Seybold Perspective, Mar. 10, 2009, available at <http://www.andrewseybold.com/blog.asp?ID=244> (last visited Mar. 11, 2009) (same).

by permitting one stakeholder, CellAntenna, to engage in illegal conduct in its campaign to force a solution that primarily serves its own business interests and risks introducing uncontrolled jamming equipment into the stream of commerce.

I. THE PROPOSED DEMONSTRATION IS PROHIBITED BY THE COMMUNICATIONS ACT.

Most fundamentally, the proposed demonstration would violate 47 U.S.C. § 333, which the Commission lacks authority to waive through the grant of a request for special temporary authority. The Commission recently drew this conclusion when it denied the District of Columbia Department of Corrections’ request to demonstrate CellAntenna’s jamming equipment.⁵ Section 333 provides that “[n]o person shall willfully or maliciously interfere with or cause interference to any radio communications of any station licensed or authorized by or under this chapter or operated by the United States Government.”⁶ CellAntenna asserts that its equipment is designed to block wireless calls⁷ and that “CellAntenna respectfully requests the STA to conduct the demonstration....”⁸ Moreover, CellAntenna advertises “directional jamming equipment,” the very purpose of which, as claimed by the company’s website, is to “interfere with or cause interference to” the use of wireless telephones.⁹ Operation of the proposed technology thus violates the Communications Act on its face.

⁵ Letter from James D. Schlichting, Acting Chief, Wireless Telecommunications Bureau to Devon Brown, Director, District of Columbia Department of Corrections, DA 09-354 (dated Feb. 18, 2009).

⁶ *Id.*

⁷ STA Request at 1.

⁸ STA Request at 5.

⁹ See CJAM Prison Cellular Communication Denial Solution, *available at* http://www.cellantenna.com/CJAM/cjam_prison.htm (last visited Mar. 11, 2009) (describing CellAntenna’s technology as “a unique jamming technique that eliminates the

It is well-established that intentional interference with wireless telephones is prohibited by Section 333. As discussed above, the Bureau recently denied a request from the District of Columbia Department of Corrections seeking temporary authority to operate a jamming device. Further, a string of cease-and-desist notices from the Commission's Enforcement Bureau has applied the plain language of Section 333 to so hold – including two recently-issued citations in May 2008 for marketing of jammers.¹⁰ Moreover, the Wireless Telecommunications Bureau, the Enforcement Bureau, and the Office of Engineering and Technology have explicitly announced this prohibition in a joint public notice.¹¹

The Commission cannot ignore Section 333 of the Act or its extensive history of declaring wireless jamming technology illegal. Accordingly, the Commission cannot and should not grant CellAntenna special temporary authority for the proposed

ability for the cell phone to receive or continue with any calls. There is no size area limitation to our system, and no signal that we cannot jam”).

¹⁰ See, e.g., *Monty Henry*, DA 08-1202, 23 FCC Rcd 8293, 8294 (May 27, 2008) (“[t]he main purpose of cell phone, GPS and other wireless jammers is to block or interfere with radio communications. Such use is clearly prohibited by section 333 of the Act . . .”); *Victor McCormack*, DA 08-1193, 23 FCC Rcd 8264, 8265 (May 22, 2008) (“[t]he main purpose of cell phone and other wireless jammers is to block or interfere with radio communications. Such use is clearly prohibited by section 333 of the Act...”); *Mr. Jean Pierre de Melo*, 22 FCC Rcd 20957, 20958 (Dec. 6, 2007) (same); *Curtis King*, 22 FCC Rcd 19162, 19163 (Nov. 1, 2007) (same); *Shaker Hassan*, 20 FCC Rcd 10605, 10606-07 (June 9, 2005) (same).

¹¹ Public Notice, *Sale or Use of Transmitters Designed to Prevent, Jam or Interfere with Cell Phone Communications Is Prohibited in the United States*, No. DA-05-1776, 20 FCC Rcd.11134 (2005) (declaring that “the marketing, sale, or operation” of “transmitters designed to prevent, jam, or interfere with the operation of cellular and personal communications service (PCS) telephones” is “unlawful” because, *inter alia*, “[i]t is unlawful for any person to willfully or maliciously interference with radio communications of any station licensed or authorized under the Act or operated by the U.S. government (See Section 333 of the Communications Act, 47 U.S.C. § 333)”).

“demonstration.”¹² A grant of special temporary authority cannot conceivably waive a *statutory* prohibition like Section 333’s prohibition on interference with authorized, licensed radio communications. Such a grant can only serve to waive the Commission’s own regulatory requirements and only in a narrow set of circumstances. Section 333 plainly bars CellAntenna’s proposed “demonstration” and the Commission lacks any authority to grant a party a “special temporary” right to violate a Congressional command.¹³

CellAntenna’s attempt to style its STA Request as fitting within an exception for use of wireless jammers by *federal* government agencies¹⁴ also is misplaced and should be rejected.¹⁵ As noted above, it is CellAntenna, a private corporation, that is requesting the special temporary authority and holding the demonstration.¹⁶ Not only has no request been made by the Pine Prairie Correctional Center, the Pine Prairie Correctional Center is owned and operated by a private company, LCS Corrections Services, Inc.,¹⁷ and is not a federal prison operated by a federal government agency.¹⁸ The Federal Bureau of

¹² See STA Request at 1.

¹³ As the Bureaus’ Joint Public Notice makes clear, the use of wireless jamming technology violates not only Section 333; it also violates 47 U.S.C. § 302a(b), which states that “[n]o person shall . . . use devices . . . which fail to comply with regulations promulgated pursuant to this section” and 47 U.S.C. § 301, which states that “[n]o person shall use or operate any apparatus for the transmission of energy or communications or signals by radio . . . except under and in accordance with this chapter and with a license in that behalf granted under the provisions of this chapter.”

¹⁴ See 47 U.S.C. §§ 302(c), 902(b)(2)(A); 47 C.F.R. § 2.807(d). See *infra* note 21.

¹⁵ See STA Request at 3.

¹⁶ See, e.g., STA Request at 1, 5.

¹⁷ See STA Request at 3.

¹⁸ CTIA notes that Pine Prairie Correctional Center has not joined CellAntenna in its STA Request, nor has it stated that it is experiencing “a major security risk” within its

Prisons classifies the Pine Prairie facility as a “CI - Correctional Institution (a private facility)”¹⁹ with “[a]pproximately 15 percent of the [Federal Bureau of Prisons]’s inmate population [] confined in secure facilities *operated primarily by private corrections companies and to a lesser extent by state and local governments, and in privately-operated community corrections centers.*”²⁰ The mere presence of a minority of federal inmates at a private facility operated by a private company cannot – and in this case, does not – satisfy the limited exception for the federal government or its authorized agencies under Section 302(c) of the Act.²¹

II. THE PROPOSED DEMONSTRATION IS LIKELY TO CAUSE SUBSTANTIAL HARM TO LICENSED, LEGITIMATE USES OF WIRELESS TECHNOLOGY

Not only would grant of CellAntenna’s STA Request violate the Communications Act clear prohibition, the request should be denied because the requested “demonstration” will provide no meaningful information about the capability of the CellAntenna device to interfere with licensed radio communications. As noted above,

facility or is having difficulties controlling contraband cell phones to protect inmates, the public and public safety. *See* STA Request at 1.

¹⁹ Federal Bureau of Prisons, Common Bureau of Prisons Facility Abbreviations, available at <http://www.bop.gov/locations/abbreviations.jsp> (last accessed March 11, 2009).

²⁰ Federal Bureau of Prisons, CI Pine Prairie Contact Information, available at <http://www.bop.gov/DataSource/execute/dsFacilityAddressLoc?start=y&facilityCode=ppr> (emphasis added) (last accessed March 11, 2009).

²¹ Moreover, CellAntenna’s attempt to come within Section 302(c)’s limited exception for federal government agencies is misplaced. 47 U.S.C. § 302(c). Requests for authorization pursuant to this exception are administered by the National Telecommunications & Information Administration (“NTIA”). *See* 47 U.S.C. § 305(a); § 902(b)(2)(A); § 902(b)(2)(K); Exec. Order No. 12,046, 43 Fed. Reg. 13,349 (Mar. 27, 1978); U.S. Reorganization Plan Number 1 of 1977, 42 Fed. Reg. 56,101, 91 Stat. 1633 (July 15, 1977), as amended Pub. L. 97-195, § 1(c)(5), 96 Stat. 115 (June 16, 1982). No authorization from the NTIA has been sought or obtained for this request.

CellAntenna claims that “[t]here is no size area limitation to our system, and no signal that we cannot jam.”²² Although CellAntenna claims that its proposed demonstration would have no effect on authorized wireless communications outside the test area, CellAntenna offers little detailed information regarding how that is to be accomplished. What little information CellAntenna does provide is insufficient to yield any meaningful data that would help determine interference to wireless communications and networks. CellAntenna merely makes unsupported representations that the harmful interference it intends to transmit for its marketing trial will not interfere with communications outside of the demonstration area.²³ But reliance by the Bureau on such bald assertions to permit the authorization that CellAntenna has requested would be arbitrary and capricious.

CTIA’s concerns about interference with licensed, legitimate uses of wireless technology are not hypothetical. In a number of cases, the use of jammers in prisons and similar facilities has resulted in harmful interference to commercial wireless subscribers.

For example:

- In Brazil, jamming equipment deployed in a prison blocked cell service to 200,000 people who lived nearby.²⁴
- The Telecom Regulatory Authority of India directed the Central Prison in Parappana Agrahara (Bangalore) to cease use of cell phone jammers it had installed after investigating reports that the prison’s jammers disrupted the cell phone network in areas of the city. One senior police officer observed

²² See *supra* note 9.

²³ STA Request. CellAntenna also describes its intent to limit the test area by using “attenuating fabric that has the properties of 50 db of signal attenuation between 500 to 3000 MHz.” *Id.* at 4. CTIA has no objection to a demonstration of the use of this passive technology to isolate cells and other prison areas from licensed radio communications. Such a demonstration could be conducted with a fabric curtain and any service-initialized wireless phone, and would not require the use of CellAntenna’s jamming equipment.

²⁴ Torsten Ove, “Bars of Trouble: Cell Phones in Jail,” *Post-Gazette*, Oct. 10, 2008 available at <http://www.post-gazette.com/pg/08284/918854-85.stm> (last visited Mar. 11, 2009).

that the equipment jammed cell phone operations up to a radius of five kilometers.²⁵

- The Pakistan Telecommunication Authority (PTA) found that customs authorities had illegally installed frequency jammers in Karachi that had been found to cause interference to telecom users on GSM and other wireless phone systems.²⁶

These examples demonstrate the real harms to wireless carriers' businesses and their customers' communications needs when calls are blocked. Further, the use of wireless jammers can impair critical E911 calls and public safety communications.²⁷ Indeed, this was precisely the case in which a U.S. high school reportedly operated a wireless jamming device.²⁸ Reports indicated that the jammer also disrupted the local sheriff's radio used for ordinary police activity and swat team deployments.²⁹ A system designed to block commercial wireless calls would likely impact public safety

²⁵ Madhuprasad N, "Central prison forced to withdraw mobile jammers, Deacon Herald, May 13, 2006 *available at* <http://www.deccanherald.com/Archives/may132006/state1955422006512.asp> (last visited Mar. 11, 2009).

²⁶ "Pakistan PTA asks customs to remove jammers," Asia Media News Daily, May 29, 2008 *available at* <http://www.asiamedia.ucla.edu/article-southasia.asp?parentid=92997> (last visited Mar. 11, 2009).

²⁷ *See, e.g.*, Letter from Chris Fischer, President, Association of Public-Safety Communications Officials-International, Inc. to Acting Chairman Michael Copps, dated Mar. 13, 2009 ("APCO is deeply concerned that the use of these ['cell phone jamming'] devices will block 9-1-1 calls from wireless telephones, creating a serious threat to the safety of life and property" and noting the "potential that these 'cell phone jamming' devices could also interfere with public safety radio communications in adjacent frequency bands.")

²⁸ Device blocks students' cell phone use, KXAN.com, Mar. 9, 2009, *available at* http://www.kxan.com/dpp/news/education/device_blocks_students_cell_phone_use (last visited Mar. 11, 2009).

²⁹ *See* Illegal Wireless Devices, Andrew Seybold Perspective, Mar. 10, 2009, *available at* <http://www.andrewseybold.com/blog.asp?ID=244> (last visited Mar. 11, 2009) (reporting that "[t]he sheriff's quote went like this. 'While I understand the problems / issues of teenagers and cell phones, interference to emergency communications is not acceptable. As I was not aware of this situation, I will be checking with the FCC enforcement bureau next week for any updates or information.'").

communications deployed in the 700 MHz and 800 MHz bands, which are adjacent or near commercial wireless spectrum.³⁰ Moreover, the harmful interference may only be detected after the harm has occurred, *i.e.*, only when communications have been disrupted. Whether it is a blocked 9-1-1 call, a Public Safety call, or a call from one citizen to another, none should be prevented.³¹

To be clear, CTIA appreciates the serious security concerns raised by prisoners' illicit use of wireless phones. CTIA strongly urges state and local authorities to consider the myriad alternatives to unlawful cell phone jammers, such as radio scanner technology that can identify cell phones in a given area. When used by law enforcement, these sophisticated scanners are legal and could achieve the same important goal of preventing unauthorized use of cell phones by prisoners without risking interference to properly authorized channels. Indeed, CellAntenna offers such a legal alternative on its website.³² Moreover, a number of technology vendors, including Tecore Networks, EVI Technology, BINJ Laboratories, Triple Dragon Communications, Electronic Entities Group, Airpatrol and others offer similar legal solutions to assist state and local authorities. CTIA remains ready and willing to work with the Commission and state and local authorities to find lawful, effective answers to this contraband issue.

³⁰ See *supra* note 27.

³¹ See Declaration of Dr. Charles L. Jackson, ¶¶ 7-8, 10 (attached as Attachment A).

³² See CJAM™ Cell Phone Detector – CJCPD, *available* at <http://www.cellantenna.com/CJAM/CJCPD.htm> (last accessed Mar. 11, 2009).

III. CELLANTENNA'S STA REQUEST SUFFERS FROM NUMEROUS ADDITIONAL FLAWS

CellAntenna's STA request suffers from a number of other flaws, each of which requires that it be denied. First, CellAntenna has not fulfilled – or even cited – any of the Commission's regulations governing requests for special temporary authority.³³ Each of these regulations applies to specific requests for special temporary authority and each has clear requirements for filing a request. For example, 47 C.F.R. § 1.931(a) allows carriers to request to use new or modified equipment, but mandates that such requests “must be filed electronically using FCC Form 601 and must contain complete details about the proposed operation and the circumstances that fully justify and necessitate the grant of STA.” CellAntenna's letter fails to comply with any of these regulations.

Second, CellAntenna's wireless jamming device violates the rules governing intentional radiators. Such devices must be registered with the Commission³⁴ and are prohibited from causing “harmful interference.”³⁵ CTIA is unaware of any device manufactured by CellAntenna that has been registered with the Commission. And wireless jamming devices necessarily cause harmful interference, which is defined as, among other things, “[a]ny emission, radiation or induction that . . . seriously degrades,

³³ See, e.g., 47 C.F.R. § 1.931 (governing requests for special temporary authority for wireless telecommunications services and private wireless services); 47 C.F.R. § 73.1635 (governing requests for special temporary authority for radio broadcast services); 47 C.F.R. § 5.61 (governing requests for special temporary authority for experimental radio services).

³⁴ 47 C.F.R. § 15.201.

³⁵ 47 C.F.R. § 15.5(b).

obstructs or repeatedly interrupts a radiocommunications service operating in accordance with this chapter.”³⁶

Third, allowing CellAntenna to cause interference to licensed wireless operations would change the terms of CMRS licenses. Such license modification, however, cannot be undertaken in the manner requested by CellAntenna. Under Section 316 of the Communications Act, license holders must be given written notification of the proposed action and an opportunity to protest.³⁷ Such a course has not been followed here. Accordingly, CTIA urges the Bureau to deny CellAntenna’s flawed STA request.

IV. THE COMMISSION SHOULD EXERCISE ITS ENFORCEMENT AUTHORITY TO INVESTIGATE AND REMEDY CELLANTENNA’S PAST OFFENSES AND PREVENT FUTURE ILLEGAL CONDUCT AND HARMFUL INTERFERENCE

The Commission has ample authority under Sections 4(i), 4(j), and 403 of the Act to investigate CellAntenna for its violation of Sections 301, 302, and 333 of the Act and the Commission’s rules.³⁸ CellAntenna has knowingly and willingly operated wireless jamming devices in a manner that violates Sections 301, 302, 333, and the Commission’s rules. As described above, the interference caused by CellAntenna’s illegal conduct poses a serious threat to both commercial and adjacent public safety wireless networks,

³⁶ *Id.*

³⁷ 47 U.S.C. § 316.

³⁸ *See, e.g., Shenzhen Ruidian Communication Co. Ltd.*, Notice of Apparent Liability of Forfeiture, 20 FCC Rcd. 18976, 18978 (2005) (“Sections 4(i), 4(j), and 403 of the Act afford the Commission broad authority to investigate the entities it regulates. Section 4(i) authorizes the Commission to ‘issue such orders, not inconsistent with this Act, as may be necessary in the execution of its functions,’ and section 4(j) states that ‘the Commission may conduct its proceedings in such manner as will best conduce to the proper dispatch business and to the ends of justice.’ Section 403 likewise grants the Commission ‘full authority and power to institute and inquiry, on its own motion...relating to the enforcement of any of the provisions of this Act’.”).

including the possibility of impairing public safety and consumer use of the network in emergency situations. Accordingly, CTIA asks the Commission to investigate and use the full array of remedies at its disposal—including cease and desist orders and monetary forfeitures—to sanction CellAntenna’s past offenses and prevent future illegal conduct and harmful interference.

A. CellAntenna Has Operated its Jamming Equipment on at Least One Occasion, and Has Stated that it Plans to Operate it Again Imminently.

CellAntenna markets and sells a wide variety of cellular and wireless equipment both domestically and worldwide. CellAntenna’s “advocacy” has primarily consisted of an aggressive marketing campaign to conduct illegal “demonstrations” of its jamming devices at state, local and private correctional facilities across the country.³⁹ On information and belief, such a demonstration was conducted on November 21, 2008, at the Lieber Correctional Institution in South Carolina (“Lieber”).⁴⁰ A local news report described the demonstration:

Inside a building at Lieber Correctional Institution in Ridgeville, the jamming equipment was turned on. The people who had been invited to witness the demonstration then checked their cell phones and they were not working.⁴¹

³⁹ See, e.g., *Cell Jamming Company Plans Series of Demonstrations Across the U.S.*, 28 Communication Daily 228 (Nov. 25, 2008), available at http://www.cellantenna.com/CJAM/CA_communicationsDaily_11.25.08.pdf (last visited Mar. 11, 2009).

⁴⁰ See Press Release, *CellAntenna and South Carolina Department of Corrections Hold Successful “Cell Phone” Jamming Demonstration at Lieber Correctional Institution*, available at <http://www.1888pressrelease.com/cellantenna-and-south-carolina-department-of-corrections-hol-pr-86858.html> (last visited Mar. 11, 2009).

⁴¹ Robert Kittle, *SC Prison Cell Phone Jamming Demonstration Conducted*, News Channel 6 WJBF-TV (November 21, 2007), available at

Yet another press report recounted that the demonstration was witnessed by a number of officials, and that the jamming equipment was operated personally by CellAntenna's CEO, Howard Melamed:

[Director Jon] Ozmint and dozens of corrections officials, reporters and representatives from U.S. Sen. Jim DeMint's office watched as CellAntenna Corp. CEO Howard Melamed flipped a switch on a black, briefcase-sized device. When the equipment began to whir gently, it emitted a frequency that immediately shut down cell phones around the auditorium.⁴²

CellAntenna has proudly admitted to operating jamming equipment during the demonstration, and maintains a web page cataloguing the extensive media coverage of the incident.⁴³ CellAntenna concedes on its website that it knows the operation of jamming equipment is illegal.⁴⁴ Mr. Melamed himself even issued a statement, available on CellAntenna's website, admitting that the demonstration had been carried out and brazenly asserting that "[i]t is perfectly legal."⁴⁵ The Lieber demonstration was not an

http://www.wjbf.com/jbf/news/state_regional/article/cell_phone_jamming/8928/ (last visited Mar. 11, 2009).

⁴² Meg Kinnard, *Prison Hosts Cell Phone Jamming Demonstration*, Aiken Standard (Nov. 21, 2008), available at <http://www.aikenstandard.com/state/1122prisoncellphone> (last visited Mar. 11, 2009).

⁴³ CellAntenna, CJAM™ Cellular Jamming Technology NEWS, available at http://www.cellantenna.com/CJAM/cjam_prison_news.htm (last visited Mar. 11, 2009).

⁴⁴ See <http://www.cellantenna.com/CJAM/cjam.htm> (last visited Mar. 12, 2009) ("It is currently illegal for anyone but the federal government to use the technology."); CellAntenna Press Release, CellAntenna to Hold "Cell Phone" Jamming Demonstration at DC Training Academy on January 8th (acknowledging that "Currently the 1934 Communications Act prohibits local and state law enforcement from using jamming devices. CellAntenna has been leading a national legal challenge to give local and state law enforcement the power to jam such illegal activity.") available at <http://www.prurgent.com/2009-01-07/pressrelease27461.htm> (last visited Mar. 12, 2009).

⁴⁵ Howard Melamed, CEO CellAntenna Corporation, *Cellular Service Providers Have New Plan: Prison Time Minutes* (Jan. 8, 2009), available at

isolated instance of unintentional misconduct. Rather, it was one unlawful act by a company that continues to demonstrate its thorough dedication to market an illegal device through the repeated, willful, and intentional violation of the Communications Act and the Commission's regulations, in contravention of statements made to the FCC during its previous investigation of CellAntenna.

The Commission first investigated CellAntenna in 2005, in response to a complaint that the company had marketed, sold, or otherwise provided cell phone jamming equipment to non-federal government entities.⁴⁶ In response to the Letter of Investigation ("LOI"), CellAntenna averred that it "does not manufacture [cell phone jamming] [d]evices, or any other 'jammer' equipment, nor does it provide the [d]evices or any other such equipment to retailers or wholesalers, private individuals, or local or state governments."⁴⁷ Furthermore, stated the company, "[i]f CellAntenna receives any inquiry for the [d]evices from within the United States from sources other than the Federal Government, CellAntenna responds that in the United States the [d]evices are exclusively intended for distribution to *and use by* the Federal Government, and cannot be purchased by anyone else."⁴⁸ The company stressed that it "does not distribute the [d]evices to any local or state government in the United States."⁴⁹

http://www.cellantenna.com/CJAM/CA_PrisonTimes_1.8.09.pdf (last visited Mar. 11, 2009).

⁴⁶ Letter from Kathryn S. Berthot, Deputy Chief, Spectrum Enforcement Division, Enforcement Bureau to CellAntenna Corporation (Aug. 24, 2005) ("LOI").

⁴⁷ Letter from Ronald G. London, Counsel to CellAntenna, to Mr. Neal McNeil, Spectrum Enforcement Division, Enforcement Bureau (Sept. 13, 2005) ("LOI Response").

⁴⁸ *Id.* at 3-4 (emphasis added).

⁴⁹ *Id.* at 4.

Based on CellAntenna's representations, the Spectrum Enforcement Division decided "not . . . to take further action regarding these matters," and "closed th[e] investigation."⁵⁰ The letter also warned CellAntenna, however, that "[j]ust as you should not view the pendency of an investigation as a determination that a violation has occurred, you should also not construe the closing of the investigation as a determination that a violation did not occur."⁵¹ Thus, the letter concluded, "the Bureau may take future action if the public interest so requires." *Id.*

The public interest now so requires. Counter to what the company said in 2005, Mr. Melamed now publicly acknowledges that he not only has marketed, but actually has demonstrated, such technology. CellAntenna continues to market unauthorized jamming equipment to corrections officials across the country by attempting to conduct illegal "demonstrations" such as that conducted at Lieber and the one planned at Pine Prairie.⁵² The company's CEO, Mr. Melamed, has said publicly that use of the jamming equipment by prisons "is perfectly legal,"⁵³ and that "[i]t doesn't seem necessary to have a license

⁵⁰ Letter from Joseph Casey, Chief, Spectrum Enforcement Division, Enforcement Bureau, to Mr. Howard Melamed, CellAntenna Corporation (October 26, 2005) ("LOI Reply").

⁵¹ *Id.* at 2.

⁵² See, e.g., Mike Ward, *Test to Jam Prison Cell Phones Scuttled: Officials Say They Fear Demonstration Would Violate Federal Law*, Austin American-Statesman (Dec. 16, 2008), [available at http://www.statesman.com/news/content/news/stories/local/12/16/1216cellphones.html](http://www.statesman.com/news/content/news/stories/local/12/16/1216cellphones.html) (last visited Mar. 11, 2009) (discussing planned demonstration in Texas); *Cell Jamming Company Plans Series of Demonstrations Across the U.S.*, 28 Communication Daily 228 (Nov. 25, 2008), [available at http://www.cellantenna.com/CJAM/CA_communicationsDaily_11.25.08.pdf](http://www.cellantenna.com/CJAM/CA_communicationsDaily_11.25.08.pdf) (last visited Mar. 11, 2009) (discussing CellAntenna's plans for additional demonstrations).

⁵³ Howard Melamed, CEO CellAntenna Corporation, *Cellular Service Providers Have New Plan: Prison Time Minutes* (Jan. 8, 2009), [available at](#)

to do a demonstration.”⁵⁴ The company proclaims on its website, “WE DEMONSTRATE OUR PRODUCTS : CONTACT US FOR MORE DETAILS.”⁵⁵ News outlets have consistently reported that CellAntenna “plans to conduct more . . . demonstrations at prisons in Texas, Arkansas, and North Carolina *despite a federal prohibition on use of the technology by non-federal government entities.*”⁵⁶

The Commission should investigate and take action against CellAntenna because, as detailed *supra*, its jamming demonstrations violate the Communications Act, which prohibits the use of devices designed to interfere with or block wireless telephone calls. The equipment CellAntenna has operated and intends to operate in the future falls within this general prohibition, for its sole purpose is to enable willful interference with licensed wireless transmissions. As the Commission has explained, “[t]he main purpose of cell phone, GPS and other wireless jammers is to block or interfere with radio communications. Such use is clearly prohibited by section 333 of the Act.”⁵⁷ Moreover,

http://www.cellantenna.com/CJAM/CA_PrisonTimes_1.8.09.pdf (last visited Mar. 11, 2009).

⁵⁴ CellAntenna Press Release, *Cellphone Jamming Test Called Successful, Firm Plans to Petition FCC*, Telecommunications Reports International, Inc., by Paul Kirby (Nov 21, 2008), available at http://www.cellantenna.com/pressreleases/CA_TRtechnologystory_11.21.08.htm. (emphasis added) (last visited Mar. 11, 2009).

⁵⁵ CellAntenna, *CJAM Prison Cellular Communication Denial Solution*, available at http://www.cellantenna.com/CJAM/cjam_prison.htm (last visited Mar. 11, 2009).

⁵⁶ CellAntenna Press Release, *Cellphone Jamming Test Called Successful, Firm Plans to Petition FCC*, Telecommunications Reports International, Inc., by Paul Kirby (Nov 21, 2008), available at http://www.cellantenna.com/pressreleases/CA_TRtechnologystory_11.21.08.htm (emphasis added) (last visited Mar. 11, 2009).

⁵⁷ *Monty Henry*, 23 FCC Rcd. 8293, 8294 (May 27, 2008); *see also Victor McCormack*, 23 FCC Rcd. 8264, 8265 (May 22, 2008); *Mr. Jean Pierre de Melo*, 22 FCC Rcd. 20957, 20958 (Dec. 6, 2007); *Curtis King*, 22 FCC Rcd. 19162, 19163 (Nov. 1, 2007); *Shaker Hassan*, 20 FCC Rcd. 10605, 10606-07 (June 9, 2005).

the Commission's 2005 FCC Public Notice makes clear "that the marketing, sale, or operation of this type of equipment is unlawful."⁵⁸ The limited exception to Section 333 permitting the United States government to use wireless jamming equipment does not extend to state or local government entities such as Lieber or private facilities.⁵⁹

CTIA respectfully submits that the Commission should adhere to and enforce its consistently held interpretation of Section 333. This interpretation is well-grounded in the plain language of the statute, which flatly prohibits intentional interference of the sort created by CellAntenna's demonstration at Lieber.

B. CellAntenna's Actions Violated Sections 301 and 302(b) of the Communications Act and Section 2.803 of the Commission's Rules.

CellAntenna's prison demonstrations, including the one already conducted at Lieber and the one planned at Pine Prairie, are also unlawful because they necessitate use of CMRS spectrum without a license by devices ineligible for certification.⁶⁰ Section 302(b) provides that "[n]o person shall . . . use devices . . . which fail to comply with regulations promulgated pursuant to this section."⁶¹ The Commission has made clear that

⁵⁸ Public Notice, *Sale or Use of Transmitters Designed to Prevent, Jam or Interfere with Cell Phone Communications Is Prohibited in the United States*, 20 FCC Rcd. 11134 (2005) ("2005 FCC Public Notice").

⁵⁹ *E.g.*, *Monty Henry*, 23 FCC Rcd. at 8295 (explaining that the Act and Rules exempt "the federal government from the general prohibition" on wireless jammers, but "there is no similar exemption allowing the marketing or sale of unauthorized radio frequency devices to state and local law enforcement agencies"); *Ms. Murina C. Bollaro*, 23 FCC Rcd. 842, 843 (Jan. 28, 2008) ("While radio frequency devices intended for the federal government or agencies thereof are exempt from the Commission's rules, there is no similar exemption for sales to state and local law enforcement.") (footnotes omitted). *See also* supra note 21.

⁶⁰ *See* 47 U.S.C. §§ 301, 302(b); 1999 Joint Public Notice, 15 FCC Rcd. 6997 ("[T]he operation of transmitters designed to jam cellular communications is a violation of 47 U.S.C. 301, 302(b), and 333.").

⁶¹ 47 U.S.C. § 302(b).

jamming equipment cannot be sold, marketed, or used consistent with Section 302(b) because the Section 333 prohibition on intentional interference renders such equipment ineligible for certification.⁶²

Furthermore, CellAntenna has violated—and continues to violate—the Commission’s rule prohibiting the marketing of devices “that could not be authorized or legally operated.”⁶³ Because CellAntenna’s intentionally interfering equipment is not eligible for FCC certification, Section 2.803(g) of the Commission’s rules provides that: “[s]uch devices shall not be operated, advertised, displayed, offered for sale or lease, sold or leased, or otherwise marketed absent a license.”⁶⁴ CellAntenna continually violates this provision by marketing its jamming devices through demonstrations – proposed and completed – to state and local corrections officials around the country. These marketing efforts advance CellAntenna’s parochial interest in increasing the availability of its jamming equipment in the stream of commerce, with no regard for the potential for interference with the legitimate communications of public safety and the general public.

The Lieber jamming demonstration also violated Section 301, which provides that “[n]o person shall use or operate any apparatus for the transmission of energy or communications or signals by radio . . . except under and in accordance with this chapter *and* with a license in that behalf granted under the provisions of this chapter.”⁶⁵ For the

⁶² *E.g., Ms. Murina C. Bollaro*, 23 FCC Rcd. at 843 (“Garden State has violated Section 302(b) of the Communications Act . . . by marketing in the United States radio frequency devices that are not eligible for certification.”); *Monty Henry*, 23 FCC Rcd. at 8294 (“[A] device such as a jammer which intentionally interferes with radio communications is not eligible for certification.”).

⁶³ *See* 47 C.F.R. § 2.803(g); *Monty Henry*, 23 FCC Rcd. at 8294.

⁶⁴ *Id.*

⁶⁵ 47 U.S.C. § 301 (emphasis added).

reason set forth above, *i.e.* Section 333, wireless jamming equipment is not an “apparatus” susceptible of lawful operation “under and in accordance with this chapter.”⁶⁶ Moreover, the Lieber demonstration entailed “transmission of energy . . . or signals by radio” on frequencies that CellAntenna is not licensed to use.⁶⁷ Only wireless carriers hold “license[s] . . . granted under the provisions of this chapter,” and may therefore operate on the radiofrequencies impacted by the Lieber demonstration.⁶⁸

CTIA respectfully requests that the Commission investigate and, upon a finding of violation, take appropriate remedial action against CellAntenna—including cease and desist orders and monetary forfeitures—as it determines necessary to enforce compliance with Sections 301, 302(b), or 333 of the Communications Act and Section 2.803 of the Commission’s rules.

V. CONCLUSION

For the foregoing reasons, CTIA respectfully requests that the Wireless Telecommunications Bureau deny CellAntenna’s STA Request and investigate CellAntenna for violating Sections 301, 302, and 333 of the Act. CTIA recommends appropriate enforcement action upon conclusion of the investigation and a finding that

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

CellAntenna knowingly and willingly operates devices and/or equipment that blocks wireless communications in a manner that violates the Act and the Commission's rules.

Respectfully submitted,

By: /s/ Brian M. Josef

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Dated: March 13, 2009

Its Attorneys

CERTIFICATE OF SERVICE

I, Liz Dale, hereby certify that a copy of the foregoing "Petition to Deny" was sent on March 13, 2009, by first-class U.S. mail to:

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/s/ Liz Dale
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ATTACHMENT A

Technological Considerations Regarding Jamming
Wireless Telephone Service

Dr. Charles L. Jackson

6 January 2009

1. My name is Charles L. Jackson. My address is 8370 Woody Road, Port Tobacco, Maryland 20677. I am electrical engineer who has worked extensively in telecommunications and wireless. I have been both a digital designer and a system programmer. I work a consultant and as an adjunct professor at George Washington University, where I have taught graduate and undergraduate courses on mobile communications, wireless networks, computer security, C programming, and the Internet. I have consulted on spectrum and telecommunications policy issues for several governments including New Zealand, Panama, Jamaica, United Kingdom, Germany, Latvia, and the United States. I have also consulted for major corporations and industry associations on those issues. I served three terms on the FCC's Technological Advisory Council. I previously worked at both the FCC and the House Commerce Committee. I hold two U.S. patents and I received my PhD in Electrical Engineering from MIT. A longer professional biography is available at www.jacksons.net.
2. The purpose of this declaration is to describe the basic technology of jamming, identify some of the possible harmful, unintended consequences of jamming, and to note some of the alternative technological approaches to the use of unauthorized wireless telephones in correctional facilities.

Jamming

3. The term *jamming* refers to the transmission of radio signals that interfere with the reception of radio signals by other parties. For example, during the Cold War the Soviet Union often jammed the reception of Radio Free Europe by the residents of the Warsaw Pact nations. Similarly, Cuba has jammed the signal of TV Marti.¹
4. Jamming dates back to the early days of radio. By the end of World War II, jamming had been extensively analyzed and was a subtopic in radio engineering. Originally, jamming technology was developed by the military and knowledge was restricted.

¹ See <http://ibb7-2.ibb.gov/pubaff/ocbfact.html>.

However, today much information about jamming has become publically available. There are engineering handbooks and texts on the subject.²

5. The basic concept of jamming is simple—transmit a signal on the same channel as the desired signal. The jamming signal must either be strong enough to drown out the desired signal or designed to that it can cause the receiver to fail to work properly and thus be unable to pick up the desired signal.
6. Jamming commercial wireless services is relatively simple because, unlike military systems, commercial systems are not explicitly designed to withstand jamming.

Unintended Consequences

7. Jamming a commercial wireless system can have multiple unintended consequences. A jamming system deployed to silence wireless handsets in a movie theater may also block a wireless telemetry system in use by an ambulance outside the theater or may cause dropped calls for people walking or driving by the theater.
8. A system designed to jam commercial wireless calls inside a prison may also jam important public safety communications nearby. The 800 MHz public safety band is adjacent to the cellular band and the 700 MHz public safety band is near the commercial 700 MHz bands. The as-yet-unlicensed 700 MHz D-block frequencies are intended for shared use by commercial and public safety entities. It is quite conceivable that a system designed to jam commercial wireless signals within a correctional facility would not jam the wireless communications of the facility but would jam wireless communications used by fire departments or other public safety agencies—a fact that might not be discovered until a fire or other incident required those agencies to operate at or near the prison.

² See *Modern Communications Jamming Principles and Techniques*, Poisel Richard, Artech House, 2003.

Alternative Approaches

9. From a technological point of view there are alternative approaches to dealing with the use of wireless phones by prisoners that appear to offer advantages over jamming. One is the use of signal tracking gear that permits tracking down the source of wireless signals and identifying the prisoners using those radios. A second alternative approach is to combine searching for presence of errant or rogue wireless signals inside the facility with the use of lawful interception techniques to discover the contents of the conversations on those signals. Intercepted conversations would provide information regarding planned escapes, contraband shipments, corrupt correctional officials and other weaknesses and concerns.

Conclusions

10. Jamming can easily have significant external effects—damaging commercial wireless service or public safety radio communications in the geographic region near the jamming device. The extent of such external effects depends on multiple factors—the power of jamming signal, the location of the jamming device, the location of nearby wireless base stations, the wireless technologies used and many other factors.



Charles L. Jackson
6 January 2009