

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of

SafeView, Inc., Request for Waiver
of Sections 15.31 and 15.35 of the
Commission's Rules to Permit the
Deployment of Security Screening Portal
Devices that Operate in the 24.25-30 GHz
Range

ET Docket No. 04-373

OPPOSITION TO PETITION FOR RECONSIDERATION

September 15, 2006

Mitchell Lazarus
FLETCHER, HEALD & HILDRETH, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209
703-812-0440
Counsel for L3 Communications SafeView, Inc.

TABLE OF CONTENTS

A. Introduction 2

 1. *The SafeScout security device* 2

 2. *Waiver* 3

 3. *Petition for reconsideration* 3

B. Petitioner Does not Show Any Harm from the Waiver 4

C. Special Interference Testing is Unnecessary 5

D. SafeView Need Not Rule Out All Alternatives. 6

E. SafeView Need Not Make Its Locations Public 8

F. Petitioner's Requests for Interference Correction Are Unrealistic. 9

CONCLUSION 10

Technical Certification

Certificate of Service

Before the
Federal Communications Commission
Washington DC 20554

In the Matter of

SafeView, Inc., Request for Waiver
of Sections 15.31 and 15.35 of the
Commission's Rules to Permit the
Deployment of Security Screening Portal
Devices that Operate in the 24.25-30 GHz
Range

ET Docket No. 04-373

OPPOSITION TO PETITION FOR RECONSIDERATION

L3 Communications SafeView, Inc. ("SafeView"), a division of L3 Communications Corporation, opposes the Petition for Reconsideration filed in this docket by FiberTower Corporation on September 5, 2006.

Petitioner. FiberTower seeks reconsideration of a waiver granted to SafeView on August 4, 2006.¹ FiberTower has not previously been a party to this proceeding. Effective August 30, 2006, however, FiberTower merged with First Avenue Networks, Inc., which had opposed the waiver. The newly combined entity took the FiberTower name.²

¹ *SafeView, Inc., Request for Waiver of Sections 15.31 and 15.35 of the Commission's Rules*, ET Docket No. 04-373, Order, DA 06-1589 (released Aug. 4, 2006) (Order).

² Counsel for SafeView also represents FiberTower before the Commission on matters unrelated to SafeView's interests. The recent merger between FiberTower and First Avenue thus resulted in this firm having clients on both sides of the proceeding. Both SafeView and FiberTower have consented to our continued representation of SafeView in this matter.

A. Introduction

1. The SafeScout security device

SafeView manufactures a "SafeScout" screening device that reliably detects weapons or contraband on an individual's person, including both metallic items and non-metallic objects, liquids, and gels, even if hidden under clothing. The device can greatly improve security at airports, stadiums, government buildings, prisons, and the like. Its efficacy and the public interest in its use are not in dispute.

The device operates by briefly illuminating the subject with near-millimeter radio waves at very low levels and measuring the reflections. The device contains two vertical masts about 1.5 meters apart, each carrying 192 transmit antenna elements arranged vertically. While the masts rotate around the subject over a 2 second interval, each antenna element in turn sweeps quickly from 24.25 through 30 GHz, taking 6 microseconds per sweep.

SafeView required a waiver of two rules in order to certify the device under Section 15.209. The rules require that average power of a swept-frequency device be measured with the sweep stopped;³ SafeView requested a waiver to measure average power with the sweep running.⁴ And, where peak power is ordinarily limited to 20 dB above average power,⁵ SafeView requested a waiver to allow an increase in peak power of 21 dB.

³ 47 C.F.R. Sec. 15.31(c).

⁴ In order to avoid the practical difficulties of measuring a fast sweep, SafeView originally proposed to measure peak emissions, to compute the device's duty cycle in a 1 MHz measurement bandwidth, and to find the average emissions as the product of those two values. Letter from Mitchell Lazarus to Marlene H. Dortch, Secretary, FCC (filed March 11, 2005). The Commission instead required SafeView to measure emissions with the sweep running. Order at para. 29(8)(a). SafeView has since taken those measurements successfully.

⁵ 47 C.F.R. Sec. 15.35(b).

2. *Waiver*

The Commission's August 4 Order granted both requests.⁶ The Order also limits the number of devices to be installed under the waiver; restricts installations to indoors; requires a record of type and location of installations; and obligates SafeView to impose the same waiver conditions on resale customers.⁷

3. *Petition for reconsideration*

Petitioner's subsidiary holds licenses in the 24 GHz band, which is within the SafeScout sweep range. Petitioner seeks the following new requirements:

- that SafeView conduct special testing, in collaboration with Petitioner and under its specifications, to satisfy Petitioner that there will be no risk of interference to licensed users;⁸
- that SafeView demonstrate the impossibility of using other frequency bands or of shielding its devices;⁹
- that SafeView establish a publicly accessible database of all sites under the waiver, giving thirty days advance public notice of new installations;¹⁰
- that a subsequent purchaser give the public thirty days advance notice before it sells or moves a waived device;¹¹
- that SafeView designate a point of contact for reports of suspected interference, respond to a report within two hours, report back on a

⁶ Order at paras. 29(8)(a), (b).

⁷ Order at paras. 29(3)-(6).

⁸ Petition at 5-7.

⁹ Petition at 7-8.

¹⁰ Petition at 9.

¹¹ Petition at 9.

proposed resolution within four hours, and effect the resolution within 24 hours, or else terminate operations;¹² and

- that any 24 GHz licensee be empowered to shut down a SafeScout device at an "open location" until the device is shielded.¹³

We take these points up individually, and show that each is unnecessary, inappropriate, or both.

B. Petitioner Does not Show Any Harm from the Waiver.

At the outset, we note a fatal deficiency in the Petition.

The user of a compliant Section 15.209 device -- *i.e.*, one not requiring a waiver -- is not subject to either the special waiver conditions listed in Part A(2), above, or the additional conditions that Petitioner requests.¹⁴

The Petition therefore presupposes that a waived device must create such a gravely increased threat of interference, compared to a compliant device, as to warrant multiple and extraordinary interference protection measures. In fact, however, a waived SafeScout device differs from ordinary Section 15.209 equipment in only two relatively unimportant respects: it shows compliance with the average emissions limit with the sweep running, rather than stopped, and it exhibits somewhat higher peak emissions. *Petitioner has not presented evidence that either of these characteristics renders a SafeScout device significantly more interfering than a compliant device.* In other words, Petitioner has not demonstrated that the waiver threatens any harm. Absent a persuasive showing of harm, there is no justification for the measures proposed.

¹² Petition at 9-10.

¹³ Petition at 10.

¹⁴ The Part 15 user must nonetheless protect licensees from harmful interference. 47 C.F.R. Sec. 15.5.

SafeView, on the other hand, has argued throughout the proceeding that the waiver does not significantly raise the interference threat. The terms of the waiver leave unchanged the maximum allowable average emissions, which is the property most likely to correlate with harmful interference. That level is extremely low, the equivalent of 75 nanowatts.¹⁵ The only effect of the waiver on average emissions is to allow a measurement method that better reflects the device's actual interference potential.¹⁶

The waived device thus should be no more likely to cause harmful interference than a compliant device. Taking into account the waiver limits on numbers installed and the restriction to indoor operation, the SafeScout device should be far safer, overall, than a compliant Section 15.209 device used in large numbers at uncontrolled locations. Petitioner offers nothing to suggest otherwise.

C. Special Interference Testing is Unnecessary.

Petitioner says that a Part 15 user must "fully demonstrate, with appropriate testing procedures, that there will be no harmful interference to licensed operations."¹⁷ That is not a correct statement of the law. To be sure, every Part 15 device must be tested for compliance

¹⁵ See 47 C.F.R. Sec. 15.209(a). The field strength specified in the rule is the mathematical equivalent of 75 nW.

¹⁶ Measurements in compliance with Section 15.31(c), with the sweep stopped, greatly overstate the interference potential. Measurement with the sweep stopped is equivalent to a peak measurement, while interference risk is more closely associated with average emissions. Average emissions in the SafeScout device are lower than peak emissions by 41 dB, or a factor of 12,600. Compliance with Section 15.31(c) thus exaggerates the interference potential by the same amount. The waiver corrects this overstatement.

¹⁷ Petition at 5.

with applicable rules and waiver conditions. Nowhere, however, do the rules require testing for non-interference into specific receivers.

Petitioner cites three cases in which it claims such testing was required.¹⁸ The first two concern ultra-wideband devices. That technology raised special concerns because (1) it emits simultaneously over a large swath of spectrum, in some cases radiating directly into GPS, aeronautical, and other safety-critical bands; and (2) the devices were to be marketed by the millions to consumers for use at uncontrolled locations. Neither of these considerations applies here. Far from being typical, the ultra-wideband proceeding was unique in its accumulation of detailed test results. The third example Petitioner cites, a waiver order, mentions in passing that the proponent submitted test data, but the Commission did not rely on that data, or even describe it.¹⁹ Certainly the data was not a prerequisite to the waiver.

In short, Petitioner cannot support its assertion that interference testing is the norm, and presents nothing that would justify requiring it here.

D. SafeView Need Not Rule Out All Alternatives.

Petitioner asserts that SafeView must demonstrate a lack of reasonable alternatives to operation at 24.25-30 GHz in an unshielded enclosure. It cites two cases.²⁰

Petitioner is confusing two principles, one correct and the other not. To qualify for a waiver, SafeView must indeed show, among other things, that it cannot accomplish its purposes

¹⁸ Petition at 5 n.8, 6 n.10.

¹⁹ *Remington Arms Company, Inc.*, 20 FCC Rcd 18724 at para. 8 (2005).

²⁰ Petition at 7 & n.12.

in compliance with the rules, thus making a waiver necessary.²¹ Petitioner's two cases support this point, and SafeView met the burden in its original Request for Waiver.²² Petitioner infers a second principle, however, supposedly requiring that SafeView show it has no alternative to the particular details of its operation -- specifically, its choice of frequencies and construction materials. That idea has no basis or precedent.

SafeView chose its frequency range on several criteria. These include avoidance of safety-critical bands, image resolution, cost, equipment size, and ease of maintenance, among others. SafeView showed that any risk of interference at its frequencies is exceedingly low, and accepts the obligation to correct any harmful interference that does occur. That is all that Commission rules and policy demand. There is no legal requirement that SafeView move to a different band of Petitioner's choosing.

Petitioner also faults SafeView for not putting conductive coating on the transparent surfaces of its device as a means of shielding.²³ SafeView previously explained that reflective shielding would produce levels of coherent reflections and multi-path energy that degrade the device's ability to detect objects.²⁴ Again, the rules say SafeView must not cause interference, but do not require it to redesign its equipment to Petitioner's specifications.

²¹ *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

²² Request for Waiver of SafeView, Inc., ET Docket No. 04-373 at 9-11 (filed Aug. 18, 2004).

²³ Petition at 8.

²⁴ Letter from Mitchell Lazarus to Marlene H. Dortch, Secretary, FCC at 8-9 (filed Jan. 28, 2005).

E. SafeView Need Not Make Its Locations Public.

SafeView proposed, and the Commission required, that SafeView maintain a database of device locations and disclose that information to the Commission or NTIA on request.²⁵

Petitioner wants SafeView to make the database public, to give thirty days prior notice of a new installation, and to require that subsequent purchasers give thirty days public notice prior to reselling or moving a unit.²⁶

SafeView's security customers would likely object to public disclosure of their installations.

In any event, if a SafeScout device were ever to cause interference, the victim would have no trouble locating the source. SafeScout units must be installed indoors,²⁷ and building attenuation at these frequencies is high.²⁸ As a result, interference could realistically occur only if the SafeScout device and the 24 GHz receiver were located in the same room -- such as the same airport terminal -- and the SafeScout equipment were situated in or near the boresight of the 24 GHz antenna. A SafeScout unit is a large and conspicuous object. A glance along the antenna axis will locate it reliably every time, with no need for a database. If there is no SafeScout device in plain sight of the 24 GHz antenna, it is very likely that something else is causing the interference.

²⁵ Order at para. 29(5).

²⁶ Petition at 9.

²⁷ Order at para. 29(4).

²⁸ See Order at para. 19.

F. Petitioner's Requests for Interference Correction Are Unrealistic.

Petitioner wants the Commission to require that SafeView designate a point of contact to which licensees can report suspected interference.²⁹ Petitioner wants further requirements that SafeView respond to a report of suspected interference within two hours, either deny responsibility or propose a resolution within four hours, and effect the resolution within 24 hours; and if interference persists, then terminate operations.³⁰ In cases where the device is at an "open location," such as a stadium or an open door, Petitioner asks for the "presumptive right" to require the SafeScout user to cease operations until the device is shielded.

These measures would, in all probability, never be invoked. And, at the same time, they would be unreasonably expensive, particularly in requiring SafeView to staff a contact point 24/7. The proposed deadlines for responding to and resolving complaints might sometimes be achievable -- for example, if a shielding panel is needed to protect a 24 GHz receiver in an airport terminal -- but perhaps not in other cases, where more investigation is needed, and especially when the SafeScout device turns out not to be the source of interference.

The further suggestion that SafeView hand over control of its equipment at "open locations" to 24 GHz licensees is unprecedented. Like the other measures requested, it would be justified only under a far more persuasive showing of likely harm than Petitioner has offered here.

SafeView acknowledges its obligations to promptly investigate reports of interference, to correct any harmful interference caused by its equipment, and to turn off the equipment if the

²⁹ Petition at 9.

³⁰ Petition at 10.

interference cannot otherwise be resolved.³¹ Together with exceedingly low emissions levels and the additional protections mandated under the Order, this is more than adequate to ensure that 24 GHz operations will continue without disruption.

CONCLUSION

The Order strikes a careful balance between the security benefits offered by the SafeScout device and the needs of licensees. The waiver will permit deployment of the device to go forward, and thus directly promote the safety of the public, yet at the same time will hold down the risk of interference to levels no higher than those presented by compliant devices.

The Commission should dismiss the Petition for Reconsideration and let the Order stand.

Respectfully submitted,

Mitchell Lazarus
FLETCHER, HEALD & HILDRETH, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, VA 22209
703-812-0440
Counsel for L3 Communications SafeView, Inc.

September 15, 2006

³¹ 47 C.F.R. Sec. 15.5.

TECHNICAL CERTIFICATION

I am a technically qualified person who reviewed the foregoing Opposition to Petition for Reconsideration. I certify that the technical statements therein are correct to the best of my knowledge.

Scott Trospen
Director of Hardware Development
L3 Communications SafeView, Inc.

CERTIFICATE OF SERVICE

I, Deborah N. Lunt, a secretary with the law firm of Fletcher, Heald & Hildreth, PLC, hereby state that true copies of the foregoing **OPPOSITION TO PETITION FOR RECONSIDERATION** have been served this 15th day of September, 2006, by first class mail, postage prepaid, to the following listed on the attached Service List.

Deborah N. Lunt

SERVICE LIST

Chairman Kevin J. Martin *
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Michael J. Copps *
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Jonathan S. Adelstein *
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Deborah Taylor Tate *
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Commissioner Robert M. McDowell *
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Julius P. Knapp, Acting Chief *
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Bruce A. Romano, Associate Chief *
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Joseph M. Sandri, Jr., Esq.

Alan Scrimme, Chief *
Policy and Rules Division
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Karen Rackley, Chief *
Technical Rules Branch
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

John Reed *
Office of Engineering & Technology
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

John P. Janka, Esq.
Tonya Rutherford, Esq.
Latham & Watkins LLP
555 Eleventh Street, NW
Suite 1000
Washington, DC 20004
Counsel for Hughes Network Systems, Inc.

Russell H. Fox, Esq.
Susan F. Duarte, Esq.
Mintz Levin Cohn Ferris Glowsky
and Popeo, PC
701 Pennsylvania Avenue, NW
Washington, DC 20004
**Counsel for XO Communications,
Hughes Network Systems, Inc.
and FiberTower Corp.**

Senior Vice President, Regulatory and

Government Affairs
FiberTower Corporation
7925 Jones Branch Drive, Suite 3300
McLean, VA 22102

Andrew Kreig
Co-Chairman
Fixed Wireless Communications Coalition
1333 H Street, NW
Suite 700 West
Washington, DC 20005

Andrew Kreig
President
Wireless Communications Association
International, Inc.
1333 H Street, NW
Washington, DC 20005

Joseph M. Sandri, Jr.
Gene Rappoport
Vishnu Sahay
Lynne Hewitt Engledow
Winstar Communications, LLC
1850 M Street, NW, Suite 300
Washington, DC 20036

Kenneth J. Hacker
Director of Administration, TSL-1
Transportation Security Administration
U.S. Dept. of Homeland Security
Transportation Security Laboratory, Bldg. 315
William J. Hughes Technical Center
Atlantic City, NJ 08405

Pariz Rza
Security Technical Specialist
Bureau of Diplomatic Security
U.S. Department of State
Washington, DC 20520

Charles E. Walters
Managing Director
RF Development, LLC

6509 Goldsboro Road
Bethesda, MD 20817

Jake Gadsden
Assistant Director
Institutions and Operations
Department of Corrections
State of Rhode Island
39 Howard Avenue
Cranston, RI 02920

*By Email and Hand Delivery