

public safety entities. SBT supports a use of 700 MHz spectrum for public safety, but avers that its funding proposal for financing public safety relocation is more practical. Additionally, the Motorola plan is short on technical solutions to assist in the short term. Conservatively, the relocation suggested within the Motorola plan could take over five years to complete. In the meantime, Motorola offers nothing more than the Best Practices Guide as a method for relieving existing interference and interference which arises during the period prior to relocation.

SBT respectfully notes that the Motorola plan suffers from many of the same flawed premises which exist in the PWC plan, the most dangerous being that Nextel and cellular carriers have some unarticulated right to operate low-site cellular systems. In short, such right does not exist. Nothing on the face of any cellular operator's license states that it is also entitled to operate low-site systems to the detriment of other legitimate operators. There is no dictate of law or logic which results in a finding that a license to transmit above 861 MHz should and must include the right to construct systems close to ground level, employing downtilt antennas, with unnecessarily high power density, and without regard to the production of destructive IM products. Yet, Motorola, like the PWC, appears to accept that this right exists and is subject to protection. SBT strongly disagrees. And it is this flawed premise, this failure to analyze thoroughly the rights of affected licensees and the duties attendant to those rights, in combination with the authority and obligation of the agency to manage the spectrum on behalf of both large carriers and small, that leads Motorola and the PWC down illogical paths that ignore the best and simplest solution, have the interfering carriers both avoid and resolve interference complaints in a manner which places fully the burden for such actions on the interfering parties. That is what SBT advocated in its Reply Comments and that position has

not only been left unchanged by the other Reply Comments and proposed plans, but SBT's commitment to the logic and equity of that path has been strengthened.

The Underlying Legal Analysis Regarding
The Rights and Duties Of Interfering Operators

The flawed premises regarding the existing operations of the interfering CMRS carriers appears to begin with the overly simplistic approach that since those operators possess authorizations to operate on those channels over the respective geographic areas and since the equipment employed has been type accepted by the Commission, then all such operation is legal. This is untrue and the pedestrian logic which produces this conclusion has undermined the agency's exercise of rightful authority to protect the operation of legitimate systems.

A simple example demonstrates the obvious falsity of the conclusion. If an amateur radio operator uses its type accepted equipment to engage in unauthorized broadcasting, this activity is not within its authority and thus subjects the operator to serious penalties, even if the channels upon which the operator is transmitting are fully authorized for amateur radio operation and the equipment is otherwise operating within the technical parameters of the operator's authority. This operator is deemed a "pirate broadcaster" and the Commission's records are filled with the serious punitive reaction to such activity, regardless of whether the offender's operation causes harmful interference or otherwise injures any other person or their business. Therefore, the issue is not whether the operator holds a license or whether the equipment is type accepted. The relevant issue is whether the operation is within the boundaries of the operator's authorization. In this example, the amateur

radio operator does not have authority to engage in commercial broadcasting, thus, the operator is subject to fine.

The underlying statutory authority rests with 47 U.S.C. §301, which states in relevant part,

It is the purpose of this Act, among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions and periods of the license.⁶ No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio ... or when interference is caused by such use or operation with the transmission of such energy, communications, or signals ... upon any other mobile stations within the jurisdiction of the United States, except under and in accordance with this Act and with a license in that behalf granted under the provisions of this Act.⁷

The logic which suggests that interfering carriers are acting in accord with authorizations is inconsistent with the dictates of Section 301. The interference created by low-site cellular operations is suffered by other licensees due to the interfering entities' production of energy on channels for which the interfering licensee does not have authority to transmit. For example, the production of intermodulation products is the creation of energy spurs on channels upon which the operator(s) do not hold authority. Accordingly, these unintended transmissions are, in accord with law, unauthorized transmissions produced outside the technical parameters of the operator's license.

⁶ Significantly, one of the conditions of the subject licenses is the licensee's requirement to limit the transmission of energy to within the authorized passband shown on the face of the license.

⁷ The Act does not provide for the ability of a carrier, motivated by business practices, to create harmful interference to another. Nor does any license issued by the Commission to those carriers provide for such unfettered operations outside the technical parameters shown on the face of the license and reflected in the applicable Rule Part.

The subject cellular licensees and Nextel cannot point to language on the face of their respective licenses which states, in effect, "Licensee is authorized to produce unintended radiation in amounts sufficient to be detectable by adjacent channel licensees and licensees operating on channels upon which intermodulation products occur, which harmful radiation detecting licensees must be made to suffer until such time as the parties might informally and mutually agree to a resolution of any harmful interference that results from licensee's unintended radiation." Yet, the underlying premise upon which the Best Practices Guide, the PWC plan and the Motorola plan collectively rest suggests the existence of such language.

Conversely, analog SMR operators, utility companies, public safety licensees, B/ILT licensees, and other affected licensees will search in vain upon the face of their respective licenses for language which states, in effect, "This license is conditioned upon licensee's agreement to accept interference from unauthorized transmissions operating outside the authorized passband of other licensees' systems until such time as the interfering operator engages in extensive testing for undetermined periods. Licensee may be subject to all costs arising out of its participation in all such testing and any modification demanded by the interfering operator to accommodate the operation of the interfering operator's system."

The above illustration directs the Commission to return to the basics of its statutory mandate expressed in Section 301⁸ and which has been employed countless times in numerous agency

⁸ In fact, 47 U.S.C. §303(y)(2)(C) specifically prohibits the Commission from adopting a "flexibility of use" justification for interfering carriers' operations, since the Commission does not have authority from Congress to do so unless "such use would not result in harmful

decisions. The basic premise is that no person may operate radio apparatus in a manner which exceeds the technical parameters of that person's license. Further, that all such operation is, by its very nature, unauthorized. Since most of the interference which the rule making seeks to correct is the result of transmissions of energy outside the authorized passband which appears on the offending party's license, the Commission's path is clear, to take reasonable steps to halt these unauthorized transmissions.

The proposed action is not without substantial precedent and, in fact, is fully consistent with previous Commission actions. For examples, although the agency recognizes the authority of cable television systems to provide services, that authority does not extend to a right to create harmful interference arising from signal leakage across a system, *In the Matter of Charter Communications, VI, LLC*, DA 02-2137 (released September 4, 2002); and the Enforcement Bureau is quick to point out in its admonitions to licensees, "[o]peration outside the scope of authorization creates a definite danger of interference to other radio communications services and may subject the operator to the penalties provided for in the Communications Act of 1934, as amended." *Letter to Communications Unlimited, Inc.*, EB-01-CG-134 (March 20, 2001). Even when operation was less effective for producing any signal, i.e. the operation of antenna facilities at heights substantially below the authorized AGL, the Commission has held that a licensee must operate in accord with the technical parameters of its license, see, e.g. *In the Matter of Mobile Communications Service, Inc.*, 14 FCC Rcd 19471 (released November 22, 1999). Analogously, the Commission denied a request for Special Temporary Authority when the applicant wished to operate at a bandwidth greater than that

interference."

appearing on its license, because no equipment was available which would limit the bandwidth to 6.25 kHz as authorized, *Letter decision to Hilltop Communications, Inc.*, Ref. No. 7110-19 (October 26, 1999), even though the requesting party stated that no licensed system would be affected and that all such authority would be accepted on a secondary basis. Time and again the Commission has held to its basic principles and the clear language of the Act that operation must be in accord with the specific authority provided for on the license. The subject operations by interfering carriers provide no basis for abandonment of this basic principle upon which the mandates of the Act rest.

It is beyond doubt that the production of interfering signals, which production exceeds operation within the technical parameters of the interfering operator's authorization, is subject to immediate remedial action by the agency. The agency may immediately order a cessation of such transmissions and, in accord with 47 U.S.C. §503 (b)(1)(A), demand a forfeiture for continuous violations due to that operator's having "willfully or repeatedly failed to comply substantially with the terms and conditions of [its] license. . ." which action would be consistent with 47 U.S.C. §333 which states 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 Act or operated by the United States Government." That the interfering carriers' actions are wilful is beyond doubt as such term is defined, *see, Southern California Broadcasting Co.*, 6 FCC Rcd 4387 (1991). That the production of such interference outside the terms of the interfering party's license also gives rise to affected operators' right to make formal complaint in accord with 47 U.S.C. §208 is also obvious.

What the foregoing analysis clearly shows is that the Commission operates under a statutory mandate by Congress to take all actions necessary to protect licensed operations from harmful interference. The language contained within the Act goes further in clearly assigning the responsibility to avoid the creation of harmful interference upon the party which might or is creating that interference. No where within the Act will the Commission find support for any proposal which would shift the burden from the interfering party onto the victim of that interference. Those plans put forth in this rule making which would place the burden on non-interfering parties or victims of interference from CMRS operators to resolve the problem are without statutory basis and are, therefore, without any legal support. Just as some plans have attempted to have the agency unlawfully create an escrow account or demand a private contractual relationship be formed or serve as a banker or base its decisions on unfunded initiatives, those plans which fail to properly address the responsibilities of interfering operators to take all steps necessary to cease the creation of harmful interference ignore improperly the first and only statutorily allowable action to be taken by the agency, to direct those interfering operators to immediately cease the creation of harmful interference, in particular that interference which arises from transmissions of energy outside the technical parameters of the interfering operators' authorizations.

The Commission is directed to its long history of adopting technical rules which are employed for the purpose of interference avoidance. As has been noted already within comments, 47 C.F.R. §§90.173(b) & 403(e) are directly applicable to this matter. However, the Commission has often adopted rules to protect licensed operations, even when the potentially interfering parties do not operate facilities under the same Rule Part as the potential victims of that operation. For

example, 47 C.F.R. §90.257 sets forth specific technical and operational rules to protect licensees of television channels 4 and 5 from receipt of harmful interference from operators of 72-76 MHz facilities. See, also, the Commission's decision *In the Matter of Resolution of Interference Between UHF Channels 14 and 69 and Adjacent-channel Land Mobile Operations*, FCC 91-241, MM 87-465 (released August 29, 1991), from which the Commission promulgated 47 C.F.R. §73.687(e) ("Interference Order"). The Commission's efforts in that matter are directly analogous to the instant situation, as Section 73.687(e)(4)(ii) specifically directs the broadcaster to "correct a desensitization problem if its occurrence can be directly linked to the start of TV operation and the land mobile station is using facilities with typical desensitization characteristics." In the instant situation, land mobile operators are employing facilities with typical desensitization characteristics and the problem has been directly linked to operation of the interfering CMRS stations. The language within the Interference Order is quite instructive to the instant matter wherein the Commissions stated at paragraph 16:

Interference to land mobile facilities from TV signals may be caused by desensitization of the land mobile receiver by the TV signal, generation of intermodulation products and radiation outside the assigned TV channel. In this Notice we addressed receiver desensitization, which occurs when the extremely strong signals within authorized TV channels reach a land mobile receiver with sufficient strength to impair reception. Such impairment may take the form of decreased receiver sensitivity or increased noise, both of which, from the land mobile user's standpoint, result in loss of coverage area. We also addressed intermodulation interference, a type of interference that occurs when strong signals mix with other signals within or external to a land mobile receiver to produce spurious signals (intermodulation products) on the land mobile receive frequency.⁹

⁹ Other forms of interference were also addressed within the Interference Order.

Within that proceeding the Commission correctly decided that the responsibility for avoiding and correcting interference laid with the TV broadcasters. In fact, the Commission went so far as to require broadcasters to demonstrate that proposed operations would not create harmful interference to land mobile facilities prior to commencing program tests. Interference Order at para. 28. The same logic used therein and urged by the LMCC within that proceeding should be equally applied here.

The Commission's approach within the Interference Order should serve as a guide to the instant proceeding. It is consistent with the Commission's duties and limitations on authority codified under the Act, while setting forth technical rules for the protection of legitimate operations from harmful interference produced as an unauthorized byproduct of licensed operations. And such approach squares with the basic premise of all operation of radio facilities, that operation is only appropriate when it is performed in a manner which avoids the creation of harmful interference and, if interference occurs, the interfering party must take all steps necessary to cease the creation of interference and resolve the cause of that interference.

Among the various plans put before the Commission within this proceeding, only SBT's plan employs as its foundation the basic tenets of the Act outlined above. All other plans, except those general statements made by commenters which correctly assign the burden to interfering CMRS operators, fail to focus on this fundamental principle that has guided spectrum management from the beginning of federal regulation of the radio spectrum.

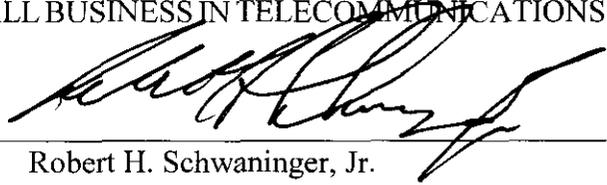
Conclusion

SBT respectfully requests that the Commission adopt its plan as the only comprehensive plan put forth that deals with all relevant issues in light of law, logic, funding, and the rights and duties of affected licensees.

Respectfully submitted,

SMALL BUSINESS IN TELECOMMUNICATIONS

By


Robert H. Schwaninger, Jr.

Dated: September 23, 2002

Schwaninger & Associates, P.C.
1331 H Street, N.W.
Suite 500
Washington, D.C. 20005
(202) 347-8580 phone
(202) 347-8607 facsimile

CERTIFICATE OF SERVICE

I, Ann Hamilton-Jones, hereby certify that on this 23 day of September, 2002 I caused a copy of the foregoing Second Reply Comments to be served by First Class U.S. Mail, postage prepaid, to the following:

N.Y.S. Office for Technology, Statewide Wireless
c/o Handford C. Thomas, Director
Department of Public Safety Network
6C Executive Park Drive
Albany, New York 12203

State of Arizona
Department of Public Safety
PO Box 6638
Phoenix, AZ 85005-6638

Public Safety Improvement Coalition
c/o James R. Hobson
Miller & Van Eaton, P.L.L.C.
1155 Connecticut Avenue, NW Suite 1000
Washington, DC 20036

Ron Solemsaas, Project Coordinator
Snohomish County (SERS)
1121 SE Everett Mall Way Ste., 210
Everett, Washington 99202

Regional Communications System
c/o Curt Munro, Manager
Sheriff's Department
5555 Overland Avenue, Bldg., 12, MS-056
San Diego, CA 92123

Public Safety Wireless Network
c/o Brigadier General Paul H. Wieck II
Booz Allen & Hamilton
8283 Greensboro Drive
McLean, VA 22102
Attn: Greenwood Facility

Wireless Systems Manager
c/o Ronald G. Mayworm
PO Box 9960
College Station, TX 77842

Public Safety Wireless Network
c/o Steven Proctor, Executive Director
Booz Allen & Hamilton
8283 Greensboro Drive
McLean, VA 22102
Attn: Greenwood Facility

City of Bryan
Emergency Management Coordinator
c/o Roy G. Ross
PO Box 1000
Bryan, TX 77805

Fairfax County
Department of Information, Tech.
1200 Government Center Parkway
Suite 527
Fairfax County, VA 20035

City of Austin, TX
c/o Michael Simpson, Wireless Comm. Serv. Officer
1006 Smith Road
City of Austin, TX 78721

Judy Chesser, Director
The City of New York Federal Affairs Office
1301 Pennsylvania, Ave., NW
Washington, DC 20004

New York City Department of Information
11 Metro Tech Center
Brooklyn, NY 11201
Attn: Atostino Cangemi, Deputy Commissioner and
General Counsel Technology and Telecommunications

Michael Ahlbaum, Special Counsel for Reg. Affairs
11 Metro Tech Center
Brooklyn, NY 11201

Nancy Jesuale, Bureau Director
City of Portland, Oregon
3732 SE 99th Avenue
Portland, OR 97266-2502

Commonwealth of Virginia
Department of Information Technology
Richmond Plaza Building
110 South 7th Street
Richmond, VA 22319-3931

Office of The Chief Technology Officer
Government of the District of Columbia
441 4th Street, NW, Suite 930
Washington, DC 20001

Norman B. Botsford, Chief of Police
City of Gainesville
PO Box 1250
Gainesville, FL 32602-1250

John Schmidig, Chief, County Police
Bergen County Police Department
327 East Ridgewood Avenue
Paramus, NJ 07652

Paul A. Einreinhofer, Sergeant
Bergen County Police Department
327 East Ridgewood Avenue
Paramus, NJ 07652

John E. Logan, Special Counsel
County of Bergen
1050 Connecticut Ave., NW 10th Fl.
Washington, DC 20036

Lester M. Nakamura, Administrator
State of Hawaii ICS Division
PO Box 119
Honolulu, Hawaii 96810-0119

Kevin Kearns, Manager
King County Information and
Telecommunications Serv., Divisions
700 5th Avenue, Suite 2300
Seattle, WA 98104-5002

The State of Maryland
Department of Budget and Maryland
c/o G. Edward Ryan, II
301 West Preston Street, Ste. 1304
Baltimore, MD 21201

Maui County
c/o James Kimo Apana
200 South High Street
Waikuku, Maui, HI, USA 96793

Cingular Wireless LLC
c/o J. R. Carbonell
5565 Glenridge Connector, Ste 1700
Atlanta, GA 30342

Dobson Communications Corporation
c/o Ronald L. Ripley, Esq.
14201 Wireless Way
Oklahoma City, OK 73134

United States Cellular Corp.
c/o George Y. Wheeler
Holland & Knights LLP
2099 Pennsylvania Ave., NW
Suite 100
Washington, DC 20006

Nextel Communications, Inc.
c/o Leonard Cascioli, VP- Engineer & Operations
2001 Edmund Halley Drive
Reston, VA 20191

Alltel Communications, Inc.
c/o Glenn R. Rabin
601 Pennsylvania Ave., NW Ste. 720
Washington, DC 20004

AT&T Wireless Services, Inc.
c/o Douglas I. Brandon, VP - External Affairs
1150 Connecticut Ave., NW Ste 400
Washington, DC 20036

Verizon Wireless
c/o John T. Scott, II &
Donald C. Brittingham
1300 I Street, NW, Ste. 400 W
Washington, DC 20005

Motorola, Inc.
c/o Richard C. Barth, VP & Dir., Telecom Strategy
1350 I Street, NW
Washington, DC 20005

RCC Consultants, Inc.
2000 Linglestown Rd., Ste., 304
Harrisburg, PA 17110

Southern LINC
c/o Christine M. Gill
600 13th Street, NW
Washington, DC 20005

Qualcomm Incorporated
c/o Jennifer M. McCarthy, Senior Dir.
International Government Affairs
5775 Morehouse Drive
San Diego, CA 92121

E.F. Johnson Company
c/o John S. Oblak
299 Johnson Ave., SW
WASECA, MN 56093

Lubrizol Corporation
c/o Charlie Cooley
29400 Lakeland Boulevard
Wickliffe, OH 44092

Kenwood Communications Corp.
c/o Christopher D. Imlay
Booth Freret Imlay & Tepper, PC
5101 Wisconsin Ave., NW Ste., 307
Washington, DC 20016

Avaya
c/o Charles E. Crowders
VP - Gov Affairs
1450 G Street, NW
Washington, DC 20005

Utstarcom. Inc.
c/o Henry Goldberg
Goldberg, Godles, Wiener & Wright
1229 Nineteenth Street, NW
Washington, DC 20036

SmartLink Radio Networks, Inc.
c/o John E. Logan, Attorney
1050 Connecticut Ave., NW 10 Fl.
Washington, DC 20036

Codington-Clark Electric Cooperative, Inc.
c/o Gene Ward, General Manager
PO Box 880
3 8TH Ave., SE
Watertown, SD 57201-0880

Kankakee Valley REMC
c/o Dennis C. Weiss, Chief Executive Officer
114 S. Main Street
PO Box 157
Wanatah, IN 46390

Cinergy Corporation
c/o Shirley S. Fujimoto
McDermott, Will & Emery
600 I Street, NW
Washington, DC 20005

White County REMC
c/o Jack R. Lndrum, President & CEO
PO Box 599
Monticello, IN 47960

Carlina Power & Light Company and
TXU Business Services
c/o Jonathan L. Wiener
Goldberg, Godles, Wiener & Wright
1229 19th Street, NW
Washington, DC 20036

Keller & Heckman, LLP
c/o Melvin W. Bercovici
1001 G Street, NW
Ste., 500 West
Washington, DC 20001

National Association of Counties, *et al*
c/o Robert M. Gurs
Shook Hardy & Bacon, LLP
600 14TH Street, NW Ste., 800
Washington, DC 20005

Southwest Louisiana Electric
Membership Corporation
c/o J. U. Gajan, CEO & GM
PO Box 90866
Lafayette, Louisiana 70509-0866

American Electric Power Comp., Inc.
c/o David B. Trego, VP - Telecom.
1 Riverside Plaza 5th Floor
Columbus, OH 43215

Metropolitan Utilities District
c/o Thomas A. Wurtz, GM
1723 Harney
Omaha, NE 68102

Omaha Public Power District
c/o Diane Kremlacek
Manager - Comm Dept.
444 South 16TH Street Mall
Omaha, NE 68102

Satellite Industry Association
c/o Richard Dalbelo, Executive Dir.
255 Reinekers Lane, Ste., 600
Alexandria, VA 22314

Marnell Corrao Associates
c/o Rick Colvin, Exec. VP
4495 South Polairs, Ave.
Las Vegas, NV 89103

Palomar Communications, *et al.*
c/o Alan S. Tilles, Esq.
Shulman, Rogers, Gandal, Pordy &
Ecker, P.A.
11921 Rockville Pike
Third Floor
Rockville, Maryland 20852

M/A-COM Private Radio Systems, Inc.
c/o Robert J. Speidel, Esq.
Manager, Regulatory Policy
PO Box 2000
Lynchburg, VA 24501

RadioSoft
c/o Peter Moncure, Vice President
109 West Knapp Avenue
Edgewater, FL 32132

Sandy Abramson, President
UTAM, Inc.
PO Box 8126
Bridgewater, NJ 08807

Xcel Energy Services, Inc.
c/o Carole C. Harris
McDermott, Will & Emery
600 13TH Street, NW
Washington, DC 20005
Its Attorneys

Ohio MARCS, Program Office
c/o Paul A. Liosis
2885 W. Dublin-Granville Road
Columbus, OH 43235

c/o Peter Tannenwald
Irwin, Campbell & Tannenwald, PC
1730 Rhode Island Ave., NW Ste., 200
The City of Baltimore, Maryland
Washington, DC 20036

Gary Cramer, General Manager
H-D Electric Cooperative, Inc.
PO Box 1007
423 3rd Ave. S.
Clear Lake, SD 57226

FEM Electric Association, Inc.
c/o Paul Erickson, Manager
PO Box 468
800 5th Ave.
Ipswich, SD 57451-0468

NEC America, Inc.
c/o Ari Q. Fitzgerald
Hogan & Hartson, LLP
555 13TH Street, NW
Washington, DC 20004

Consumers Energy Company
c/o Shirley S. Fujimoto
McDermott, Will & Emery
600 13th Street, NW
Washington, DC 20005

Steven H. Proctor, Executive Dir.
Utah Communications Agency Network
2451 South 600 West, Ste., 300
Salt Lake City, UT 84115

State of Florida
Kouroush Bastani, P.E. Chief
Information Tech., Prog. Bur of Radio
Ste., 180 of the Capital Circle Office
Center - 4030 Esplanade Way
Tallahassee, Florida, 32399

Northern Electric Cooperative, Inc..
c/o Dennis Hagny, General Manager
PO Box 457
39454 133RD Street
Bath SD 57427

Holy Cross Electric Assoc., Inc.
c/o Richard Brinkley, GM - Reg Serv.
PO Drawer 2150
Glenwood Springs, CO 81602-2150

Jones- Onslow EMC
Thomas E. Pritchard P.E.
259 Western Blvd.
Jacksonville, NC 28546

American Mobile Telecommunications
Association, Inc.
c/o Alan R. Shark, President
1130 Connecticut Ave., NW Suite 325
Washington, DC 20036

National Rural
Telecommunications Cooperative
c/o Steven T. Berman
2121 Cooperative Way
Herndon, VA 20171

International Association of Chiefs of Police
c/o William B. Berger, President
515 N. Washington Street
Alexandria, VA 22314-2357

Major Cities Chiefs Association
c/o Jerry Keller, President
Las Vegas Metro Police Dept.
400 Stewart Avenue
Las Vegas, NV 89101

National Sheriff's Association
c/o John Cary Bittick, President
1450 Duke Street
Alexandria, VA 22314

Telecommunications Industry Assoc.
c/o Grant E. Seiffert
1300 Penn. Ave., NW., Ste., 350
Washington, DC 20004

Society of Broadcast Engineers, Inc.
c/o Booth, Freret, Imaly & Tepper
5101 Wisconsin Avenue, NW
Suite 307
Washington, DC 20016

Lockheed Martin Corporation
c/o Gerald C. Musarra, Vice President
1725 Jefferson Davis Highway
Crystal Square 2 Suite 403
Arlington, VA 22314

Cellular Telecommunications &
Internet Association
c/o Michael F. Altschul
1250 Connecticut Ave., NW Ste., 800
Washington, DC 20036

The Forestry Conservation
Communications Association
c/o John Berst, President
Pennsylvania Bureau Forestry
PO Box 8552
Harrisburg, PA 17105

Major County Sheriffs' Association
c/o Kevin E. Beary, President
Orange County Sheriff's Office
2400 West 33rd Street
Orlando, FL 32839

National Association of Manufactures
Arter Hadden, L.L.P.
1801 K Street, NW
3rd Floor
L Street Entrance
Washington, DC 20554

The National Assoc., for Amateur Radio
c/ Christopher D. Imaly
Booth Freret Imaly & Tepper, PC
5101 Wisconsin Avenue NW Ste., 307
Washington, DC 20016

National Ready Mixed
Concrete Association
c/o Jennifer LeFevre
900 Spring Street
Silver Spring, MD 20910

Federal Express Corporation
c/o Nathan Lemmon and Richard Dunn
PO Box 727
Memphis, TN 38194

Intel Corporation
c/o Greg S. Slater, Senior Corp., Attorney
M/S/ CH6-404
5000 W Chandler Blvd.
Chandler, AZ 85226

AVR, Inc.
c/o Mark W. Swanson, IT Manager
14698 Galaxie Ave.
Apple Valley, MN 55124

Eastman Chemical Company
c/o Jerry B. Hale
PO Box 511
Kingsport, TN 37662

Aeronautical Radio Inc.
c/o John L. Bartlet
Wiley Rein & Fielding LLP
1776 K Street, NW
Washington, DC 20006

ISG - Cleveland, Inc.
c/o Frank Palazzolo, Project Manager
3100 East 45th Street
Cleveland, OH 44127

The American Petroleum Inst.
c/o Wayne V. Black
Keller and Heckerman, LLP
1001 G Street, NW Ste., 500 West
Washington, DC 20001

American Water Works, Association
c/o Thomas W. Curtis
Deputy Executive Director
1401 New York Ave., NW Ste., 640
Washington, DC 20005

Boeing Company
c/o David A. Nall
Squire Sanders & Dempsey L.L.P.
1201 Pennsylvania Avenue, N.W.
P.O. Box 407
Washington, DC 20044-0407

United Telcom Council
c/o Jill M. Lyon, VP & Gen Counsel
1901 Pennsylvania Ave., 5th Floor
Washington, DC 20006

Ameren Corporation
c/o Gerald Bednar
P.O. Box 66149 MC-620
St. Louis, MO 63166-6149

Florida Power & Light company
c/o Lourdes F. Sori
P.O. Box 029100
Miami, FL 33102-029100

Washington Electric Membership Corp.
c/o Robert Chapman
P.O. Box 598
Sandersville, GA 31082

Southeastern Electric Coop., Inc.
c/o Brad Schardin
P.O. Box 388
Marion, SD 57043

Renville Sibley Coop. Power Assoc.
c/o Dale Christensen, CEO
P.O. Box 68
Danube, MN 56230-0068

Delmarva Power & Light, *et al.*
c/o Shirley S. Fujimoto
McDermott, Will & Emery
600 13 Street, NW
Washington, DC 20005-3096

National Rural Electric Coop. Assoc.
c/o Eric W. DeSilva
Wiley, Rein & Fielding, LLP
1776 K Street, NW
Washington, DC 20006

Sid Richardson Energy Services Co.
c/o Weldon Wright
201 Main Street, Suite 3000
Fort Worth, TX 76102

East River Electric Power Coop., Inc
c/o Jeffrey L. Nelson
P.O. Box 227
121 SE 1st Street
Madison, SD 57042

Pinnacle West Capital Corp.
c/o Denny L. Brown
P.O. Box 53999 - Mail Station 8878
Phoenix, AZ 85072

Excelon Corporation
c/o Michael S. Pabian
10 South Dearborn Street, 35th Floor
Chicago, IL 60603

Scana Corporation
c/o Carole C. Harris and Kirk Burgee
McDermott, Will & Emery
600 13th Street, NW
Washington, DC 20005-3096

Duke Energy Corp.
c/o Tara B. Shostek
Irwin, Campbell & Tannwenwald, P.C.
1730 Rhode Island Ave., NW Suite 200
Washington, DC 20036-3101

Metropolitan Transit Authority of
Harris County, Texas
c/o Derrick Blount
5700 East Tex Freeway
Houston, TX 77026

Dallas Area Rapid Transit
c/o Jerelyn Arbuckle, Esq.
P.O. Box 660163
Dallas, TX 75266

The New Jersey Transit Authority
c/o Malcolm G. Stevenson
Schwartz, Woods & Miller
1350 Connecticut Ave., NW
Washington, DC 20036

The Amer. Public Trans. Association
c/o William W. Miller, President
1666 K Street, NW
Washington, DC 20006

San Francisco Bay Area Rapid Transit Dist.
c/o James M. Dunn
800 Madison Street
Oakland, CA 94607

Forest Industries Telecommunications
c/o Kenton E. Sturdevant, Exec. VP
871 Country Club Road, Suite A
Eugene, OR 97401

Personal Communications Industry Assoc.
c/o Jay Kitchen, President & CEO
500 Montgomery Street, Suite 700
Alexandria, VA 22314

Industrial Telecommunications Association, Inc.
c/o Laura L. Smith, Esq.
1110 North Glebe Road, Suite 500
Arlington, VA 22201

National Association of Manufacturers
c/o Lawrence A Finerman
1331 Pennsylvania Avenue, NW
Washington, DC 20004

The City of Fort Lauderdale
c/o Mark Pallans
100 North Andrews Avenue
Fort Lauderdale, FL 33301

Association of American Railroads
c/o Thomas J. Keller
50 F Street, NW
Washington, DC 20001

Preferred Communication Systems, Inc.
c/o Charles D. Gusky, Exec. VP
MacArthur Center II
10th Floor
5605 N. MacArthur Boulevard
Irving, Texas 75038

Access Spectrum, LLC
c/o Mark E. Crosby, President
Two Bethesda Metro Center
Bethesda, Maryland 20814

Motient Communications, Inc.
c/o Walter V. Purnell, Jr., President & CEO
10802 Parkridge Boulevard
Reston, VA 20191-5416

Blooston, Mordkofsky, Dickens, Duffy
& Prendergast
c/o John A. Prendergast
2120 L Street, NW., Suite 300
Washington, DC 20037

Island SMR, Inc.
c/o Bill J. Sandford, President & CEO
1088 Bishop Street, Ste 811
Honolulu, HI 96818

Fisher Wireless Services, Inc.
c/o Dana B. Fisher, Jr., President
14530 S. Commercial St.
Blythe, CA 92225

Cascade Two Way Radio
c/o Spencer L. Bahner, Owner
7301 33rd Ave., NE
Seattle, WA 98115

Western Communications, Inc.
c/o Michael A. Lees, President
3106 South Highway 79
Rapid City, SD 57701

Danny Hampton
5453 Rock Service Station Road
Raleigh, NC 27603-9513

The Ad Hoc Wireless Alliance
c/o Russell H. Fox
Mintz, Levin, Cohn, Ferris
Glovsky and Popeo, PC
701 Pennsylvania Ave., NW
Washington, DC 20004-2608

Skitronics, LLC
c/o Dan L. Hardway, General Counsel
9620 Fayetteville Road
Raleigh, NC 27603

Focus 2000 Communications
c/o J. Patrick Barrett, CEO
4495 South Polaris Ave.
Las Vegas, NV 89103

Commercial Radio And Television, Inc.
c/o Roger Combs, VP - GM
4427 South Polaris Ave.
Las Vegas, NV 89103

Bosshard Radio Service
c/o Paul J. Feldman
Feltcher, Held & Hildreth, PLC
1300 North 17th Street
11th Floor
Arlington, VA 22209

State of New York
Office for Technology
State Capitol, ESD
PO Box 2062
Albany NY 12224
Atten: Hanford Thomas

Madison County
Jerry Kane
One Transit Way
Granite City, IL 62040

Aeronautical Radio, Inc.
2551 Riva Road
Annapolis, MD 21401-7465

MRFAC, Inc.
899 A Harrision Street, SE
Leesburg, VA 201765

Entergy Corp. & Entergy Services, Inc.
c/o Shirley S. Fujimoto and Kirk Burgee
McDermott, Will & Emery
600 13th Street, NW
Washington, DC 20005-3096

ProComm Service Corp.
c/o Henry B. Henderson, President
3805 South Main Street
Blacksburg, VA 24060

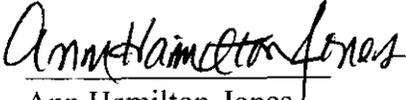
Blooston, Mordkofsky, Dickens,
Duffy & Pendergast
c/o Richard D. Rubino
2120 L. Street, N.W., Suite 300
Washington, D.C. 20037

Fresno Mobile Radio
c/o Bob Cook
160 North Broadway
Fresno, CA 93701

Supreme Radio Communications, Inc.
c/o Dale Tripp
4017 North Prospect Toad
Peoria Heights, IL 61614

C& M Communications, Inc.
c/o Chris Salgot
P.O. Box 6176
Glendale, AZ 85312

Jamestown Communications, Inc.
c/o John Weron
P.O. Box 1933
Jamestown, ND 58402


Ann Hamilton-Jones