STATE OF NEW HAMPSHIRE

SUPREME COURT

2001 TERM

AUGUST SESSION

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DOCKET No. 2001-440

**KOOR COMMUNICATION, INC.**

**v.**

**CITY OF LEBANON**

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# PLAINTIFF'S BRIEF


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### Article VI - United States Constitution

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> This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any state to the Contrary notwithstanding.

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### United States Code

TITLE 47 - TELEGRAPHS, TELEPHONES, AND RADIOTELEGRAPHS
CHAPTER 5 - WIRE OR RADIO COMMUNICATION
SUBCHAPTER I - GENERAL PROVISIONS

**Section 151.** Purposes of chapter; Federal Communications Commission created

> For the purpose of regulating interstate and foreign commerce in communication by wire and radio so as to make available, so far as possible, to all the people of the United States, without discrimination on the basis of race, color, religion, national origin, or sex, a rapid, efficient, Nation-wide, and world-wide wire and radio communication service with adequate facilities at reasonable charges, for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communications, and for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce in wire and radio communication, there is created a commission to be known as the "Federal Communications Commission", which shall be constituted as hereinafter provided, and which shall execute and enforce the provisions of this chapter.

**Section 152.** Application of chapter

(a) The provisions of this chapter shall apply to all interstate and foreign communication by wire or radio and all interstate and foreign transmission of energy by radio, which originates and/or is received within the United States, and to all persons engaged within the United States in such communication or such transmission of energy by radio, and to the licensing and regulating of all radio stations as hereinafter provided;

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**Section 301.** License for radio communication or transmission of energy

It is the purpose of this chapter, among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for 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. No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio (a) from one place in any State, Territory, or possession of the United States or in the District of Columbia to another place in the same State, Territory, possession, or District; or (b) from any State, Territory, or possession of the United States, or from the District of Columbia to any other State, Territory, or possession of the United States; or (c) from any place in any State, Territory, or possession of the United States, or in the District of Columbia, to any place in any foreign country or to any vessel; or (d) within any State when the effects of such use extend beyond the borders of said State, or when interference is caused by such use or operation with the transmission of such energy, communications, or signals from within said State to any place beyond its borders, or from any place beyond its borders to any place within said State, or with the transmission or reception of such energy, communications, or signals from and/or to places beyond the borders of said State; or

(e) upon any vessel or aircraft of the United States (except as provided in section 303(t) of this title); or (f) upon any other mobile stations within the jurisdiction of the United States, except under and in accordance with this chapter and with a license in that behalf granted under the provisions of this chapter.

**Section 302a.** Devices which interfere with radio reception

(a) Regulations

The Commission may, consistent with the public interest, convenience, and necessity, make reasonable regulations (1) governing the interference potential of devices which in their operation are capable of emitting radio frequency energy by radiation, conduction, or other means in sufficient degree to cause harmful interference to radio communications; and (2) establishing minimum performance standards for home electronic equipment and systems to reduce their susceptibility to interference from radio frequency energy. Such regulations shall be applicable to the manufacture, import, sale, offer for sale, or shipment of such devices and home electronic equipment and systems, and to the use of such devices.

**Section 303.** Powers and duties of Commission

Except as otherwise provided in this chapter, the Commission from time to time, as public convenience, interest, or necessity requires, shall -

(a) Classify radio stations;

(b) Prescribe the nature of the service to be rendered by each class of licensed stations and each station within any class

(c) Assign bands of frequencies to the various classes of stations, and assign frequencies for each individual station and determine the power which each station shall use and the time during which it may operate;

(d) Determine the location of classes of stations or individual stations;

**(e)** **Regulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein;**

**(f)** **Make such regulations not inconsistent with law as it may deem necessary to prevent interference between stations** and to carry out the provisions of this chapter: Provided, however, That changes in the frequencies, authorized power, or in the times of operation of any station, shall not be made without the consent of the station licensee unless the Commission shall determine that such changes will promote public convenience or interest or will serve public necessity, or the provisions of this chapter will be more fully complied with;

(g) Study new uses for radio, provide for experimental uses of frequencies, and generally encourage the larger and more effective use of radio in the public interest;

**(h)** **Have authority to establish areas or zones to be served by any station;**

* * *

(r) Make such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of this chapter, or any international radio or wire communications treaty or convention, or regulations annexed thereto, including any treaty or convention insofar as it relates to the use of radio, to which the United States is or may hereafter become a party.

* * *

(y) Have authority to allocate electromagnetic spectrum so as to provide flexibility of use, if -

(1) such use is consistent with international agreements to which the United States is a party; and

(2) the Commission finds, after notice and an opportunity for public comment, that –

(A) such an allocation would be in the public interest;

(B) such use would not deter investment in communications services and systems, or technology development; and

(C) such use would not result in harmful interference among users.

**Section 307. Licenses**

(a) Grant

The Commission, if public convenience, interest, or necessity will be served thereby, subject to the limitations of this chapter, shall grant to any applicant therefor a station license provided for by this chapter.

(b) Allocation of facilities

In considering applications for licenses, and modifications and renewals thereof, when and insofar as there is demand for the same, the Commission shall make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each of the same.

* * *

**Code of Federal Regulations**

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION (Continued)

PART 73--RADIO BROADCAST SERVICES--Table of Contents

Subpart A--AM Broadcast Stations

**Sec. 73.24** Broadcast facilities; showing required.

An authorization for a new AM broadcast station or increase in facilities of an existing station will be issued only after a satisfactory showing has been made in regard to the following, among others:

(a) That the proposed assignment will tend to effect a fair, efficient, and equitable distribution of radio service among the several states and communities.

(b) That a proposed new station (or a proposed change in the facilities of an authorized station) complies with the pertinent requirements of Sec. 73.37 of this chapter.

(c) That the applicant is financially qualified to construct and operate the proposed station.

(d) That the applicant is legally qualified. That the applicant (or the person or persons in control of an applicant corporation or other organization) is of good character and possesses other qualifications sufficient to provide a satisfactory public service.

(e) That the technical equipment proposed, the location of the transmitter, and other technical phases of operation comply with the regulations governing the same, and the requirements of good engineering practice.

(f) That the facilities sought are subject to assignment as requested under existing international agreements and the rules and regulations of the Commission.

(g) That the population within the 1 V/m contour does not exceed 1.0 percent of the population within the 25 mV/m contour: Provided, however, that where the number of persons within the 1 V/m contour is 300 or less the provisions of this paragraph are not applicable.

(h) That, in the case of an application for a Class B or Class D station on a clear channel, the proposed station would radiate, during two hours following local sunrise and two hours preceding local sunset, in any direction toward the 0.1 mV/m groundwave contour of a co-channel United States Class A station, no more than the maximum value permitted under the provisions of Sec. 73.187.

(i) That, for all stations, the daytime 5 mV/m contour encompasses the entire principal community to be served. That, for stations in the 535-1605 kHz band, 80% of the principal community is encompassed by the nighttime 5 mV/m contour or the nighttime interference-free contour, whichever value is higher. That, for stations in the 1605-1705 kHz band, 50% of the principal community is encompassed by the 5 mV/m contour or the nighttime interference-free contour,

whichever value is higher. That, Class D stations with nighttime authorizations need not demonstrate such coverage during nighttime operation.

(j) That the public interest, convenience, and necessity will be served through the operation under the proposed assignment.

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION (Continued)

PART 73 -- RADIO BROADCAST SERVICES -- Table of Contents

Subpart A -- AM Broadcast Stations

**Sec. 73.45** AM antenna systems.

(a) All applicants for new, additional, or different AM station facilities and all licensees requesting authority to change the transmitting system site of an existing station must specify an antenna system, the efficiency of which complies with the requirements for the class and power of station. (See Secs. 73.186 and 73.189.)

(1) An application for authority to install an AM broadcast antenna must specify a definite site and include full details of the antenna system design and expected performance.

(2) All data necessary to show compliance with the terms and conditions of the construction permit must be filed with the application for the station license to cover the construction. If the station has constructed a directional antenna, a directional proof of performance must be filed. See Secs. 73.150 through 73.157.

(b) The simultaneous use of a common antenna or antenna structure by more than one AM station or by a station of any other type or service may be authorized provided:

(1) Engineering data are submitted showing that satisfactory operation of each station will be obtained without adversely affecting the operation of the other station(s).

(2) The minimum field strength for each AM station complies with Sec. 73.189(b).

(c) Should any changes be made or otherwise occur which would possibly alter the resistance of the antenna system, the licensee must commence the determination of the operating power by a method described in Sec. 73.51(a)(1) or (d). (If the changes are due to the construction of FM or TV transmitting facilities, see Secs. 73.316, 73.685, and 73.1692.) Upon completion of any necessary repairs or adjustments, or upon completion of authorized construction or modifications, the licensee must make a new determination of the antenna resistance using the procedures described in Sec. 73.54. Operating power should then be determined by a direct method as described in Sec. 73.51. Notification of the value of resistance of the antenna system must be filed with the FCC in Washington, DC as follows:

(1) Whenever the measurements show that the antenna or common point resistance differs from that shown on the station authorization by more than 2%, FCC Form 302 must be filed with the information and measurement data specified in Sec. 73.54(d).

(2) Whenever AM stations use direct reading power meters pursuant to Sec. 73.51, a letter notification to the FCC in Washington, DC, Attention: Audio Services Division, Mass Media Bureau, must be filed in accordance with Sec. 73.54(e).

TITLE 47--TELECOMMUNICATION

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PART 73 -- RADIO BROADCAST SERVICES -- Table of Contents

Subpart A--AM Broadcast Stations

**Sec. 73.186** Establishment of effective field at one kilometer.

2. Section 73.189 provides that certain minimum field strengths are acceptable in lieu of the required minimum physical heights of the antennas proper. Also, in other situations, it may be necessary to determine the effective field. The following requirements shall govern the taking and submission of data on the field strength produced:

(1) Beginning as near to the antenna as possible without including the induction field and to provide for the fact that a broadcast antenna is not a point source of radiation (not less than one wave length or 5 times the vertical height in the case of a single element, i.e., nondirectional antenna or 10 times the spacing between the elements of a directional antenna), measurements shall be made on eight or more radials, at intervals of approximately 0.2 kilometer up to 3 kilometers (1.87 miles) from the antenna, at intervals of approximately 1 kilometer from 3 kilometers (1.87 miles) to 10 kilometers (6.2 miles) from the antenna, at intervals of approximately 3 kilometers from 10 kilometers (6.2 miles) to 25 or 34 kilometers (15.5 miles or 20 miles) from the antenna, and a few additional measurements if needed at greater distances from the antenna. Where the antenna is rurally located and unobstructed measurements can be made, there shall be as many as 18 measurements on each radial. However, where the antenna is located in a city where unobstructed measurements are difficult to make, measurements shall be made on each radial at as many unobstructed locations as possible, even though the intervals are considerably less than stated above, particularly within 3 kilometers of the antenna. In cases where it is not possible to obtain accurate measurements at the closer distances (even out to 8 or 10 kilometers due to the character of the intervening terrain), the measurements at greater distances should be made at closer intervals. (It is suggested that "wave tilt'" measurements may be made to determine and compare locations for taking field strength measurements, particularly to determine that there are no abrupt changes in ground conductivity or that reflected waves are not causing abnormal strengths.

(2) The data required by paragraph (a)(1) of this section should be plotted for each radial in accordance with either of the two methods set forth below:

(i) Using log-log coordinate paper, plot field strengths as ordinate and distance as abscissa.

(ii) Using semi-log coordinate paper, plot field strength times distance as ordinate on the log scale and distance as abscissa on the linear scale.

(3) However, regardless of which of the methods in paragraph (a)(2) of this section is employed, the proper curve to be drawn through the points plotted shall be determined by comparison with the curves in Sec. 73.184 as follows:

Place the sheet on which the actual points have been plotted over the appropriate Graph in Sec. 73.184, hold to the light if necessary and adjust until the curve most closely matching the points is found. This curve should then be drawn on the sheet on which the points were plotted, together with the inverse distance curve corresponding to that curve. The field at 1 kilometer for the radial concerned shall be the ordinate on the inverse distance curve at 1 kilometer.

(4) When all radials have been analyzed in accordance with paragraph (a)(3) of this section, a curve shall be plotted on polar coordinate paper from the fields obtained, which gives the inverse distance field pattern at 1 kilometer. The radius of a circle, the area of which is equal to the area bounded by this pattern, is the effective field. (See Sec. 73.14.)

(5) The antenna power of the station shall be maintained at the authorized level during all field measurements. The power determination will be made using the direct method as described in Sec. 73.51(a) with instruments of acceptable accuracy specified in Sec. 73.1215.

(b) Complete data taken in conjunction with the field strength measurements shall be submitted to the Commission in affidavit form including the following:

(1) Tabulation by number of each point of measurement to agree with the map required in paragraph (b)(2) of this section, the date and time of each measurement, the field strength (E), the distance from the antenna (D) and the product of the field strength and distance (ED) (if data for each radial are plotted on semilogarithmic paper, see above) for each point of measurement.

(2) Map showing each point of measurement numbered to agree with tabulation required above.

(3) Description of method used to take field strength measurements.

(4) The family of theoretical curves used in determining the curve for each radial properly identified by conductivity and dielectric constants.

(5) The curves drawn for each radial and the field strength pattern.

(6) The antenna resistance at the operating frequency.

(7) Antenna current or currents maintained during field strength measurements.

TITLE 47--TELECOMMUNICATION

CHAPTER I--FEDERAL COMMUNICATIONS COMMISSION (Continued)
PART 73 -- RADIO BROADCAST SERVICES -- Table of Contents

Subpart A--AM Broadcast Stations



(a) Section 73.45 requires that all applicants for new, additional, or different broadcast facilities and all licensees requesting authority to move the transmitter of an existing station, shall specify a radiating system, the efficiency of which complies with the requirements of good engineering practice for the class and power of the station.

(b) The specifications deemed necessary to meet the requirements of good engineering practice at the present state of the art are set out in detail below.

(1) The licensee of a AM broadcast station requesting a change in power, time of operation, frequency, or transmitter location must also request authority to install a new antenna system or to make changes in the existing antenna system which will meet the minimum height requirements, or submit evidence that the present antenna system meets the minimum requirements with respect to field strength, before favorable consideration will be given thereto. (See Sec. 73.186.) In the event it is proposed to make substantial changes in an

existing antenna system, the changes shall be such as to meet the minimum height requirements or will be permitted subject to the submission of field strength measurements showing that it meets the minimum requirements with respect to effective field strength.

(2) These minimum actual physical vertical heights of antennas permitted to be installed are shown by curves A, B, and C of Figure 7 of Sec. 73.190 as follows:

(i) Class C stations, and stations in Alaska, Hawaii, Puerto Rico and the U.S. Virgin Islands on 1230, 1240, 1340, 1400, 1450 and 1490 kHz that were formerly Class C and were redesignated as Class B pursuant to Sec. 73.26(b), 45 meters or a minimum effective field strength of 241 mV/m for 1 kW (121 mV/m for 0.25 kW). (This height applies to a Class C station on a local channel only. Curve A shall apply to any Class C stations in the 48 coterminous States that are assigned to Regional channels.)

(ii) Class A (Alaska), Class B and Class D stations other than those covered in Sec. 73.189(b)(2)(i), a minimum effective field strength of 282 mV/m for 1 kW.

(iii) Class A stations, a minimum effective field strength of 362 mV/m for 1 kW.

(3) The heights given on the graph for the antenna apply regardless of whether the antenna is located on the ground or on a building. Except for the reduction of shadows, locating the antenna on a building does not necessarily increase the efficiency and where the height of the building is in the order of a quarter wave the efficiency may be materially reduced.

(4) At the present development of the art, it is considered that where a vertical radiator is employed with its base on the ground, the ground system should consist of buried radial wires at least one-fourth wave length long. There should be as many of these radials evenly spaced as practicable and in no event less than 90. (120 radials of 0.35 to 0.4 of a wave length in length and spaced 3 deg. is considered an excellent ground system and in case of high base voltage, a base screen of suitable dimensions should be employed.)

(5) In case it is contended that the required antenna efficiency can be obtained with an antenna of height or ground system less than the minimum specified, a complete field strength survey must be supplied to the Commission showing that the field strength at a mile without absorption fulfills the minimum requirements. (See Sec. 73.186.) This field survey must be made by a qualified engineer using equipment of acceptable accuracy.

(6) The main element or elements of a directional antenna system shall meet the above minimum requirements with respect to height or effective field strength. No directional antenna system will be approved which is so designed that the effective field of the array is less than the minimum prescribed for the class of station concerned, or in case of a Class A station less than 90 percent of the ground wave field which would be obtained from a perfect antenna of the height specified by Figure 7 of Sec. 73.190 for operation on frequencies below 1000 kHz, and in the case of a Class B or Class D station less than 90 percent of the ground wave field which would be obtained from a perfect antenna of the height specified by Figure 7 of Sec. 73.190 for operation on frequencies below 750 kHz.

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Subpart A--AM Broadcast Stations

**Sec. 73.190** Engineering charts and related formulas.

(a) This section consists of the following Figures: 2, r3, 5, 6a, 7, 8, 9, 10, 11, 12, and 13. Additionally, formulas that are directly related to graphs are included.

(b) Formula 1 is used for calculation of 50% skywave field strength values. Formula 1. Skywave field strength, 50% of the time (at SS+6):

[and following Figures]

## QUESTIONS PRESENTED FOR REVIEW

1. The purpose of the 1934 Federal Communications Act was:

> to make available, so far as possible, to all the people of the United States a rapid, efficient, nationwide and world wide wire and radio communications service with adequate facilities at reasonable charges 47 U.S.C. §151.

Pursuant to the Act, the Federal Communications Commission established a system of licensing radio stations with comprehensive engineering requirements specifically including minimum height requirements for towers. 47 CFR §73.189 -.190.

Can the City of Lebanon, through a 42 foot height limitation in its zoning ordinance, effectively preclude from the City radio stations licensed by the Federal Communications Commission?

2. Was the Superior Court (Burling, J.) mistaken in finding "no actual conflict" between the F.C.C. "minimum height" requirement of 266 feet and the City's "maximum height" requirement of 42 feet?
3. Was the Superior Court (Burling, J.) mistaken in finding "no actual conflict" as a matter of law between F.C.C. requirements and City requirements, where the Superior Court (Fitzgerald, J.) had previously held that there were "genuine issues of material fact" as to "whether the zoning ordinance actually conflicts with the federal law?"

4. Was the Superior Court (Burling, J.) mistaken in holding that the subsequent failure by the F.C.C. to adopt proposed 1997 rules for the rapid implementation of digital television indicated no federal preemption of local radio tower height limitations where the 1997 F.C.C. "Notice of Proposed Rule Making" states:

> As a preliminary matter, we note that it is well settled that the Communications Act of 1934, as amended ("Communications Act"), comprehensively provides for regulation of radio frequency interference and that the FCC has exclusive jurisdiction to resolve such questions.... Thus, a rule preempting state and local zoning regulations based on electromagnetic interference would simply codify the existing state of the law. (Appendix to Notice of Appeal at pg. 643).

5. Was the Superior Court (Fitzgerald, J.) mistaken in denying Koor's Motion for Partial Summary Judgment on the basis of the City's presentation of hearsay affidavits and a newspaper article reporting a short Egyptian radio tower?

6. Was the Superior Court mistaken in holding that the height limitations prohibiting radio towers of over 42 feet was justified by "a valid public purpose of preserving the aesthetic quality of the City" where:

   - that purpose was not stated in any public record when the prohibition was enacted;

   - the City has many pre-existing radio towers well over 42 feet in height;

   - the Zoning Ordinance allows other structures over 42 feet, and allows pre-existing radio towers to be increased in height over 42 feet?

7. Was the Superior Court mistaken in dismissing Koor's "takings" claim because (1) Koor holds a federal license rather than an interest in real property, and,

(2) Koor challenges the basic constitutionality of the Zoning Ordinance, rather than appealing the denial of a zoning decision?

## STATEMENT OF FACTS AND STATEMENT OF THE CASE

### A. THE FACTS

Koor Communication, Inc. ("Koor") holds a Federal Communications Commission ("FCC") Construction Permit for an AM Broadcast Station in Lebanon, New Hampshire, issued on November 20, 1997. (Appendix to Notice of Appeal at 9; see also 51-54). The Construction Permit is for a Class B License at 720 kHz, and calls for the construction of four (4) radio transmitter antenna/towers, each a height of 81.1 meters (266 feet). (Appendix at 63-64). For an AM broadcast station, all four towers are the antenna, and the terms are interchangeable. Federal regulations establish this as the minimum height of the antennas. 47 CFR §§73.45, 73.189 and 73.190, Figure 7. (Appendix at 67-77).

The City of Lebanon's Zoning Ordinance forbids an AM broadcast antenna in all zoning districts except "Rural Lands", and allows a maximum of only 42 feet of height for such an antenna in that district.

The Superior Court (Fitzgerald, J.) denied summary judgment for Koor, ruling that there was a material issue of fact as to whether the City Zoning Ordinance and federal regulation conflicted. (Appendix at 402). The Superior Court (Burling, J.) granted summary judgment for the City, holding that there was no actual conflict between the City Ordinance and federal regulation. (Appendix at 637).

Koor appeals this matter, requesting that the Court reverse the decision of the trial court and hold that there is both field preemption and actual conflict between federal law and local regulation, and that the Lebanon Zoning Ordinance is unreasonable.

**Koor's FCC Application**

Koor's application for its FCC license provided information required by the FCC about the proposed station and its individual owners, Mr. and Mrs. Robert Vinikoor. The application included substantial engineering data, attested to by its consulting radio engineer, William J. Sitzman. (Appendix at 78-215; *see also* 120-24 and 127).

Koor's proposed AM broadcast station will transmit on 720 kHz with a power of 50 kilowatts (kW) daytime, and 0.5 kW nighttime. The engineering of transmission power and antennas for Koor's proposed station was required for two reasons: 1) to avoid nighttime interference with two radio stations in other states, WOR (710 kHz) in New York City and WGN (720 kHz) in Chicago, 2) while still meeting the station's requirement (imposed by FCC regulation) to serve its home community. 47 CFR §73.24 (i). These two needs, avoiding interference with distant stations and serving the local home community, are two sides of the same coin.

FCC regulations limit interference with other broadcast stations to less than 0.500 millivolts per meter ("mv/m"; a measure of signal strength). 47 CFR §73.37; Figure 18 (Appendix at 210-214). The "Analysis of Night Limits" demonstrates interference at

critical points within the signal area of both stations. As to WOR in New York City, the maximum interference is 0.479 mv/m, or 95.8% of the limit (Figure 18, page 1). As to WGN in Chicago, it is 0.481 mv/m, or 96.2% of the limit (Figure 18, page 3). Koor's proposed antenna is engineered for a height of 266 feet. If that proposed height were reduced, for example by 30 feet, then interference with both of these existing stations would exceed the FCC's 0.500 mv/m limitation at these critical points. Koor would thereby violate a critical term of its FCC license (the 0.500 mv/m limit).

In addition, Koor's proposed station is required by FCC regulation to service its own local home community. (See footnote [1]). Figure 7 of Mr. Sitzman's Engineering Statement, "Nighttime Service Contours", demonstrates that the proposed station meets FCC service requirements. (Appendix at 136). If the towers were shortened by any amount, the service contours would contract, and the proposed station would not satisfy the FCC requirement of interference-free service to its home community, as required by 47 C.F.R. §73.24(i).

A standard quarter-wave antenna array for 720 kHz (such as Koor's) uses antennas over 340 feet high. However, as an accommodation to the City with respect to the antenna's visual impact, as well as to meet Federal Aviation Administration ("FAA")



[1] Koor notes that there are only two other local New Hampshire AM stations: WTSL-AM, owned by Clear Channel Communications, Inc., a Texas-based owner of over 1600 radio stations in the Untied States; and WDCR-AM, owned by the Trustees of Dartmouth College. Koor represents local ownership and management.

regulations with regard to nearby Lebanon Airport, an engineering design using shorter "top-loaded" towers was proposed. (Appendix at 120-126). "Top-loading" is the use of wires radiating from the top of the antenna, to make the antenna "think" it is taller than it really is. Top-loaded antennas are less efficient and their transmitting pattern is less stable than a full size antenna, so there is a point below which the FCC will not permit an antenna to be shortened through top-loading. That point, the FCC-mandated minimum height, is 266 feet at 720 kHz for a Class B broadcast station.

**The Lebanon Zoning Ordinance**

The current Lebanon Zoning Ordinance was adopted in December 1990. (Appendix at 216-274). It divides the City into a number of zoning use districts (e.g., Heavy and Light Industrial, Commercial, Central Business District, Neighborhood Commercial District, Professional Business District, Residential, Rural Lands, and Medical Center). See Article III of the Ordinance. (Appendix at 227-260).

A "radio or TV tower" is not a "permitted use" as of right in any zoning district. It is allowed by special exception only in the Rural Lands District. Sections 312, 313, 314. (Appendix at 253-258). Where "radio or TV towers" are not expressly permitted uses in the other districts, it is "the intent of this Ordinance" that they not be allowed in those other districts.
See Section 302. (Appendix at 228).

From City records there is no apparent reason for this height limitation. The prior 1978 Lebanon Zoning Ordinance, to the contrary, defined "Radio and TV towers" as "essential services" and permitted them as of right in both the Industrial and Medical Center zoning use districts and by special exception in all other districts. See Section 209.5E and Sections 204.1 - 204.11 (Appendix at 296 and 280-291).

The August 1989 proposed revision to the 1978 Ordinance (which would eventually become the current Ordinance) converted the original Section 209.5E to the new Section 203.2. "Radio and TV towers" remained "essential services" (Appendix at 319-320). The March 1990 revised draft eliminated this section. *It expressly prohibited* "radio and TV towers" in all except Rural Lands use districts. *It effectively prohibited* them in Rural Lands districts because of the severe height limitation of only 42 feet. (Appendix at 321-323).

City minutes and disclosures in response to Koor's discovery requests show no rationale for this change.

No antenna only 42 feet height can satisfy the minimum FCC requirements for an AM broadcast station, on any frequency, for any class of license. **Thus, the Lebanon Zoning Ordinance effectively prohibits all new AM radio stations in the City of Lebanon and frustrates the statutory purpose of the Federal Communications Act of 1934 to promote and regulate nationwide radio communication by, among other things, preventing interference.**

## B. THE CASE

In March 1999, Koor brought a Petition for Declaratory Judgment that the City of Lebanon's *de facto* prohibition of all new AM broadcast antennas was illegal. In October 1999, Koor moved for partial summary judgment to construct its antennas in accordance with its FCC License and Construction Permit. (App. at 42).

The Superior Court (Fitzgerald, J.) denied summary judgment, finding disputed issues of material fact:

> [T]he court . . . finds that genuine issues of material fact remain with respect to whether the zoning ordinance actually conflicts with the federal law. The plaintiff contends, because the zoning ordinance limits towers to a maximum height of seventy-eight feet in any zone, (this is actually a maximum height of 42 feet), and because federal law requires a minimum height of 266 feet for AM radio station antenna towers, the zoning ordinance conflicts with federal law and effectively prohibits all AM radio stations. The defendant argues the plaintiff can construct AM radio station antenna towers that comply with both local and federal law. Thus, the issue of whether a conflict exists, that is, whether it is impossible to meet the requirements of both local and federal law, is properly reserved for the trier of fact. (Appendix at 402-07).

In April 2001, the City of Lebanon moved for summary judgment "because even assuming arguendo that all new AM towers are effectively precluded, the City's height restrictions are nevertheless legal and constitutional." (Appendix at 408). (See footnote [2])



[2] Koor's position was and is that, as a broadcaster, it is a First Amendment "speaker" subject to "reasonable, narrowly drawn statues [that] may regulate the time, place, and manner of expression but that . . . blanket prohibitions of expression are invalid. . ." Plaintiff's Memorandum in Support of Partial Summary Judgment, October 25, 1999, at 11.

> Broadcasting is clearly a medium affected by a First Amendment interest. United States v. Paramount Pictures, Inc., 334 U.S. 131, 166 (1948). "But the reach of radio signals is incomparably greater than the range of the human voice and the problem of interference is a massive realty." Red Lion Broadcasting Co. v. FCC, 395 U.S. 367, 387-88 (1969). "[I]f two broadcasters were to attempt to transmit over the same frequency in the same locale, they would interfere with one another's signals, so that neither could be heard at all. The scarcity of broadcast frequencies thus required the establishment of some regulatory mechanism to divide the electromagnetic spectrum. . . ." Turner Broadcasting System, Inc. v. FCC, 512 U.S. 622 (1994) (internal citations omitted). The FCC's regulation of minimum antenna heights, specifically required to avoid interference with other stations on the same or nearby frequencies, is a part of the regulatory mechanism. The City cannot create an effective total ban on this form of First Amendment speech by creating an effective total ban on new AM broadcasting. *See* Metromedia v. San Diego, 453 U.S. 490 (1981) (holding that a total ban on billboards was not a time, place and manner restriction). Under a First Amendment analysis, the City's height ordinance requires a higher level of scrutiny than an ordinary land use regulation.
>
> The City's response to Koor's claim of an effective total ban on First Amendment speech was that Koor "has provided no evidence that AM radio towers could not be constructed elsewhere in the City where allowed by special exception." Defendant's Objections and Response to Plaintiff's Motion for partial Summary Judgment, November 30, 1999, p. 19. This response ignores Koor's repeated citations to 47 CFR §73.190, Exhibit 7.
>
> The result of this thrust and parry on the First Amendment brings us back to the question of whether the FCC would permit an array of 42-foot antennas. To Koor, the answer is that the FCC regulations speak for themselves, do not permit 42-foot antennas in this instance due to interference problems, and the City's zoning bylaw is invalid as it is **both** preempted by Federal regulation and a violation of the First Amendment. See Letter of Peter H. Doyle, FCC, Appendix page 400.

The reference to constitutionality relates to Koor's claim made initially before the Superior Court that, as a First Amendment "speaker", Lebanon's local zoning and land use regulations deserve heightened scrutiny.

The Superior Court (Burling, J.) granted summary judgment for the City of Lebanon:

> The Communications Act of 1934 is the federal law at issue. There has been no evidence presented to this court that the act contained an expression from Congress to displace all state law that regulates, however tangentially, the construction of radio towers. To the contrary, the defendant presented evidence that the F.C.C. proposed pre-emptive rules for broadcast towers in 1997, but declined to adopt them. See D. Memo for s.j. at 7. Thus, the plaintiff failed to satisfy the first prong of the preemption test. See *Disabilities Rights Center*, 143 N.H. at 676.
>
> The court is not persuaded that implicit preemption exists in the case at bar.
>
> Implied preemption may be inferred from a scheme of federal regulation so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it, or where an Act of Congress touches a field in which the federal interest is so dominant that the federal system will be assumed to preclude enforcement of state laws on the same subject.
>
> *Bliss v. Stow Mills, Inc.*, N.H. (June 27, 2001) (quoting *English v. General Electric Co.*, 496 U.S. 72, 79 (1990)). The 1934 Act simply fails to rise to the level of expansiveness required under preemption analysis. The fact that the F.C.C. continues to propose regulations clearly evidences that implied preemption has not occurred.
>
> Finally, the court finds that there is no issue relating to an actual conflict between the local land use regulations and federal communications, when viewing the dispositive motion with the defendant as the moving party. The federal permits granted to the defendant ensure that the broadcast towers comply with federal standards. Local land use regulations govern the development patterns in the community. The court finds and rules that there is no actual conflict. See *Florida Lime and Avocado Growers, Inc. v. Paul*,

373 U.S. 132 (1963) (actual conflict occurs where compliance with both federal and state requirements is a physical impossibility). (Appendix at 637).

Koor appeals both the denial of its motion for partial summary judgment and the granting of the City's motion for summary judgment.

## SUMMARY OF THE ARGUMENT

Koor holds an FCC license for an AM broadcast station at 720 kHz. Under FCC regulation, the low frequency requires an antenna with a minimum height of 266 feet. The City of Lebanon's zoning ordinance permits broadcast station antennas only in the Rural Lands use district, where Koor proposes to erect its antenna. However, Lebanon permits such antennas only to a maximum height of 42 feet, which Koor claims is an effective blanket prohibition of all new AM broadcast station antennas in Lebanon.

**Federal Preemption (Questions 1-6 on Appeal)**

Koor claims that federal law preempts the local zoning ordinance with respect to AM broadcast antennas (other tower preemption cases such as cellular, amateur (ham) radio, and satellite are not relevant). The claim of preemption for AM broadcast antennas is based on field preemption because AM radio stations cannot interfere with each other. *Freeman v. Burlington Broadcasters*, 204 F.3d 311 (2d Cir. 2000), cert. denied, 531 US ___, 121 S.Ct. 276 (2000). Koor's preemption claim is also based on an actual conflict between the FCC's federal regulation (47 CFR §73.190) which requires a minimum height of 266 feet, and Lebanon's zoning ordinance which requires a maximum height of 42 feet.

**No Valid Public Purpose (Question 7 on Appeal)**

Koor also claims that the zoning ordinance is unreasonable, because it effectively bans an AM radio station, yet Congress has determined that such station licenses are granted in the public interest, convenience and necessity. The City's ordinance, which effectively prohibits all AM broadcast stations in every use district, is unreasonable as it fails to serve any reasonable community purpose. In fact, no purpose or rationale has ever been offered by the City for this *de facto* prohibition.

**Taking (Question 8 on Appeal)**

The City's effective prohibition of all AM broadcast stations due to its unreasonable antenna height restrictions is a "taking" of Koor's property interest in its FCC license without compensation.

**Conclusion**

While there is always a tension between landowners and zoning law, this case is special and unique because of the federal interests and the unreasonableness of the City's 42-foot antenna height restriction, creating an effective ban of all AM broadcast stations in the City. Koor seeks a judgment declaring that Lebanon's zoning ordinance cannot prevent Koor's construction of the antennas required by its FCC license.

## ARGUMENT

### I. Does Federal Regulation of AM Broadcast Stations Preempt the City of Lebanon's Prohibition of Broadcast Stations? (Questions on Appeal #1-5).

This is a case of first impression before this Court. The Superior Court's grant of summary judgment upholding the City of Lebanon's effective prohibition of Koor's newly licensed AM radio station is unreasonable and unlawful because:

(1) Federal regulation comprehensively regulates the technical issues of potential interference and signal strength (field preemption); tower height is a critical element of this regulation.

(2) There is an actual conflict between federal law and regulation which encourages AM radio broadcasting, and the City of Lebanon zoning ordinance which effectively prohibits all AM radio broadcasting. Compliance with both federal and local laws and regulations is physically impossible.

### A. Federal Law and Regulation Control AM Broadcasting

> . . . [T]he reach of radio signals is incomparably greater than the range of the human voice and **the problem of interference is a massive reality.**
>
> ****
>
> It was this fact, and the chaos which ensued from permitting anyone to use any frequency at whatever power level he wished, which made necessary the enactment of the Radio Act of 1927 and the Communications Act of 1934.

*Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 387-88 (1969) (emphasis added).

In 1934, the Federal Communications Act established the Federal Communications Commission:

> [F]or the purpose of regulating interstate and foreign commerce and communication by wire and radio so as to make available, so far as possible, to all the people of the United States a rapid, efficient, nationwide and worldwide wire and radio communications service with adequate facilities at reasonable charges for the purpose of the national defense, for the purpose of promoting safety of life and property through the use of wire and radio communication, and for the purpose of securing a more effective execution of this policy by centralizing authority heretofore granted by law to several agencies and by granting additional authority with respect to interstate and foreign commerce and wire and radio communication.

47 USC §151 (2000).

The Act applied to "all interstate and foreign communication by wire or radio . . . and to the licensing and regulating of all radio stations as hereinafter provided." Id. at §152.

Additional statutory authority for the FCC to promulgate regulations derives from the Congressional mandate for the "Commission from time to time, as public convenience, interest, or necessity requires" to promulgate "such rules and regulations and prescribe such restrictions and conditions . . . as may be necessary to carry out the provisions of this chapter . . . ." *Id.* §§303 and 303 (r).

FCC regulations for issuing licenses to broadcast stations are comprehensive and govern all AM broadcast stations. 47 C.F.R. §73, Subpart A ("AM Broadcast Stations") (2000). Under these regulations, the FCC may only authorize a new AM broadcast station upon a satisfactory showing that the proposed station, among other requirements:

*

(a) "will tend to effect a fair, efficient and equitable distribution of radio service among the several states and communities;"

(b) "complies with" these regulations;

****

(e) shall have "the technical equipment. . .[that will] . . . comply with the regulations governing same;"

****

(i) shall have a "daytime 5 mv/m contour [that] encompasses the entire principal community to be served. . . . [F]or stations in the 535-1605 kHz band, 80% of the principal community is encompassed by the nighttime 5 mv/m contour or the nighttime interference-free contour, whichever value is higher."

****

(k) [shall operate so] "that the public interest, convenience and necessity will be served."

47 CFR §73.24.

In addition, the applicant must be financially qualified and of good character. 47 CFR §73.24 (c) and (d).

The application "must specify a definite site and include full details of the antenna system and expected performance." In addition, the application "**must specify an antenna system, the efficiency of which complies with the requirements for the class and power of station.** (See §73.186 and 73.189)". 47 CFR §73.45 (emphasis added).

Furthermore, 47 CFR §73.189 (Appendix at 74-75) establishes "Minimum antenna heights":

> (a) Section 73.45 requires that all applicants for new . . . broadcast facilities . . . specify a radiating system, the efficiency of which complies with the requirements of good engineering for the class and power of the station.
>
> (b) The specifications deemed necessary to meet the requirements of good engineering practice at the present state of art are set out in detail below.
>
> ****
>
> (2) These minimum actual physical vertical heights of antennas [for an AM broadcast station-Class B, such as approved by the FCC for Koor] permitted to be installed are shown by curves A, B, and C of Figure 7 of Sec. 73.190.
>
> ****
>
> (6) The main element or elements of a directional antenna system shall meet the above minimum requirements, with respect to height or effective field strength.

47 CFR §73.189(a)(b)(2)(6).

Curve B of Figure 7 of §73.190 establishes the minimum antenna height for Koor's FCC-licensed AM broadcast station on 720 kHz, at 81.1 meters (266 feet). (Appendix at 76-77).

To find the correct curve on Figure 7, recall that Koor's license is for a Class B station, on a frequency of 720 kHz. See the "AM Broadcast Station Construction Permit". (Appendix at 51). Reading the curve for a Class B station at 720 kHz (shown in the figure as kilocycles, an older terminology) yields a "minimum vertical height of antennas permitted to be installed" (the caption) of 266 feet. See also, Statement of William J. Sitzman, consulting radio engineer. (Appendix at 120-128).

This minimum height requirement is part of the comprehensive technical regulations of the FCC to prevent interference with other broadcast stations.

Here, the minimum height requirement is critical to limit interference with WOR (New York City) and WGN (Chicago) to less than 0.500 millivolts/meter, and to provide more than 5.0 millivolts/meter for required service to the local community.

**B. Federal Preemption**

The Supremacy Clause of Article VI of the United States Constitution provides Congress with the power and right to preempt state law (including municipal regulation, which derives from state law). Federal law preempts city regulation where:

1. Congress expresses a clear intent to pre-empt state law or,
2. There is an outright or actual conflict between federal and state law or,
3. Compliance with both federal and state law is in effect physically impossible or,
4. There is implicit in federal law a barrier to state regulation or,
5. Congress has legislated comprehensively, thus occupying an entire field of regulation and leaving no room for states to supplement federal law or,
6. State law stands as an obstacle to the accomplishment and execution of the full objectives of Congress.

*Louisiana Public Service Com'n v. FCC*, 476 U.S. 355; 106 S. Ct. 1890, 1898 (1986).

Preemption may result not only from action taken by Congress itself, but by a federal agency acting within the scope of its congressionally delegated authority. *Id*. at 106 S.Ct. at 1898-99.

This case meets each of those alternative federal preemption tests set forth by the United States Supreme Court in *Louisiana Public Service Com'n v. FCC*:

1. **Clear intent:** The legislative history shows that a major purpose of the FCC is to create regulations which will minimize interstate interference between broadcasters. 47 USC §303.

2. **Actual conflict:** Here the federal minimum (266') and City maximum (42') antenna heights are in actual conflict.

3. **Compliance with both physically impossible:** An antenna cannot be two different heights in the same place at the same time.

4. **Implicit barrier to state regulation:** New Hampshire cannot exercise jurisdiction over WOR (New York) or WGN (Chicago).

5. **Congress has legislated comprehensively:** The mandate to the FCC . . . is a broad one, a power "not niggardly but expansive," *National Broadcasting Co. v. United States*, 319 U.S. 190 (1943).

6. **State law an obstacle to accomplishing the full objectives of Congress:** Antennas only 42 feet high are neither stable enough, nor efficient enough, to prevent interstate interference between broadcasters while allowing the station to serve its own local community.

Koor does not argue that there is no role for local regulation, just that height and other technical matters related to the avoidance of interference are preempted by federal regulation. So, for example, state building code requirements for windload on the tower, or fencing around it, as well as rational yard requirements would not be preempted.

"[L]ocal authority over siting of broadcast towers, based on considerations not within the exclusive regulatory authority of the FCC, remains unimpaired." *Freeman v. Burlington Broadcasters*, 204 F.3d 311, (2d Cir. 2000), cert. denied, 121 S.Ct. 276 (2000).

*Head v. New Mexico Board of Examiners in Optometry*, 374 U.S. 424 (1963), held that a state statute restricting the radio advertising of optometrists' prices was not preempted by the Federal Communications Act of 1934. But the Court's famous footnote stated:

> It is to be noted that this case in no way involves the Commission's jurisdiction over **technical matters**, such as a frequency allocation, over which federal control is clearly exclusive. 47 USC §301. *Head*, 374 U.S. at 430 n. 6 (emphasis added).

With respect to the technical matters surrounding interference, *Freeman v. Burlington Broadcasters*, *supra*, summarizes current law. There, the Second Circuit Court of Appeals held:

> This appeal raises a preemption issue pitting federal authority in the field of radio communications against local zoning authority. The precise issue is whether the Federal Communications Act of 1934, as amended (F.C.A.), and regulations promulgated by the Federal Communications Commission (F.C.C.) preempt a local zoning board's power to enforce a condition of a permit to construct and use a communications tower; the permit condition requires the permittee to remedy any radio frequency interference from tower signal with appliances and devices in local homes.
>
> ****
>
> This Circuit has not yet confronted the issue whether federal law preempts state and local regulation of RF interference. Of the various forms of federal preemption, the most pertinent to the pending inquiry is so-called "field preemption": state law is preempted when the "scheme of federal regulation [is]

so pervasive as to make reasonable the inference that Congress left no room for the States to supplement it" [Citations omitted]. As always the case in preemption analysis, Congressional intent is the "ultimate touchstone."[Citations omitted]. Consistent with this view of the importance of congressional intent, the Supreme Court has explained that "field pre-emption may be understood as a species of conflict pre-emption: a state law that falls within a pre-empted field conflicts with Congress' intent (either express or plainly implied) to exclude state regulation.

****

Several statutory provisions indicate the extent of the F.C.C.'s authority and responsibility to regulate radio broadcastings. 47 U.S.C. §151 states the purposes of the FCA, among them to "centraliz[e] authority heretofore granted by law to several agencies" in the FCC, and to "grant additional authority with respect to interstate and foreign commerce in wire and radio communication" to the FCC. Section 301 provides that "it is the purpose of this chapter, among other things, to maintain the control of the United States over all the channels of radio transmission" under licenses granted by the FCC in accordance with the FCA Subsection 307(b) requires the FCC to "make such distribution of licenses, frequencies, hours of operation, and of power among the several States and communities as to provide a fair, efficient, and equitable distribution of radio service to each.

****

Section 303 grants extensive powers to the FCC to regulate radio broadcasting technology and RF interference phenomena. Among other powers, subsection 303(d) empowers the FCC to "[d]etermine the location of classes of stations or individual stations." Subsection 303(e) empowers the FCC to "[r]egulate the kind of apparatus to be used with respect to its external effects and the purity and sharpness of the emissions from each station and from the apparatus therein." **Subsection 303(f) allows the FCC to "[m]ake such regulations not inconsistent with law as it may deem necessary to prevent interference between stations and to carry out the provisions of this chapter."** Subsection 303(h) confers "authority to establish areas or zones to be served by any station."

> These statutory provisions make it clear that Congress intended the FCC to possess exclusive authority over technical matters related to radio broadcasting. [Citations omitted]. This authority is embedded in the FCC's broad authority to develop a comprehensive national regulatory system governing telecommunications. [Citations omitted].
>
> ****
>
> . . . The FCC has exercised its rule-making power to extensively regulate the technologies involved in FM broadcasting.
>
> ****
>
> In light of our conclusion that Congress intended that the FCC enjoy exclusive jurisdiction to regulate RF interference phenomena, the FCC's regulations cannot be said to be anything other than reasonable interpretations of the scope of FCC authority, and thus are entitled to deference . . . [Citations omitted].

*Freeman*, 204 F. 3d 311 (2000). (Emphasis added.)

*Freeman* involved an FM station, and the case at bar involves an AM station. However, except for the difference between AM and FM modulation, the frequencies involved, and the added *regulation-required minimum height* for a Class B station at 720 kHz, there is no material difference in the law, as each case calls for the preemption of a local land use regulation which conflicts with the field preemption for interference.

*See also, Southwestern Bell Wireless Inc. v. Johnson County Board Of County Commissioners*, 199 F.3d 1185, 1193 (10th Cir. 1999), *cert. denied*, 2000 WL 343599(2000) (holding that to allow local zoning authorities to condition construction and use permits on any requirement to eliminate or remedy interference "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress"); and

*Broyde v. Gotham Tower*, 13 F.3d 994, 997 (6th Cir., 1994) (affirming dismissal of nuisance suit regarding interference with home electronic equipment because interference falls within the FCC's exclusive jurisdiction over radio transmission technical matters).

### C. Koor's Antennas Raise Technical Issues Preempted By Federal Law

The Superior Court was mistaken in holding that FCC minimum height requirements are not technical issues. Furthermore, the Superior Court's statement that "[l]ocal land use regulations govern the development patterns in the community" although true, is not controlling on the question of preemption.

The City has written, and Koor agrees, that "[t]here is no dispute that federal law would pre-empt local regulation of the technical aspects of telecommunications facilities." City's Motion for Summary Affirmance, August 20, 2001, at 4. "There is also no dispute that under Section 151 of the Communications Act of 1934, the jurisdiction of the FCC over **technical** aspects of AM radio, such as frequency and interference matters, is exclusive. *Head of New Mexico Board of Examiners in Optometry*, 374 U.S. 424 (1963)." City of Lebanon's Memorandum of Law on the Absence of Federal Preemption, August 20, 2001, at 2. (emphasis in the original.)

The question before the Court, then, is really whether this case is about technical aspects of a telecommunications facility, such as frequency and interference matters. Koor's answer is: Yes! This is technical.

The City takes the position "that FCC approval can be obtained under varying factual possibilities, and the applicant has some freedom and flexibility in designing AM station facilities. The applicant can change one or more variables and the required antenna height will vary." (Appendix at 357). Therefore, the City argues, Koor is not effectively prohibited from broadcasting, it just must do so with antennas no higher than 42 feet. This is effective prohibition! No design with antenna heights of less than 266 feet, much less 42 feet, will meet the requirements of the FCC set forth in 47 CFR §73.190.

The City itself has not met the requirement of 47 CFR §73.189 (5):

> In case it is contended that the required antenna **efficiency** can be obtained with an antenna of height or ground system less than the minimum specified, a complete field strength survey must be supplied to the Commission showing that the field strength at a mile without absorption fulfills the minimum requirements. (See §73.186)" This field survey must be made by a qualified engineer using equipment of acceptable accuracy.

47 CFR §73.189 (5) (emphasis added).

Koor, through its engineers, knows that this is impossible. Yet this is exactly what the City tries to do, i.e., contend that the **required antenna efficiency** can be obtained with an antenna of a height less than the minimum specified.

> Defendant disputes the allegation that Plaintiff cannot construct an AM radio tower lower than 266 feet, or within the limits prescribed by the City's ordinance. (Appendix at 359).

However, the City never supplied the FCC or the trial court with such a field survey made by a qualified engineer. It provided the affidavit of its own attorney attesting to a

dubious magazine article downloaded from the internet and a telephone conversation with a "representative" of the FCC. (Appendix at 400-01). Here, the City cites the example of a claim made by press release in a trade publication to the effect that such a shorter (21 foot) antenna system exists somewhere in Egypt. Even the trade publication was skeptical, a skepticism betrayed by the article's title: "Is This AM Antenna For Real?" (Appendix at 359). Even if such an antenna is real in Egypt (and Koor asserts that the design, now several years old and still unproven by field tests, is a hoax), the City provides no claim or authority that this antenna could *ever meet United States FCC requirements.* It cannot.

Here, the minimum height is required, among other reasons, to avoid interference with other broadcasters, in particular WOR in New York City and WGN in Chicago. (Appendix 210-214). The City's great difficulty is that it has not recognized interference as one of the principal reasons the FCC requires actual minimum physical antenna heights. Interference, or "overlap of signal strength contours with any other station", is governed by FCC regulation, 47 CFR §73.37(a). This is one of the technical rationales for the height requirement. Thus, it is the FCC, not Koor, that has determined that 266 feet (47 CFR §73.190, Figure 7) is the minimum required height, or, if a single tower antenna system were possible, 137 feet would be the minimum height. (Appendix at 400). (Note: A single tower is not possible in this case, as a directional array to prevent forbidden interference is required.)

In this case, the FCC specifically wrote to Koor, stating:

> We do not believe that it would be possible to design a transmission system that relies on 42-foot towers and also meets minimum efficiency requirements. **Thus, we agree with your conclusion that the City of Lebanon zoning policies effectively prevent construction of your proposed AM broadcast facility.**

(Letter from Peter H. Doyle, Deputy Chief, FCC Mass Media Bureau/Audio Services Division, February 26, 1999, Appendix at 400-01). (Emphasis added).

This is a particular field where Congress has granted exclusive regulatory power to the FCC. Here there is also an actual conflict between local and federal law, as it is impossible to construe the City Zoning Ordinance and 47 CFR §§73.189 and 73.190, Figure 7 in a non-conflicting manner. The City prohibits tower heights over 42 feet, while the FCC prohibits a tower array height for a Class B station at 720 kHz below 266 feet.

It appears that this case is special in the history of the tension between local zoning law and FCC regulation, because it presents, for the first time, the need to use an antenna of a minimum height specified by FCC regulations to avoid "the overlap of signal strength contours with any other station." See, 47 CFR §73.37(a). Thus, in this case, and in no other previously decided antenna case, federal regulations determine the minimum antenna height in conjunction with interference requirements.

For purposes of this analysis, the existing preemptions for antenna systems used in 1) cellular telephone (47 USC §332 (a)(7)(B), where the test is effective prohibition or significant gaps); 2) amateur radio (47 CFR §97.15(b), where the test is accommodation);

3) satellite and over-the-air-TV reception (47 CFR §1.4000, where the test is a signal satisfactory to the viewer); or 4) other FCC-regulated services, are not directly on point.

Nor is the history of litigation over amateur, as opposed to commercial, radio towers directly on point. A series of court challenges to local regulation have confirmed the FCC Order of September 1985: "State and local regulations that operate to preclude amateur communications in their communities are in direct conflict with federal objectives and must be preempted." *Bodony v. Incorporated Village*, 681 F.Supp. 1009 (D.N.Y. 1987); *McMillan v. City of Rocky River*, 748 F. Supp. 1241 (D. Ohio 1990); Pentel v. City of Mendota Heights, 13 F.3d 1261 (8th Cir. 1994). *See also*, Phillip E. Hassman, Annotation, *Application of Zoning Regulation to Radio or Television Facilities*, 81 ALR 3d 1086 (1977).

However, generally these preemption cases all stand for the proposition that a community cannot simply prohibit modern communications, regulated by the FCC, of whatever type.

**D. The FCC's Failure to Adopt a Proposed Rule**

The City makes much of the fact that the FCC once proposed a sweeping preemption for a wide variety of broadcast station antenna systems:

> The ***best*** indication that there is ***no*** federal preemption of broadcast towers is the fact that the FCC did indeed ***propose*** preemptive rules for broadcast towers in 1997 but has declined to adopt them. The rules were proposed in response to

> the desire of television stations to alter their facilities to implement digital television. See FCC Docket No 97-296, "Preemption of State and Local Zoning and Land Use Restrictions on the Placement and Construction of Broadcast Transmission Facilities," Notice of Proposed Rulemaking, 62 Fed. Reg. 46241 (Sept. 2, 1997).

City of Lebanon's Memorandum of Law in Support of its Motion for Summary Judgment, April 9, 2001, at 7.

The Superior Court emphasized the FCC's failure to adopt this proposed rule in its opinion. The FCC's failure to adopt proposed rules concerning **digital television** is irrelevant to the prior existing AM radio rules. At the FCC, there are dramatic differences between the rules and regulations for radio versus television.

In fact, the FCC recognized the extreme breadth of the proposed rule and wrote: "The Petitioners' proposed rule would cover siting of all broadcast transmission facilities construction." FCC Notice of Proposed Rulemaking, Docket No. 97-296 at ¶16. It would have covered, among other things, high powered large dish satellite uplinks, satellite downlinks, studio-to-transmitter links, short-wave broadcast transmission antennas for international broadcasting, analog TV, digital TV, FM radio (both analog and digital), AM radio (both analog and digital), and so forth, as well as environmental or health effects (Id. at Appendix B, §(3)(b)(1)(i)), and lighting, painting and marking requirements (Id. at Appendix B, §(3)(b)(1)(iii)). Furthermore, the FCC hinted in its Notice that part of the proposed rule was unnecessary.

> "As a preliminary matter, we note that it is well settled that the Communications Act of 1934, as amended ("Communications Act"), *comprehensively provides for regulation of radio frequency interference and that the FCC has exclusive jurisdiction to resolve such questions."*

*Id.* at §12 (footnotes omitted) (emphasis added).

The proposed rule would have swept across many sections of Part 47 of the Code of Federal Regulations, in the process modifying the FCC's already adopted rules. As a result of the petition, the FCC simply failed to act. Is "doing nothing" the strongest argument the City can muster? In its Notice, the FCC reaffirmed its power to regulate interference and left the relevant law (47 CFR §§73.24; 73.45, 73.189 and 73.190) untouched and intact.

**E. Standards for Summary Judgment**

RSA 491:8-a requires that in responding to summary judgment the City must raise a "genuine issue as to any material fact." In order to do so, the City claimed that a 42-foot antenna would satisfy City regulations, and could also satisfy FCC requirements. But it provided no sufficient grounds to support this factual claim.

The City's attorney, Mr. Ellis, provided his own personal affidavit on behalf of his client for summary judgment (Appendix at 373) attesting:

- to a magazine article he downloaded from the internet about an alleged 21 foot Egyptian AM radio antenna (Appendix at 382-388);

- to a telephone conversation with James Crutchfield, an FCC "representative" who indicated that antenna height will vary based on variables chosen by the applicant. (Appendix at 373).

But Attorney Ellis did not claim that Mr. Crutchfield told him that any antennas could satisfy the City's 42 foot height limitation. To the contrary, Mr. Peter Doyle, Deputy Chief of the FCC's Mass Media Bureau/Audio Service Division, confirmed that such a 42 foot antenna could not satisfy federal regulations. (Appendix at page 400-01).

In fact, on behalf of the FCC, Mr. Doyle stated:

> **"Moreover, we do not believe that it would be possible to design a transmission system that relies on 42-foot towers and also meets minimum efficiency requirements. Thus, we agree with your conclusion that the City of Lebanon zoning policies effectively prevent construction of your proposed AM broadcasting facility."** (Appendix at 400). (Emphasis added).

Even assuming, *arguendo*, that the facts set forth in the City's affidavit provided for summary judgment purposes are true (i.e., essentially that Koor can design and construct, on variables chosen by it, an antenna that will satisfy City zoning requirements), such as an antenna still cannot meet FCC requirements which demand a 266 foot minimum height. The trial court's April, 2000 order denying Koor's Motion for Summary Judgment (Appendix at 402) on the basis of the City's claim that Koor "can construct AM radio station antenna towers that comply with both local and federal law" was clearly mistaken.

**II. Was the Superior Court Mistaken in Holding That the City's Prohibition was Justified by a Valid Public Purpose? (Question on Appeal 6).**

The City points out in its Motion for Summary Judgment that the City has "eleven telecommunications towers in Lebanon - more than twice as many as in any neighboring community" and has recently allowed the expansion of the Chiplin tower from 80 feet to 170 feet. (Appendix at 409, *see also* at 324).

Under the prior Lebanon Zoning Ordinance, "radio and TV towers" were generally permitted as "essential services." (Appendix at 275- see Sections 209.5E and Sections 204.1-204.11). Between the first and second draft of the proposed new 1990 Zoning Ordinance, "radio and TV towers" were dropped from the definition of "essential services" without explanation. (Appendix at 319-324). They were then effectively prohibited by the new 1990 Zoning Ordinance, again without explanation.

In April 1998, Ms. Hennessy, the Lebanon Codes Enforcement Director, "suggested" that the ordinance be amended to provide that "the maximum height for Radio and/or TV towers shall not exceed that required by the Federal Communications Commission." (Appendix at 333) (emphasis in original).

In May 1998, the City Council responded that it was "presently in the process of developing a set of regulations regarding communication towers." (Appendix at 337). City "staff has not completed their investigation and review." (Appendix at 340).

In October 1998, the City Council again confirmed that "City Staff is in the process of reviewing towers at the administration level." (Appendix at 349). In January 1999, the city informed Koor that when the City's attorney had a draft ready, Koor would receive a copy. (Appendix at 351).

Nothing was ever received by Koor. In pretrial discovery, the City stated that there was "no investigation" into allowing towers, and the only memorandum from its counsel was privileged. (Appendix at 328).

The City has provided no rationale for allowing eleven radio towers, then allowing the expansion of existing towers, and now effectively prohibiting Koor's tower.

Zoning restrictions are only allowed when they serve a reasonable community purpose. 15 P. Loughlin, New Hampshire Practice, *Land Use Planning and Zoning* §§2.04 and 2.05 (3d ed. 2000); *L. Grossman & Sons, Inc. v. Town of Gilford*, 118 N.H. 480 (1978); *Carey v. Town of Westmoreland*, 120 N.H. 374 (1980).

The City's unexplained change in its Ordinance, effectively prohibiting all AM broadcasting stations throughout the City, serves no reasonable community purpose. As the New Hampshire Supreme Court very recently held:

> Inevitably and necessarily there is a tension between zoning ordinances and property rights, as courts balance the right of citizens to the enjoyment of private property with the right of municipalities to restrict property use. In this balancing process, constitutional property rights must be respected and protected from unreasonable zoning restrictions. The New Hampshire Constitution guarantees all persons the right to acquire, possess and protect property. *See*

> N.H. Const. pt. I, arts. 2, 12. These guarantees limit all grants of power to the State that deprive individuals of the reasonable use of their land.

*Simplex Technologies, Inc. v. Town of Newington,* N.H. , 766 A.2d 713 (January 29, 2001).

*Britton v. Town of Chester*, 134 N.H. 434 (1991), upheld a challenge to a zoning ordinance which appeared to allow multi-family housing on its face, but essentially prohibited multi-family housing through its regulations.

> "Municipalities are not isolated enclaves, far removed from the concerns of the area in which they are situated." *Id*. at 441.

Obviously, the Britton Court's recognition that legal zoning **regulation** may become illegal zoning **prohibition** supports Koor's case.

The City of Lebanon has quoted *Rockingham Hotel Co. v. North Hampton*, 101 N.H. 441 (1958) as the bedrock upon which it claims that "(a) zoning restriction is not invalid merely because a particular use is excluded from a municipality." City of Lebanon's Memorandum of Law in Support of its Motion for Summary Judgment, April 9, 2001, at 12. The wording favored by Lebanon is:

> Nor is it necessarily arbitrary and unreasonable for a residential village to pass an ordinance preserving its residential character, so long as the business and industrial needs of its inhabitants are supplied by other accessible areas **in the community at large**. *Rockingham Hotel*, at 444 (emphasis added).

It is unfortunate that Lebanon relies so heavily on that case, as it involved an ordinance which entirely prohibited billboards, and is no longer valid law. That case was

overturned by implication in *Metromedia v. San Diego*, 453 U.S. 490 (1981) (holding that a total ban on billboards is unlawful). However, even if Rockingham Hotel were still good law, it does not apply here. Lebanon is not a residential village, it is a large municipality with a variety of diverse use districts ranging from heavy industrial to rural lands. It includes everything from a congested strip of shopping plazas, a historic district, farms, and industry. Koor would happily locate its antenna in the industrial, commercial or other appropriate use districts in the City. There is no valid public purpose for a blanket prohibition of all AM broadcast radio antenna (of an FCC-mandated minimum height) throughout the city.

**III. Does the Law Recognize a Takings Claim Where the City of Lebanon Takes Koor's License? (Question on Appeal 7).**

The City argued that Koor's FCC license was a property interest for purposes of the due process clause, citing *Appeal of Plantier*, 126 N.H. 500 (1985), but not for purposes of the takings clause, citing no case law.

The Superior Court granted summary judgment dismissing Koor's takings claim. The Court held that assuming an invalid ordinance, there could be no takings claim and a license is not property.

The Fifth and Fourteenth Amendments to the United States Constitution protect the property rights of Koor against deprivation by the City of Lebanon. *See also*, 16A

Am. Jur. 2d *Constitutional Law*; §§580-586 and 590 (1979). This is the right protected by *Appeal of Plantier*, *supra*.

## CONCLUSION

Though Koor is quite mindful of the fact that the cellular telephone preemption at the heart of *Omnipoint Communications v. Town of Lincoln* is not controlling law in the case at bar, the August 2, 2000 decision of United States District Court Judge Edward F. Harrington offers this Court a philosophy we commend to this Court's attention. In that case, Judge Harrington wrote:

> This case dramatizes the perpetual clash between national and local interests and between material progress and natural beauty. In the Nineteenth Century railroad tracks were layed by Walden Pond; in the Twentieth Century telephone poles were the trees that grew on urban streets; in the Twenty-First Century wireless towers will become familiar landmarks across the suburban landscape. A universal technological advance cannot be permanently stayed by a local stratagem devised to preserve the character and beauty of a locality. The enduring principle of local control of land use shall be honored, but only if a federal law which promotes the establishment of a comprehensive nationwide wireless communication network is not thereby subverted. For good or for ill, Hamilton's, not Jefferson's, vision of America has prevailed.

*Omnipoint Communications v. Town of Lincoln*, 107 F. Supp. 2d 108 (D. Mass. 2000).

## RELIEF REQUESTED

Koor Communications respectfully requests that this Honorable Court enter partial summary judgment in favor of Koor in accordance with its motion of November 20, 1997 (Appendix at 42), or in the alternative, reverse the Superior Court's order of July 11, 2001 granting summary judgment to the City. (Appendix at 637).

## REQUEST FOR ORAL ARGUMENT

Plaintiff requests the opportunity to present oral argument not to exceed 15 minutes, to be presented by K. William Clauson, Esq.

Respectfully submitted,

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