930428IC

ORIGINAL

WPKN
89.5fm

244 University Avenue
Bridgeport, Connecticut 06604-5700

(203) 576-4895 / 576-4540
Special Events - Answering Machine: 576-4090

Ms. Donna R. Searcy, Secretary
Federal Communications Commission
1919 M. Street, N.W. - Room 222
Wsdhington DC 20554

RE: Form 340 Application (replacement)
in response to FCC letter 1800B3-EPD
BPED-930405IK

Dear Ms. Searcy:

Enclosed are an original and two copies of Form 340 Application For Construction Permit, replacing the earlier Form 340 which was filed with your office on 5 April 1993, in response to FCC letter 1800B3-EPD.

The enclosed Form 340 takes note of a pre-existing change in overall tower height above ground level which resulted from previous construction by another tenant on the tower which we occupy. It also calls for an adjustment of effective radiated power to eliminate the possibility of interference to a co-channel station. Detailed engineering data are included.

Respectfully Submitted,

Henry D. Minot
President / General Manager

LCJ
5/3/93

Federal Communications Commission
Washington, D. C. 20554

FCC 340

Approved by OMB
3060-0034
Expires 11/30/94
See Page 23 for information regarding public burden estimate

APPLICATION FOR CONSTRUCTION PERMIT FOR NONCOMMERCIAL EDUCATIONAL BROADCAST STATION

(Carefully read instructions before filing form) Return only form to FCC

ORIGINAL

For Commission Use Only
APR 29 2 59 PM '93
File No. BPED-881212IC

RECEIVED
APR 28 1993
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Section I - GENERAL INFORMATION

1. Name of Applicant		
WPKN, Inc. WPKN Radio		
Street Address or P.O. Box 244 University Avenue		
City Bridgeport	State CT	ZIP Code 06601
Telephone No. (Include Area Code) (203)576-4895 or 4540		

Send notices and communications to the following person at the address below:		
Name Henry D. Minot - Pres./Gen. Mgr WPKN Radio		
Street Address or P.O. Box 244 University Avenue		
City Bridgeport	State CT	ZIP Code 06601
Telephone No. (Include Area Code) (203)576-4895 or 4540		

2. This application is for: ☐ AM ☒ FM ☐ TV

(a) Channel No. or Frequency	(b) Principal Community	City	State
208		Bridgeport	CT

(c) Check one of the following boxes:

☐ Application for **NEW** station

☐ **MAJOR** change in licensed facilities; call sign: .....

☐ **MINOR** change in licensed facilities; call sign: .....

☐ **MAJOR** modification of construction permit; call sign: .....

File No. of construction permit: .....

☒ **MINOR** modification of construction permit; call sign: WPKN(FM)

File No. of construction permit: BPED-881212IC

☐ **AMENDMENT** to pending application; application file number: .....

NOTE: It is not necessary to use this form to amend a previously filed application. Should you do so, however, please submit only Section I and those other portions of the form that contain the amended information.

3. Is this application mutually exclusive with a renewal application? ☐ Yes ☒ No

If Yes, state:	Call letters	Community of License	
		City	State

SECTION VI – EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. Does the applicant propose to employ five or more full-time employees? ☐ Yes ☐ No

If Yes, the applicant must include an EEO program called for in the separate Broadcast Equal Employment Opportunity Program Report (FCC 396-A).

SECTION VII – CERTIFICATION

1. Has or will the applicant comply with the public notice requirements of 47 C.F.R. Section 73.3580? ☒ Yes ☐ No

2. By checking Yes, the applicant certifies that, in the case of an individual applicant, he or she is not subject to a denial of federal benefits that includes FCC benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. 862, or, in the case of a non-individual applicant (e.g., corporation, partnership or other unincorporated association), no party to the application is subject to a denial of federal benefits that includes FCC benefits pursuant to that section. For the definition of a "party" for these purposes, see 47 C.F.R. Section 1.2002(b). ☒ Yes ☐ No

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. *(See Section 304 of the Communications Act of 1934, as amended.)*

The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

The APPLICANT represents that this application is not filed for the purpose of impeding, obstructing, or delaying determination on any other application with which it may be in conflict.

In accordance with 47 C.F.R. Section 1.65, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND/OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a)(1)), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503).

I certify that the statements in this application are true and correct to the best of my knowledge and belief, and are made in good faith.

Name of Applicant	Title
WPKN, Inc. / WPKN Radio	Henry D. Minot President / General Manager
Signature Henry D. Minot	Date 19 April 1993

FCC NOTICE TO INDIVIDUALS REQUIRED BY THE PRIVACY ACT AND THE PAPERWORK REDUCTION ACT

The solicitation of personal information requested in this application is authorized by the Communications Act of 1934, as amended. The Commission will use the information provided in this form to determine whether grant of this application is in the public interest. In reaching that determination, or for law enforcement purposes, it may be necessary to refer personal information contained in this form to another government agency. In addition, all information provided in this form will be available for public inspection. If information requested on the form is not provided, processing of the application may be delayed or the application may be returned without action pursuant to the Commission's rules. Your response is required to obtain the requested authority.

Public reporting burden for this collection of information is estimated to vary from 78 to 302 hours 20 minutes with an average of 171 hours 36 minutes per response. These estimates includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Information Resources Branch, Room 416, Paperwork Reduction Project, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3060-0034), Washington, D.C. 20503.

THE FOREGOING NOTICE IS REQUIRED BY THE PRIVACY ACT OF 1974, P.L. 93-579, DECEMBER 31, 1974, 5 U.S.C. 552a(e)(3), AND THE PAPERWORK REDUCTION ACT OF 1980, P.L. 96-511, DECEMBER 11, 1980, 44 U.S.C. 3507.

Section V-B - FM BROADCAST ENGINEERING DATA	FOR COMMISSION USE ONLY File No. _____ ASB Referral Date _____ Referred by _____

Name of Applicant

WPKN Inc. Bridgeport, Connecticut

Call letters *(if issued)*	Is this application being filed in response to a window? ☐ Yes ☒ No
WPKN (FM)	If Yes, specify closing date: _____

Purpose of Application: *(check appropriate box(es))*

- ☐ Construct a new (main) facility
- ☐ Construct a new auxiliary facility
- ☒ Modify existing construction permit for main facility
- ☐ Modify existing construction permit for auxiliary facility
- ☐ Modify licensed main facility
- ☐ Modify licensed auxiliary facility

If purpose is to modify, indicate below the nature of change(s) and specify the file number(s) of the authorizations affected.

- ☒ Antenna supporting-structure height
- ☒ Effective radiated power
- ☐ Antenna height above average terrain
- ☐ Frequency
- ☐ Antenna location
- ☐ Class
- ☐ Main Studio location
- ☒ Other *(Summarize briefly)* Change in Antenna Directional Pattern to that listed in the Engineering Report attached - measured Pattern - Shively Type 6015-2/3R-DA Dated June 1, 1989 - Project No. 12913

File Number(s) BPED-881212IC

1. Allocation:

Channel No.	Principal community to be served: City	County	State
208	Bridgeport	Fairfield	Ct

Class *(check only one box below)*

☐ A ☐ B1 ☒ B ☐ C3 ☐ C2 ☐ C1 ☐ C ☐ D

2. Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.

Booth Hill, Video Lane -- Trumbull, Fairfield, Connecticut

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.

Latitude	41 °	16 '	43 "	Longitude	73 °	11 '	08 "

3. Is the supporting structure the same as that of another station(s) or proposed in another pending application(s)? ☒ Yes ☐ No

If Yes, give call letter(s) or file number(s) or both. WSHU(FM) WEZN(FM WEDW(TV)

If proposal involves a change in height of an existing structure, specify existing height above ground level including antenna, all other appurtenances, and lighting, if any.

490' (149.4 m)

4. Does the application propose to correct previous site coordinates? ☐ Yes ☒ No
If Yes, list old coordinates.

Latitude	° ' "	Longitude	° ' "

5. Has the FAA been notified of the proposed construction? ☒ Yes ☐ No
If Yes, give date and office where notice was filed and attach as an Exhibit a copy of FAA determination, if available. Exhibit No.

Date May 27, 1986 Office where filed Filed by WEDW(TV) Burlington, Mass.

6. List all landing areas within 8 km of antenna site. Specify distance and bearing from structure to nearest point of the nearest runway.

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Nearest airfield is 8.2 miles distant		
(b)			

7. (a) Elevation: *(to the nearest meter)*

(1) of site above mean sea level; 161.2 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 149.4 meters

(3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 310.6 meters

(b) Height of radiation center: *(to the nearest meter)* H = Horizontal; V = Vertical

(1) above ground 91.4 meters (H)
91.4 meters (V)

(2) above mean sea level [(aX1) + (bX1)] 252.7 meters (H)
252.7 meters (V)

(3) above average terrain 168.7 meters (H)
168.7 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(bX3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator. Exhibit No. Eng

9. Effective Radiated Power:
(a) ERP in the horizontal plane 9.0 kw (H*) 9.0 kw (V*)

(b) Is beam tilt proposed? ☐ Yes ☒ No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field. Exhibit No.

_____ kw (H*) _____ kw (V*)

*Polarization

10. Is a directional antenna proposed? [XX] Yes [ ] No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of horizontally and vertically polarized radiated components in terms of relative field. Exhibit No.

11. Will the main studio be located within the 70 dBu or 3.16 mV/m contour? [XX] Yes [ ] No

If No, attach as an Exhibit justification pursuant to 47 C.F.R. Section 73.1125. Exhibit No.

12. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast *(except citizens band or amateur)* radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference? [XX] Yes [ ] No

On File – No Change – Existing Facility

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. *(See 47 C.F.R. Sections 73.315(b), 73.316(d) and 73.318.)* Exhibit No.

On File – No Change – Existing Facility

13. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction D for Section V. Further, the map must clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers. Exhibit No.

On File – No Change – Existing facility

14. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers: Exhibit No.

On File – No Change – Existing Facility

(a) the proposed transmitter location, and the radials along with profile graphs have been prepared;

(b) the 1 mV/m predicted contour and, for noncommercial educational applicants applying on a commercial channel, the 3.16 mV/m contour; and

(c) the legal boundaries of the principal community to be served.

15. Specify area in square kilometers (1 sq. mi. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

DNA

Area _____ sq. km. Population _____

16. Attach as an Exhibit a map *(Sectional Aeronautical charts where obtainable)* showing the present and proposed 1 mV/m (60 dbu) contours. Exhibit No.

DNA – On File – No Change

Enter the following from Exhibit above:

Gain Area _____ sq. mi.

Loss Area _____ sq. mi.

Percent change (gain area plus loss area as percentage of present area) _____ %.

If 50% or more this constitutes a major change. Indicate in question 2(c), Section I, accordingly.

17. For an application involving an auxiliary facility only, attach as an Exhibit a map *(Sectional Aeronautical Chart or equivalent)* that shows clearly, legibly, and accurately, and with latitude and longitude markings and a scale of distance in kilometers: DNA

Exhibit No.

(a) the proposed auxiliary 1 mV/m contour; and

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license. See 47 C.F.R. Section 73.1675. (File No.:_____)

18. Terrain and coverage data *(to be calculated in accordance with 47 C.F.R. Section 73.313).*

Source of terrain data: *(check only one box below)*

[XX] Linearly interpolated 30-second database [ ] 7.5 minute topographic map

(Source: NGDC Database)

[ ] Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances to the 1 mV/m contour (kilometers)
0	129.2	34.3
45	158.8	36.6
90	197.6	40.1
135	226.4	43.9
180	236.7	42.5
225	170.5	30.7
270	129.9	25.0
315	100.9	28.4

Allocation Studies

(See Subpart C of 47 C.F.R. Part 73)

19. Is the proposed antenna location within 320 kilometers (199 miles) of the common border between the United States and Mexico? [ ] Yes [XX] No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Agreement between the United States of America and the United Mexican States concerning Frequency Modulation Broadcasting in the 88 to 108 MHz band.

Exhibit No.

20. Is the proposed antenna location within 320 kilometers of the common border between the United States and Canada? ☐ Yes ☒ No

If Yes, attach as an Exhibit a showing of compliance with all provisions of the Working Agreement for Allocation of FM Broadcasting Stations on Channels 201-300 under The Canada-United States FM Agreement of 1947. Exhibit No.

21. If the proposed operation is for a channel in the range from channel 201 through 220 (88.1 through 91.9 MHz), or if this proposed operation is for a class D station in the range from Channel 221 through 300 (92.1 through 107.9 MHz), attach as an Exhibit a complete allocation study to establish the lack of prohibited overlap of contours with other U.S. stations. The allocation study should include the following: Exhibit No. Eng

(a) The normally protected interference-free and the interfering contours for the proposed operation along all azimuths.
(b) Complete normally protected interference-free contours of all other proposals and existing stations to which objectionable interference would be caused.
(c) Interfering contours over pertinent arcs of all other proposals and existing stations from which objectionable interference would be received.
(d) Normally protected and interfering contours over pertinent arcs, of all other proposals and existing stations, which require study to show the absence of objectionable interference.
(e) Plot of the transmitter location of each station or proposal requiring investigation, with identifying call letters, file numbers and operating or proposed facilities.
(f) When necessary to show more detail, an additional allocation study will be attached utilizing a map with a larger scale to clearly show interference or absence thereof.
(g) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire Exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(h) The name of the map(s) used in the Exhibit(s).

22. With regard to any stations separated by 53 or 54 channels (10.6 or 10.8 MHz) attach as an Exhibit information required in 1/ *(separation requirements involving intermediate frequency (i.f.) interference).* Exhibit No.

On File – No Change – Existing Facility

23.(a) Is the proposed operation on Channel 218, 219, or 220? ☐ Yes ☒ No

(b) If the answer to (a) is yes, does the proposed operation satisfy the requirements of 47 C.F.R. Section 73.207? ☐ Yes ☐ No

(c) If the answer to (b) is yes, attach as an Exhibit information required in 1/ regarding separation requirements with respect to stations on Channels 221, 222 and 223. Exhibit No.

(d) If the answer to (b) is no, attach as an Exhibit a statement describing the short spacing(s) and how it or they arose. Exhibit No.

1/ A showing that the proposed operation meets the minimum distance separation requirements. Include existing stations, proposed stations, and cities which appear in the Table of Allotments; the location and geographic coordinates of each antenna, proposed antenna or reference point, as appropriate; and distance to each from proposed antenna location.

(e) If authorization pursuant to 47 C.F.R. Section 73.215 is requested, attach as an Exhibit a complete engineering study to establish the lack of prohibited overlap of contours involving affected stations. The engineering study must include the following: DNA

Exhibit No.

(1) Protected and interfering contours, in all directions (360), for the proposed operation.
(2) Protected and interfering contours, over pertinent arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as transmitter location.
(3) When necessary to show more detail, an additional allocation study utilizing a map with a larger scale to clearly show prohibited overlap will not occur.
(4) A scale of kilometers and properly labeled longitude and latitude lines, shown across the entire exhibit(s). Sufficient lines should be shown so that the location of the sites may be verified.
(5) The official title(s) of the map(s) used in the exhibits(s).

24. Is the proposed station for a channel in the range from Channel 201 to 220 (88.1 through 91.9 MHz) and the proposed antenna location within the distance to an affected TV Channel 6 station(s) as defined in 47 C.F.R. Section 73.525? No Change - On File - Existing Facility ☐ Yes ☐ No

If Yes, attach as an Exhibit either a TV Channel 6 agreement letter dated and signed by both parties or a map and an engineering statement with calculations demonstrating compliance with 47 C.F.R. Section 73.525 for each affected TV Channel 6 station. Exhibit No.

25. Is the proposed station for a channel in the range from Channel 221 to 300 (92.1-107.9 MHz)? ☐ Yes ☒ No

If Yes, attach as an Exhibit information required in 1/. *(Except for Class D (secondary) proposals.)* Exhibit No.

26. Environmental Statement *(See 47 C.F.R. Section 1.1301 et seq.)* On File - Existing Facility

Would a Commission grant of this application come within Section 1.1307 of the FCC Rules, such that it may have a significant environmental impact? ☐ Yes ☒ No

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311. Exhibit No.

If No, explain briefly why not. Existing Facility -- No Changes made by Applicant

CERTIFICATION

I certify that I have prepared this Section of this application on behalf of the applicant, and that after such preparation, I have examined the foregoing and found it to be accurate and true to the best of my knowledge and belief.

Name *(Typed or Printed)* RALPH T. WINQUIST Consulting Engineer LAKE WORTH, FLORIDA	Relationship to Applicant *(e.g., Consulting Engineer)* Consulting Engineer
Signature	Address *(Include ZIP Code)* RALPH T. WINQUIST P.O. BOX 6668 LAKE WORTH, FLA. 33466
Date April 11, 1993	Telephone No. *(Include Area Code)* (407) 964-2496

ORIGINAL

ENGINEERING STATEMENT

The attached Engineering Data is submitted herewith in support of an application by WPKN Inc., Bridgeport, Connecticut for a Modification of Construction Permit, File No. BPED-881212IC, and in response to a Commision Letter to WPKN Inc. - Re: 1800B3-EPD.

WPKN Inc., licensee of Radio Station WPKN, Bridgeport, Connecticut had filed an application to cover construction proposed in BPED-881212IC however inspection by Commission Staff revealed potential non-compliance with conditions attached to the Construction Permit. These will be addressed one at a time.

WSOU, 89.5 mcs, 2.4 Kw ERP, South Orange New Jersey:

Commission Staff reports "Excessive radiation to the southwest causes interference to Station WSOU(FM), South Orange, N. J.". While this radiation is in excess it amounts to only a few percent increase. Had not WSOU been granted a power increase there would have been no overlap -- nowhere either in the WSOU Engineering File nor the Commission response to the initial request for 2.8 Kw ERP is there any mention that consideration was given to the possible overlap of the WSOU 60 Dbu contour by the valid outstanding WPKN Inc. Construction Permit at either the 2.8 Kw or the 2.4 Kw level suggested by the Commission in their response to the 2.8 Kw power increase application File No. BPED-910820IH (see attached copy of letter). This application, amended to reflect 2.4 Kw ERP was granted by the Commission on April 2, 1992. In order to remove this overlap WPKN Inc. proposes to reduce the ERP of WPKN from 10 Kw to 9.0 Kw using the new Shively Model 6015-2/3R Panel Antenna.

Engineering Statement, Radio Station WPKN, WPKN Inc. Bridgeport, Conn.

With the proposed reduction to 9.0 Kw ERP DA the overlap to WSOU is removed and there is at least one half mile separation between the WSOU 60 Dbu contour and the WPKN 40 Dbu contour -- thus no interference. See attached tabulation of service and interference contours along with a map showing these contours.

WSKB, 89.5 mcs, 0.100 Kw ERP Westfield, Massachusetts:

Commission Staff reports "Excessive radiation to the north causes interference to Station WSKB(FM), Westfield, Ma.". This may well be true when compared to the proposed directional antenna submitted with the application for a Construction Permit but the radiation to the north is substantially the same as the "measured" licensed directional antenna supplied by Jampro Inc. WSKB was originally a Class D and increased power to 100 watts in an application for a Construction Permit File No. BPED-791231BT and subsequently licensed, File No. BLED-830222AT. The application for a construction permit reveals that an overlap from WPKN was received and accepted in order to obtain a license -- see attached copy of a map showing this overlap as taken from the WSKB Engineering File. The reduction in power of WPKN from 10 Kw to 9.0 Kw is predicted to <u>reduce</u> this overlap -- see attached contour tabulation and associated map of service and interference contours.

It would appear, since the License File Number is dated February 22, 1983 that WSKB did not comply with Docket 20735 -- the WSKB transmitter site is within the Grade B Contour of Television Station WRGB, Albany - Schenectady, New York. The mileage to WRGB is 70.5 miles and the WRGB Grade B contour at the 120° true azimuth extends a distance of 71.8 miles -- overlap of 1.3 miles.

Had WSKB complied with Docket 20735 it would in accordance with Section 73.525(e)(4)(i) have interference predicted based on 1/40th of the vertical power since all predicted interference occurs within communities with 1980 populations of less than 50,000 persons. The 1980 Bureau of Census tabulation shows a population for Westfield, Massachusetts of 36,465 persons. Thus, with WSKB operating at 100 watts "Vertical Only" at minus 214 feet above average terrain (65.2 meters), interference would be predicted based on a "maximum horizontal polarized ERP permissible", at the same antenna height as the vertical antenna, of 2.5 watts. With "Vertical Only" power ERP WSKB would receive no interference -- however since they apparently are using the full 100 watts in horizontal polarization overlap did occur and this overlap will be reduced by the proposed reduction in power by WPKN Inc.

Exceeds of antenna pattern between 130° and 155° True:

There are no facilities located to the southeast requiring protection, thus a few percent of increase, when the power reduction is subtracted out, will be of no consequence, no new interference.

Respectfully Submitted,

Ralph T. Winquist
Consulting Engineer

April 10, 1993

Radio Station WPKN
Bridgeport, Conn

WPKN, 89.5 mcs, 9.0 Kw ERP DA, C/R 552' HAAT - 829' AMSL

DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,10) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 40.0
210.0	638	6.32	59.1
220.0	578	5.25	55.4
230.0	529	4.19	52.1
236.5	504	3.40	49.9
240.0	511	3.08	49.3
250.0	468	2.37	46.4

South Orange, New Jersey (BPED-910820IH)
WSOU, 89.5 mcs, 2.4 Kw ERP, C/R 313' HAAT - 467.9' AMSL

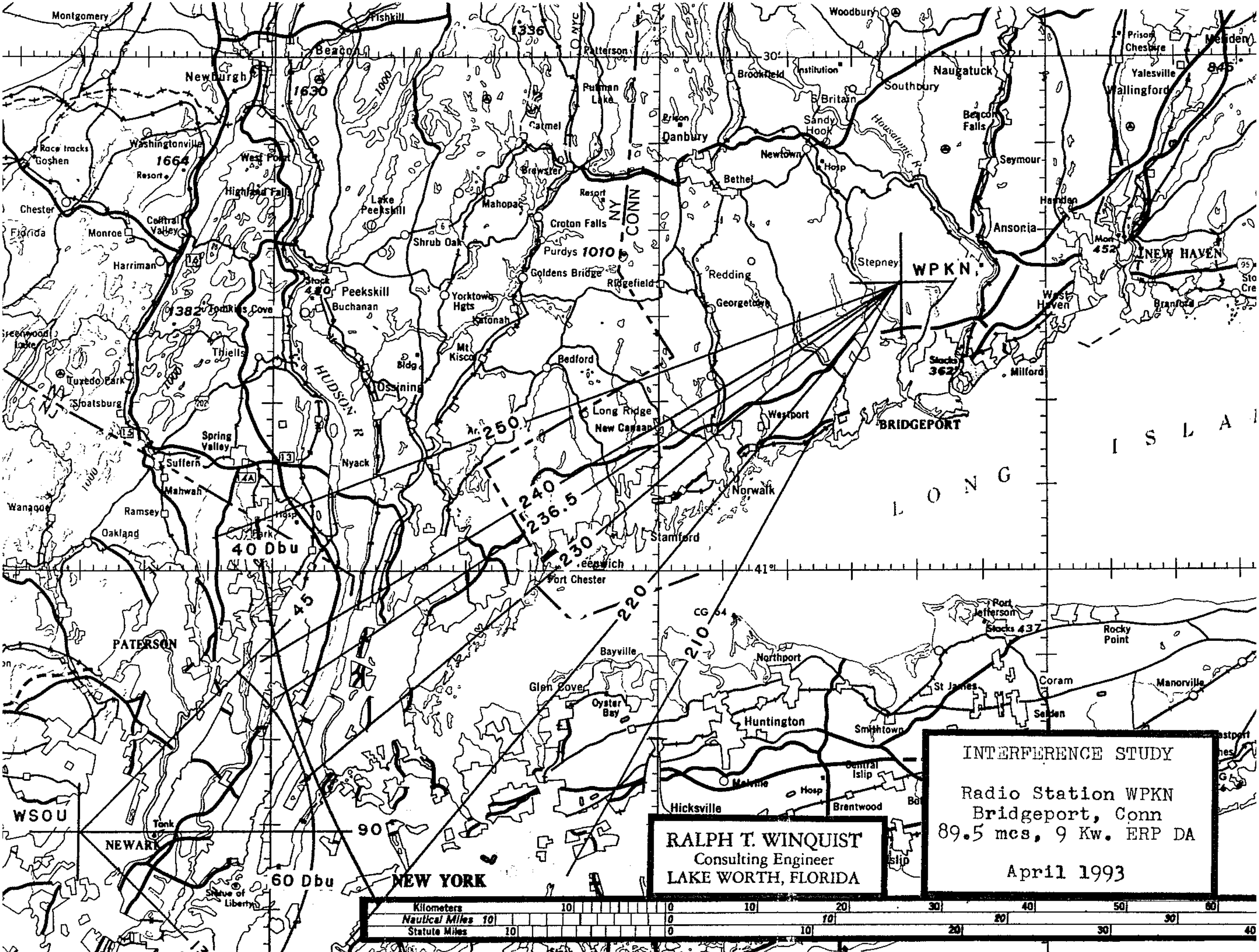
DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,50) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 60.0
.0	90	3.80	7.8
45.0	388	3.80	15.5
90.0	436	3.80	16.4
135.0	454	3.80	16.7
180.0	426	3.80	16.2

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA


INTERFERENCE STUDY
Radio Station WPKN
Bridgeport, Conn
89.5 mcs, 9 Kw. ERP DA
April 1993
RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA
WPKN
WSOU
40 Dbu
60 Dbu
250
240
236.5
230
220
210
90
45
135
BRIDGEPORT
NEW HAVEN
NEW YORK
NEWARK
PATERSON
LONG ISLAND
NY
CONN
HUDSON R
Kilometers
Nautical Miles
Statute Miles

Radio Station WPKN
Bridgeport, Conn

Existing WPKN, 89.5 mcs, 10.0 Kw ERP DA, C/R 552' HAAT - 829' AMSL
Measured Pattern

DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,10) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 40.0
350.0	343	9.65	58.8
.0	424	9.65	61.2
10.0	433	9.82	62.0
20.0	382	9.91	60.6
30.0	392	9.91	60.9
40.0	559	9.46	64.6

Proposed WPKN, 89.5 mcs, 9.0 Kw ERP DA, C/R 552' HAAT - 829' AMSL
Measured Pattern

DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,10) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 40.0
350.0	343	8.91	57.0
.0	424	9.28	60.3
10.0	433	9.50	61.2
20.0	382	9.54	59.6
30.0	392	9.37	59.5
40.0	559	9.05	63.6

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA

Radio Station WPKN
Bridgeport, Conn

Proposed WPKN, 89.5 mcs, 9.0 Kw ERP DA, C/R 552' HAAT - 829' AMSL
Measured Pattern

DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,10) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 40.0
350.0	343	8.91	57.0
.0	424	9.28	60.3
10.0	433	9.50	61.2
20.0	382	9.54	59.6
30.0	392	9.37	59.5
40.0	559	9.05	63.6

Westfield, Massachusetts (BPED-791231BT)
WSKB, 89.5 mcs, 0.0025 Kw ERP (H), C/R -214' HAAT
Assumes "Vertical Only" - 0.100 Kw Vertical in compliance with Section 73.525(e)(4)(i) -- Horizontal Polarization 1/40th Vertical power

DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,50) Curves Number of Contours: 1

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 60.0
90.0	184	-26.00	1.9
135.0	162	-26.00	1.8
180.0	10	-26.00	1.4
225.0	-517	-26.00	1.4
270.0	-659	-26.00	1.4

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA

Radio Station WPKN
Bridgeport, Conn

Westfield, Massachusetts (BPED-791231BT)
WSKB, 89.5 mcs, 0.100 Kw ERP, C/R -214' HAAT

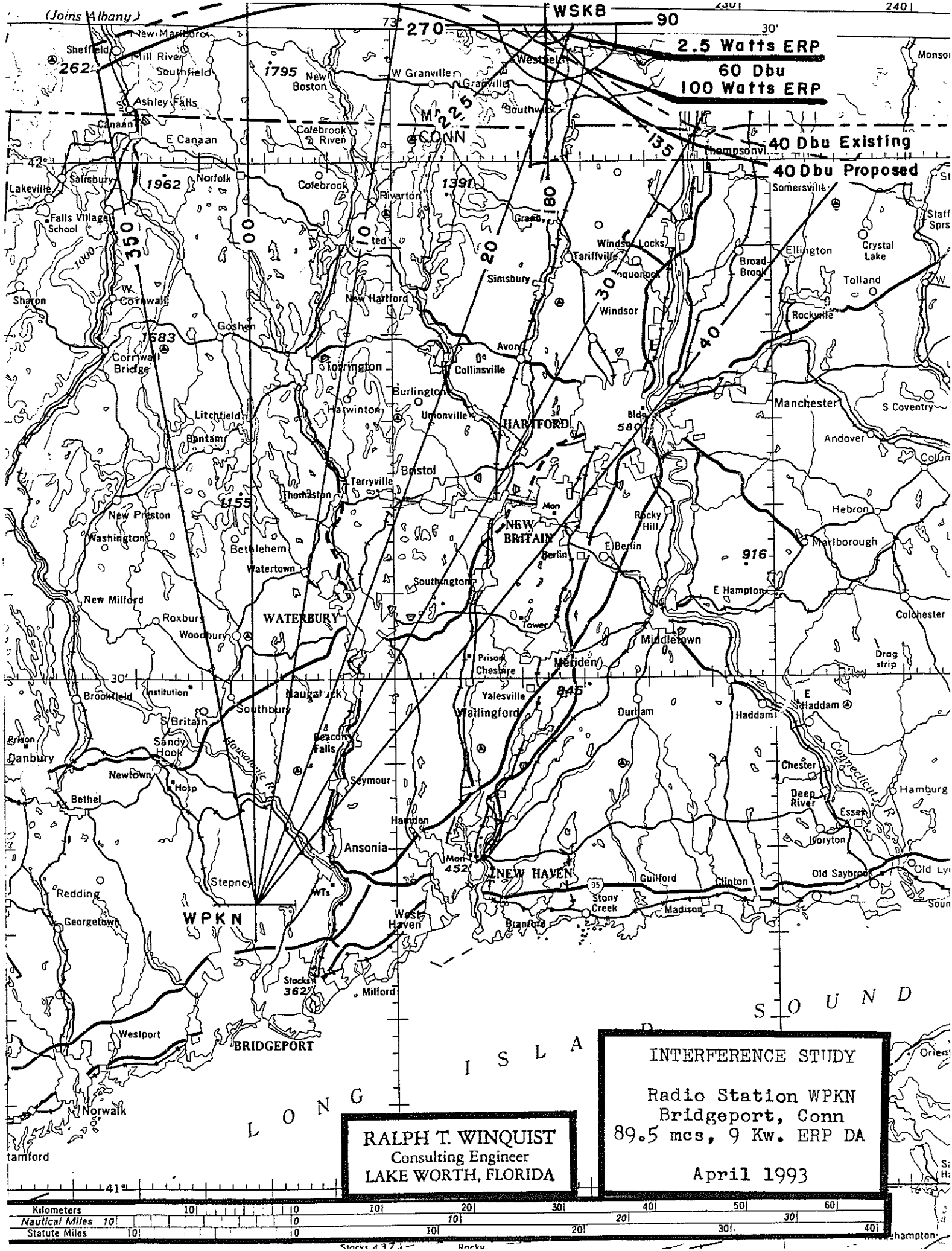
DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,50) Curves Number of Contours: 1

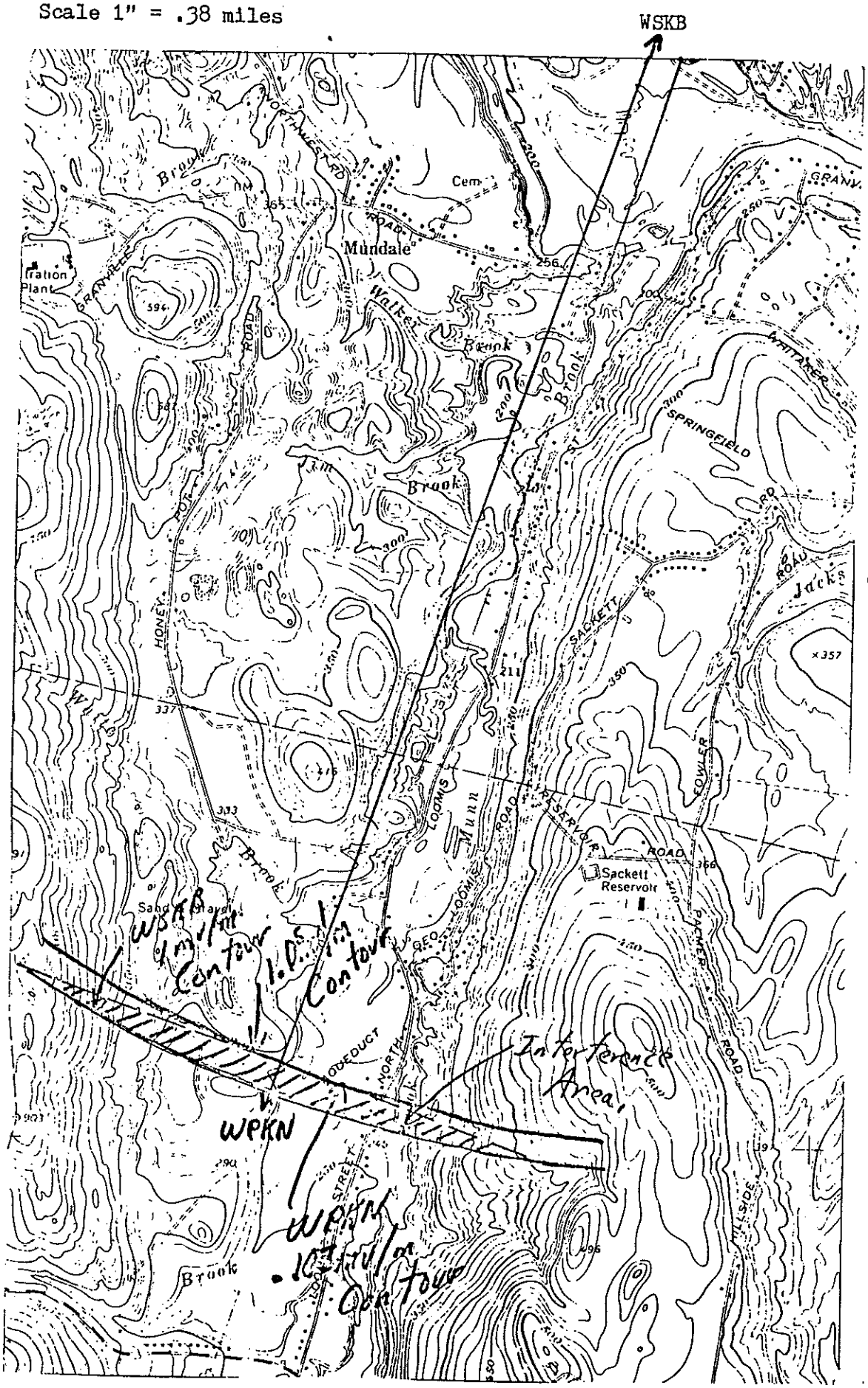
AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 60.0
90.0	184	-10.00	4.8
135.0	162	-10.00	4.5
180.0	10	-10.00	3.5
225.0	-517	-10.00	3.5
270.0	-659	-10.00	3.5

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA


WSKB
2.5 Watts ERP
60 Dbu
100 Watts ERP
40 Dbu Existing
40 Dbu Proposed
(Joins Albany)
New Marlboro
Sheffield
Mill River
Southfield
New Boston
W Granville
Granville
Westfield
Ashley Falls
Canaan
E Canaan
Colebrook River
CONN
Thompsonville
Salisbury
Norfolk
Colebrook
Riverton
Somersville
Lakeville
Falls Village
School
Simsbury
Windsor Locks
Tariffville
Ellington
Crystal Lake
Broad Brook
Tolland
Sharon
W. Cornwall
New Hartford
Windsor
Rockville
Goshen
Avon
Collinsville
Corrwall Bridge
Torrington
Burlington
Hakwinton
Unionville
HARTFORD
Manchester
S Coventry
Andover
Litchfield
Bantam
Bristol
Terryville
Thomaston
New Preston
Washington
Bethlehem
Watertown
NEW BRITAIN
Rocky Hill
E Berlin
Berlin
Hebron
Marlborough
Southington
New Milford
Roxbury
WATERBURY
Woodbury
Tower
E Hampton
Colchester
Middletown
Prison
Cheshire
Meriden
Drag strip
Brookfield
Institution
Naugatuck
Yalesville
Wallingford
Durham
Haddam
E Haddam
Southbury
S Britain
Sandy Hook
Beacon Falls
Danbury
Housatonic R
Chester
Newtown
Hosp
Seymour
Deep River
Hamburg
Bethel
Essex
Hamden
Ansonia
Ivoryton
Stepney
WTs
NEW HAVEN
Guilford
Clinton
Old Saybrook
Redding
WPKN
Stony Creek
Madison
Georgetown
West Haven
Branford
Stocks
Milford
Westport
BRIDGEPORT
Norwalk
Stamford
L O N G I S L A N D S O U N D
INTERFERENCE STUDY
Radio Station WPKN
Bridgeport, Conn
89.5 mcs, 9 Kw. ERP DA
April 1993
RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA
Kilometers
Nautical Miles
Statute Miles

Predicted interference area as shown on Southwick, Ma. USCGS Map

Scale 1" = .38 miles



WSKB's 1.05 mv/m Contour intersect WPKN's .105 mv/m contour as shown.

Engineering Exhibit

December, 1979

Radio Station WPKN
Bridgeport, Conn

WPKN, 89.5 mcs, 9.0 Kw ERP DA, C/R 552' HAAT - 829' AMSL

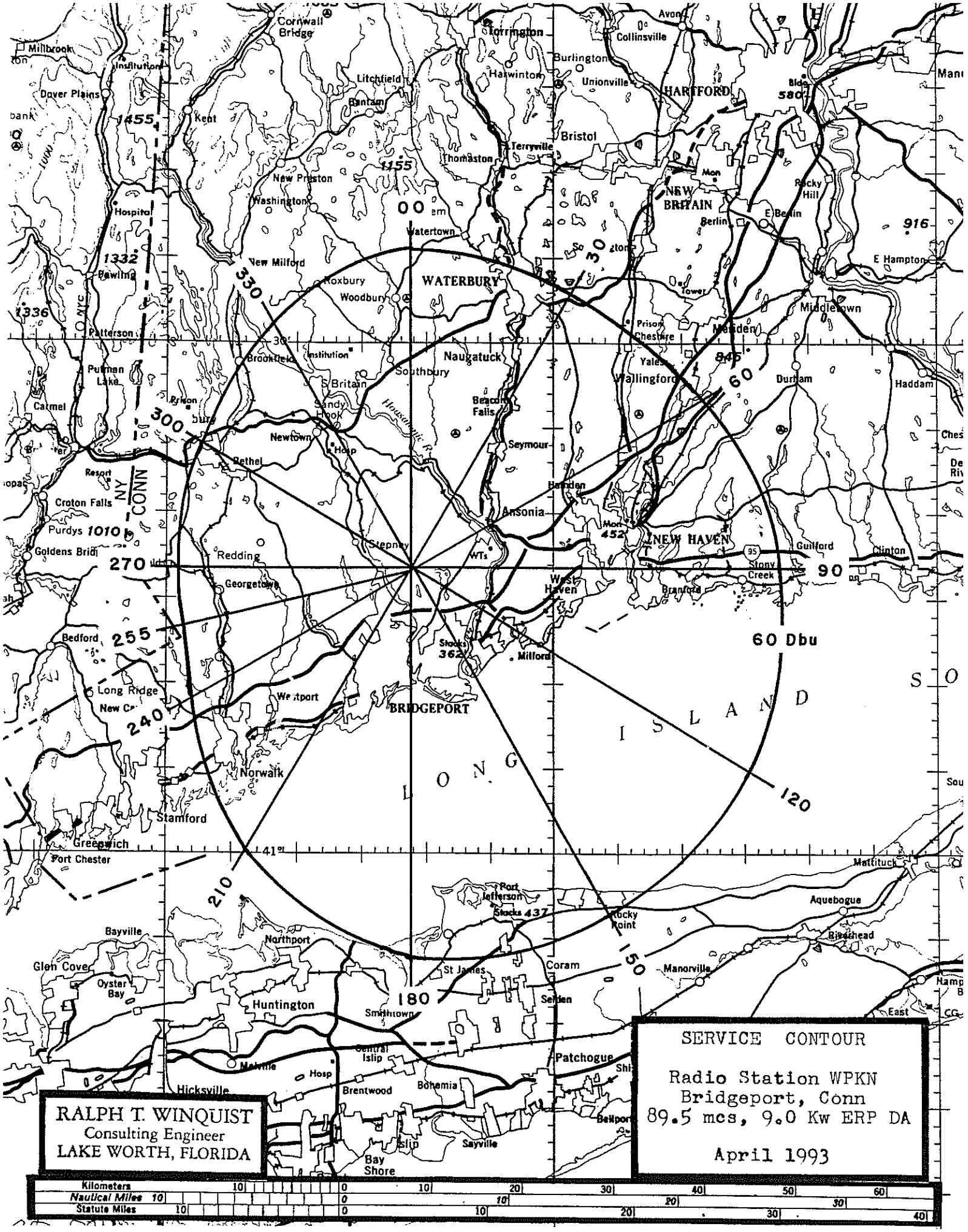
DISTANCES TO CONTOURS (Miles):

Frequency: 89.5000 MHz

F(50,50) Curves Number of Contours: 2

AZ (degs)	HAAT (ft)	ERP (dBk)	CONTOUR LEVELS (dBu): 70.0	60.0
.0	424	9.28	12.6	21.3
30.0	392	9.37	12.1	20.7
60.0	516	8.77	13.5	22.7
90.0	648	8.67	15.0	24.9
120.0	719	9.10	16.1	26.5
150.0	740	9.28	16.5	27.0
180.0	777	8.43	16.1	26.4
210.0	638	6.32	13.0	22.0
240.0	511	3.08	9.6	17.0
255.0	463	2.11	8.7	15.4
270.0	426	2.98	8.7	15.5
300.0	322	6.44	9.2	16.4
330.0	363	8.23	10.9	18.9

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA


60 Dbu
SERVICE CONTOUR
Radio Station WPKN
Bridgeport, Conn
89.5 mcs, 9.0 Kw ERP DA
April 1993
RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA
Kilometers
Nautical Miles
Statute Miles
HARTFORD
NEW BRITAIN
WATERBURY
NEW HAVEN
BRIDGEPORT
LONG ISLAND SOUND
NY/CONN
Cornwall Bridge
Torrington
Avon
Collinsville
Millbrook
Institution
Burlington
Haswinton
Unionville
Dover Plains
Litchfield
Bantam
Kent
Bristol
Terryville
Thomaston
New Preston
Washington
Watertown
Hospital
New Milford
Roxbury
Woodbury
Rocky Hill
E Berlin
Berlin
E Hampton
Middletown
Meriden
Prison
Chestnut
Tower
Patterson
Brookfield
Institution
Naugatuck
Southbury
S Britain
Yalesville
Wallingford
Durham
Haddam
Putnam Lake
Carmel
Prison
Sandy Hook
Beacon Falls
Newtown
Hosp
Seymour
Bethel
Resort
Hamden
Ansonia
Croton Falls
Purdys
Goldens Bridge
Redding
Stepney
WTs
Georgetown
West Haven
Guilford
Clinton
Stony Creek
Branford
Bedford
Stocks
Milford
Long Ridge
New Canaan
Westport
Norwalk
Stamford
Greenwich
Port Chester
Mattituck
Port Jefferson
Stocks
Aquebogue
Rocky Point
Riverhead
Bayville
Northport
Glen Cove
Oyster Bay
St James
Coram
Manorville
Huntington
Smithtown
Selden
East
Central Islip
Patchogue
Melville
Hosp
Hicksville
Brentwood
Bohemia
Bellport
Slip
Sayville
Bay Shore
1455
1155
1332
1336
916
845
452
1010
362
437
00
30
60
90
120
150
180
210
240
255
270
300
330

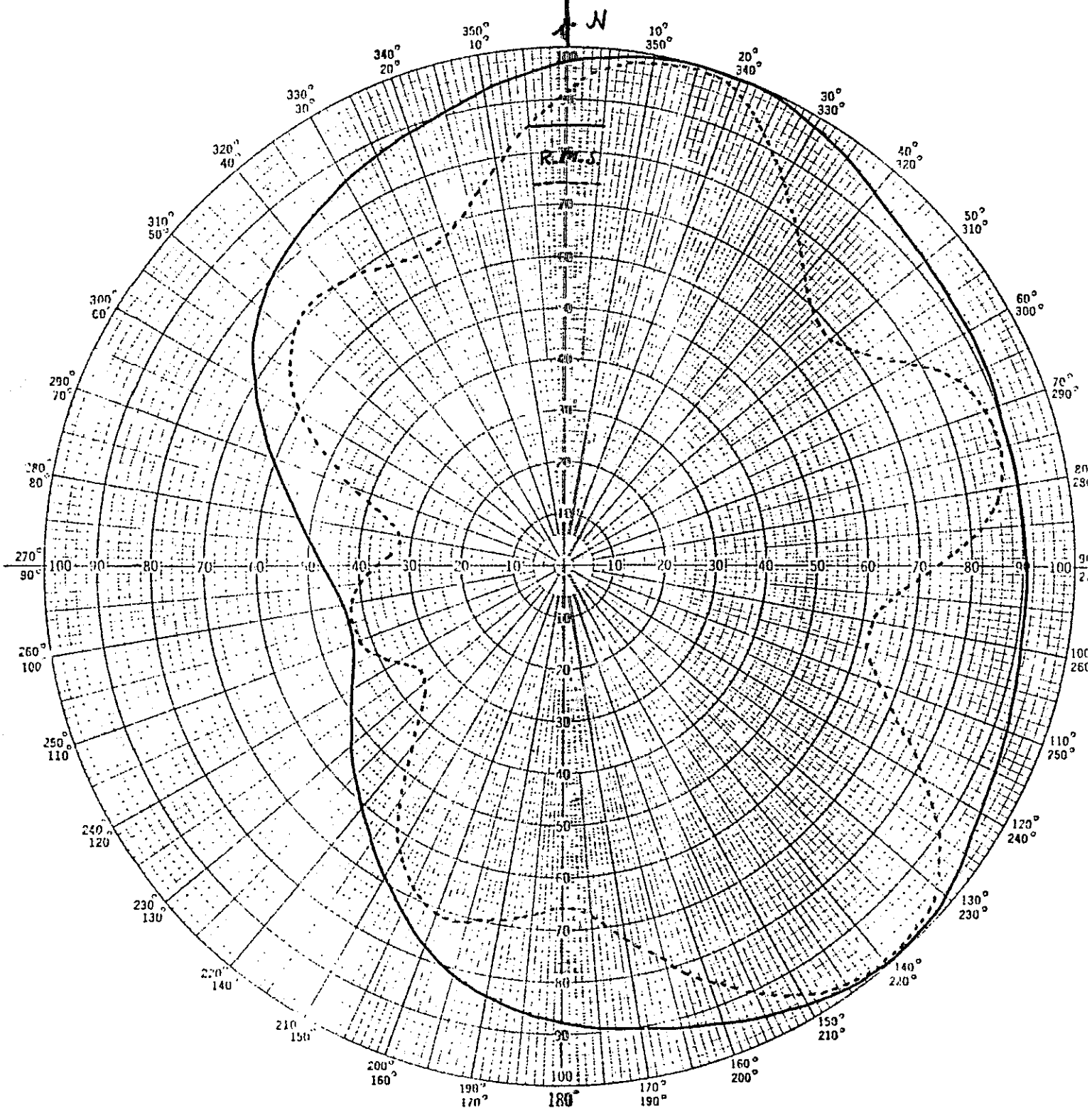
Shively Labs

PROJECT NAME WPKN

PROJECT NUMBER 12,913 DATE 6/1/89

ANTENNA TYPE 6015-2/3R-DA

PATTERN TYPE Azimuth



MODEL (X) FULL SCALE ( ) FREQUENCY 402.75/89.5 MHz

POLARIZATION Horiz (——); Vert (----)

CURVE PLOTTED IN: VOLTAGE (X) POWER( ) DB( )

OBSERVER RAS

REMARKS: See Figure 2 for Mechanical Detail.

Figure 1A

Tabulation of Horizontal Polarization

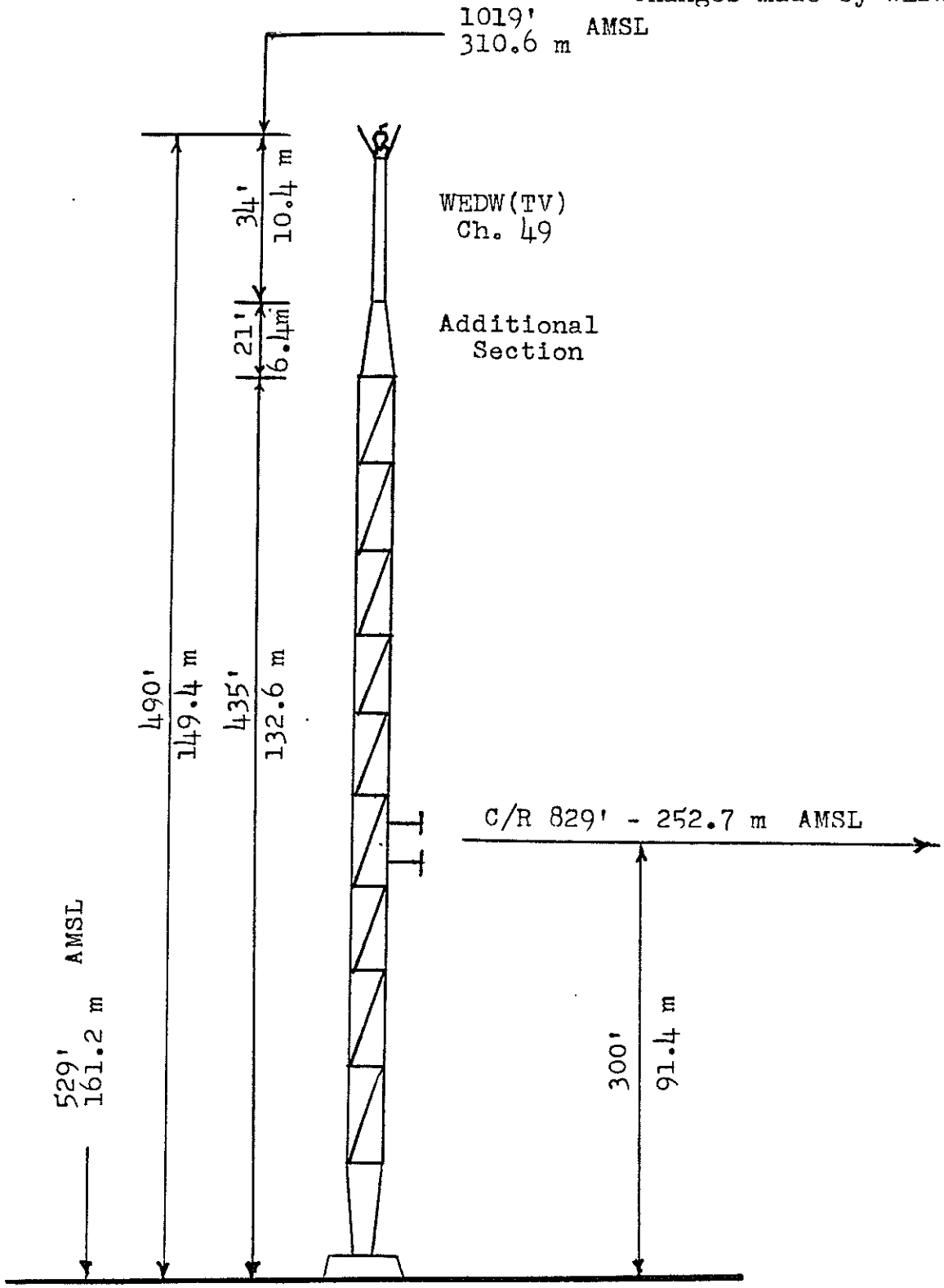
From Figure 1

Degrees	Relative Field	Degrees	Relative Field
0	0.970	180	0.880
10	0.995	190	0.840
20	1.000	200	0.780
30	0.980	210	0.690
40	0.945	220	0.610
50	0.920	230	0.540
60	0.915	236.7	0.493
70	0.902	240	0.475
80	0.900	250	0.438
90	0.905	260	0.440
100	0.910	270	0.470
110	0.927	280	0.530
120	0.950	290	0.610
130	0.985	300	0.700
140	1.000	310	0.778
150	0.970	320	0.823
160	0.935	330	0.860
170	0.900	340	0.890
		350	0.930

VERTICAL PLAN
WPKN
Bridgeport, Conn.

41° 16' 43" N. Latitude
73° 11' 08" W. Longitude

Reflects Structural
Changes made by WEDW



March 9, 1993

RALPH T. WINQUIST
Consulting Engineer
LAKE WORTH, FLORIDA

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, D.C. 20554

DEC 2 0 1991

IN REPLY REFER TO:
8920-JDB

Seton Hall University
400 South Orange Avenue
South Orange, NJ 07079

In re: WSOU(FM), South Orange, NJ
Seton Hall University
BPED-910820IH

Dear Applicant:

This letter refers to the above-captioned minor change application to correct transmitter coordinates, and antenna height, and to change effective radiated power.

An engineering study has revealed that the facilities proposed in application BPED-910820IH will cause prohibited overlap to the protected (60 dBu) contour of the construction permit for co-channel Station WPKN(FM), Bridgeport, Connecticut from the proposed interfering (40 dBu) contour. Although your existing facilities, assuming operation at the licensed coordinates with the correct radiation center above mean sea level (RCAMSL), would cause up to 1.23 kilometers of overlap, this proposal would increase that overlap to 3.42 kilometers, in violation of 47 C.F.R. § 73.509(d). Our study shows in order to maintain your existing 40 dBu interfering contour and not cause any increased overlap you must reduce the effective radiated power to 2.4 kilowatts.

In addition, there is a discrepancy between your proposed tower height above mean sea level (AMSL) and the tower height above ground level (AGL) compared to those on file with the Commission. Your application proposes 153 meters (AMSL) and 81 meters (AGL), while our files show them to be 155 meters (AMSL) and 82 meters (AGL). If the tower has been built to 81 meters, you must submit a copy of the FAA determination that authorizes a 81 meter tower. However, if the tower is 82 meters (AGL) and 155 meters (AMSL), then simply correct all pertinent sections of the application and submit the amendment in triplicate to the Secretary of the Commission and sign it in the same manner as the original application.

Finally, an engineering study based upon OST Bulletin No. 65, October, 1985 entitled "Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radiofrequency Radiation" reveals that you did not address the issue of potential occupational hazards caused by the proposed facility. You must explain what steps will be taken to limit the RF radiation exposure to persons authorized access to the tower.

Further action on the subject application will be withheld for a period of thirty days from the date of this letter to provide you an opportunity to reply. Failure to respond within this time period will result in the dismissal of the application pursuant to 47 C.F.R. § 73.3568(b). Please note that any amendment must be submitted to the Office of the Secretary in triplicate and signed in the same manner as the original application.

Sincerely,

Dennis Williams

Dennis Williams
Chief, FM Branch
Audio Services Division
Mass Media Bureau

cc: Lukas, McGowan, Nace & Gutierrez
Communications Technologies, Inc.