

FM BLANKETING CONTOUR CALCULATION

The blanketing contour of NEW FM is determined using the following formula as defined in 73.318 of the Commission's Rules:

$$D=0.394 * \text{SQR}(P)$$

where D= distance to blanketing contour in km  
P=ERP in kW of the station

The ERP of NEW FM is 1.9 kW yeilding a blanketing contour .54 km from the tower.

While it is the experience of this firm that very little, if any blanketing interference will be experienced by the grant of this proposal NEW FM will follow the guidelines of 73.318 and good engineering practice to satisfy blanketing complaints.

BLANKETING CONTOUR STUDY

EXHIBIT #2B  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

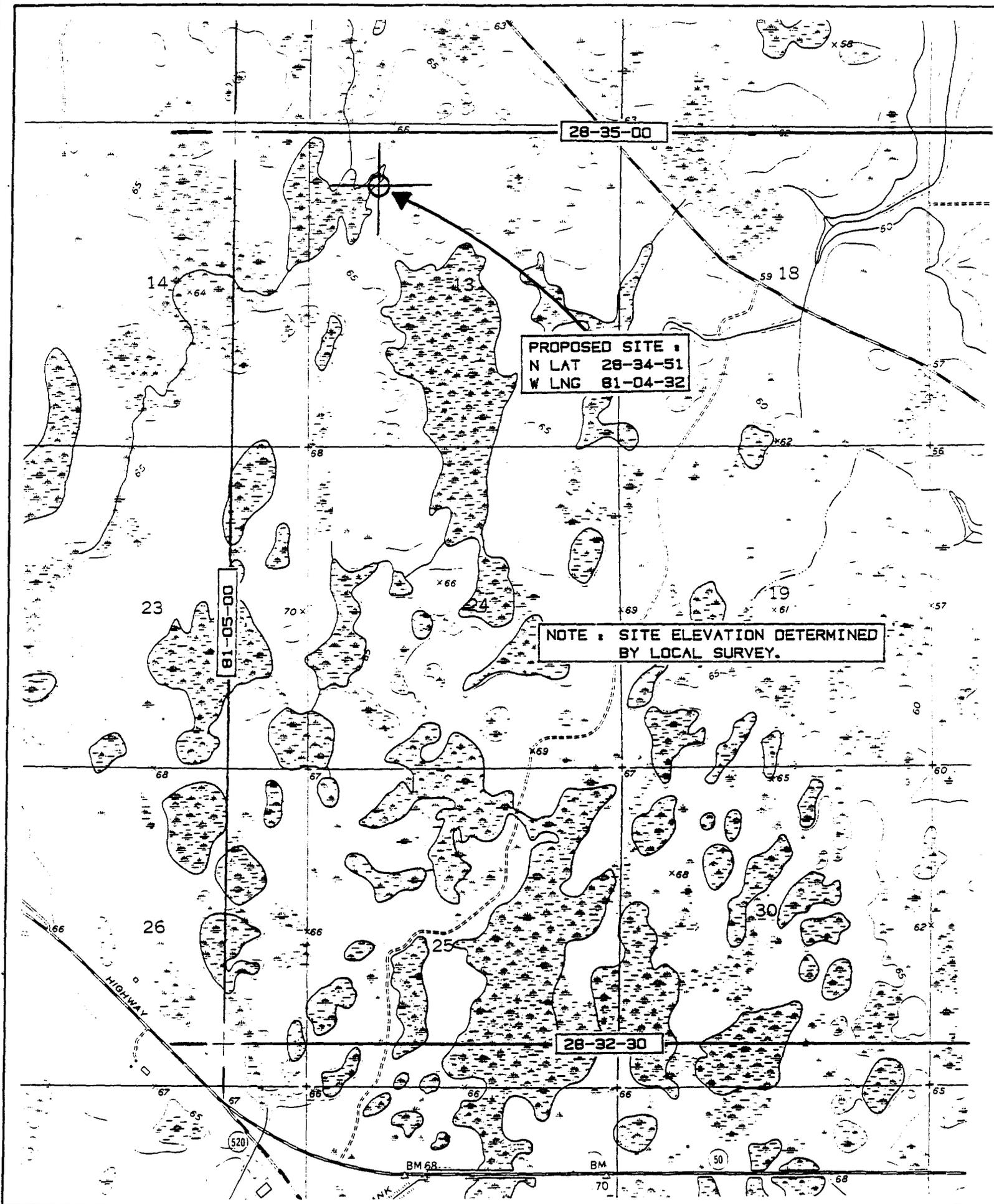
**BROMO**  
**COMMUNICATIONS**  
BROADCAST  
TECHNICAL CONSULTANTS  
St Simons Island, Georgia Washington, D.C.

DOCUMENT OFF-LINE

This page has been substituted for one of the following:

- o An oversize page or document (such as a map) which was too large to be scanned into the RIPS system.
- o Microfilm, microform, certain photographs or videotape.
- o Other materials which, for one reason or another, could not be scanned into the RIPS system.

The actual document, page(s) or materials may be reviewed by contacting a Dockets Clerk. Please note the applicable docket or rulemaking number, document type and any other relevant information about the document in order to ensure speedy retrieval by the Dockets Clerk.



PROPOSED SITE :  
N LAT 28-34-51  
W LNG 81-04-32

NOTE : SITE ELEVATION DETERMINED  
BY LOCAL SURVEY.

HIGHWAY

BM 68

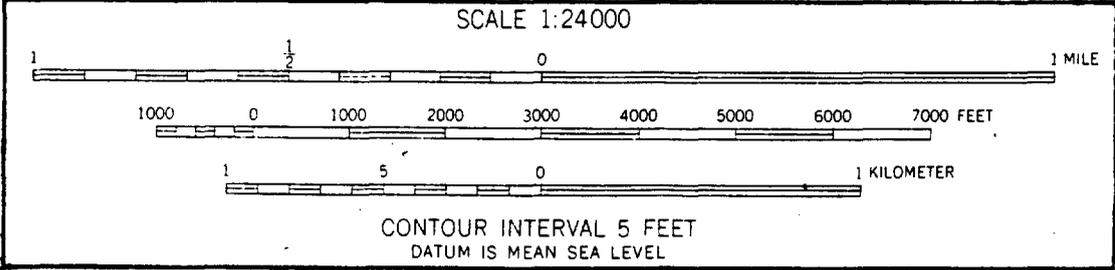
BM 70

(520)

(50)

**BITHLO QUADRANGLE  
FLORIDA  
7.5 SERIES (TOPOGRAPHIC)**

28-35-00



A COMPLETE COPY OF THE BITHLO FLORIDA 7.5 MINUTE USGS TOPOGRAPHIC MAP IS ATTACHED TO THE ORIGINAL COPY OF THIS APPLICATION AS EXHIBIT # 3A.

NOTE : THERE ARE NO AM BROADCAST STATIONS WITHIN 3.2 KILOMETERS (2.0 MILES) OF THIS PROPOSAL.

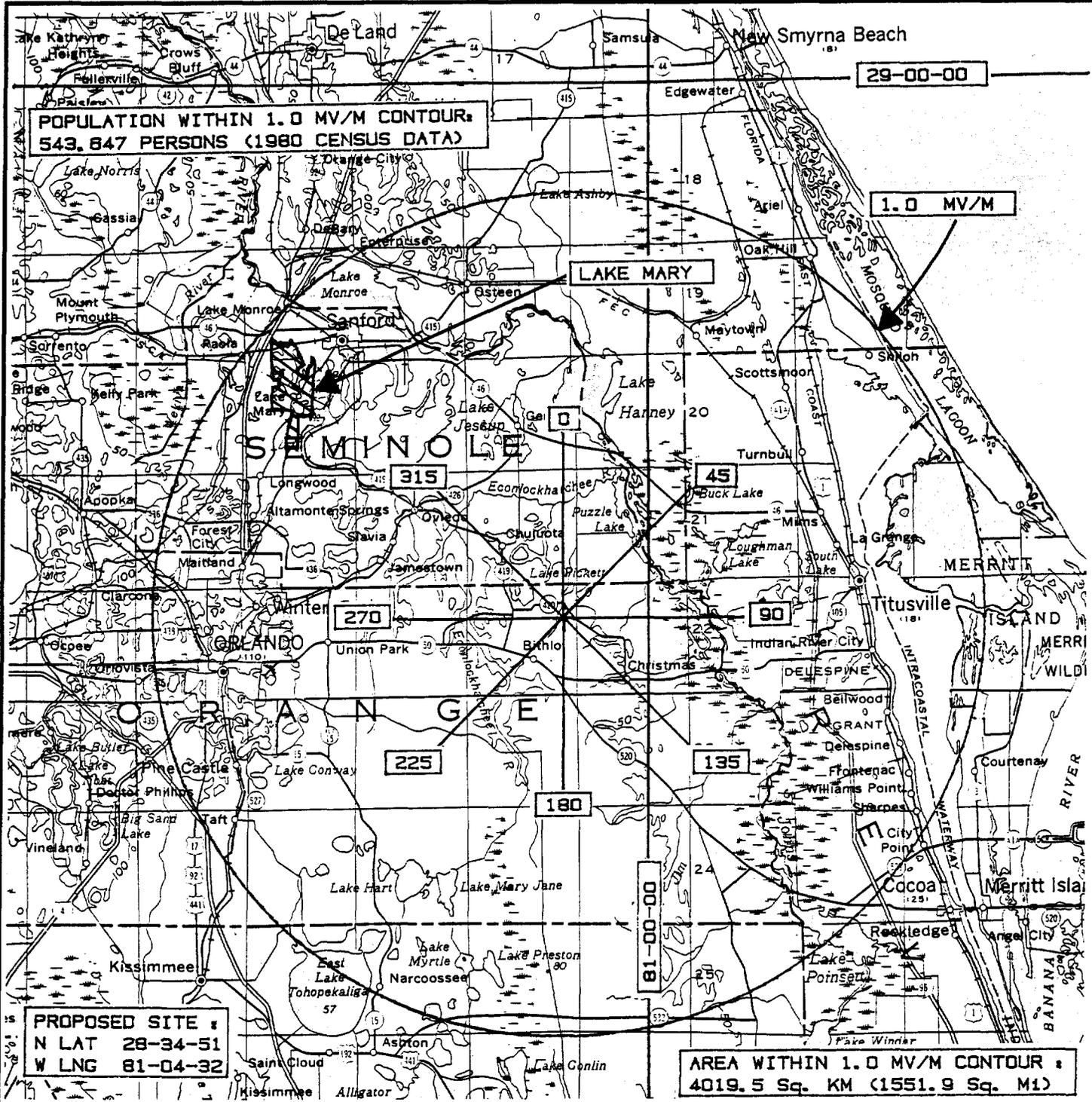
**EXHIBIT #3**  
**NEW EDUCATIONAL FM STATION**  
**HISPANIC BROADCAST SYSTEM**  
**CH 202C2 - 88.3 MHZ - 1.9 KW**  
**LAKE MARY, FLORIDA**

OCTOBER 1989

28-32-30

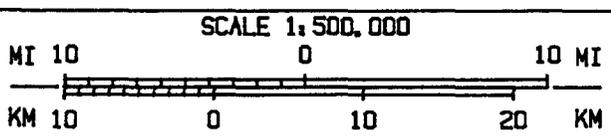
**BROMO** BROADCAST TECHNICAL CONSULTANTS  
**COMMUNICATIONS**

St Simons Island, Georgia Washington, D.C.



**PREDICTED CONTOUR**

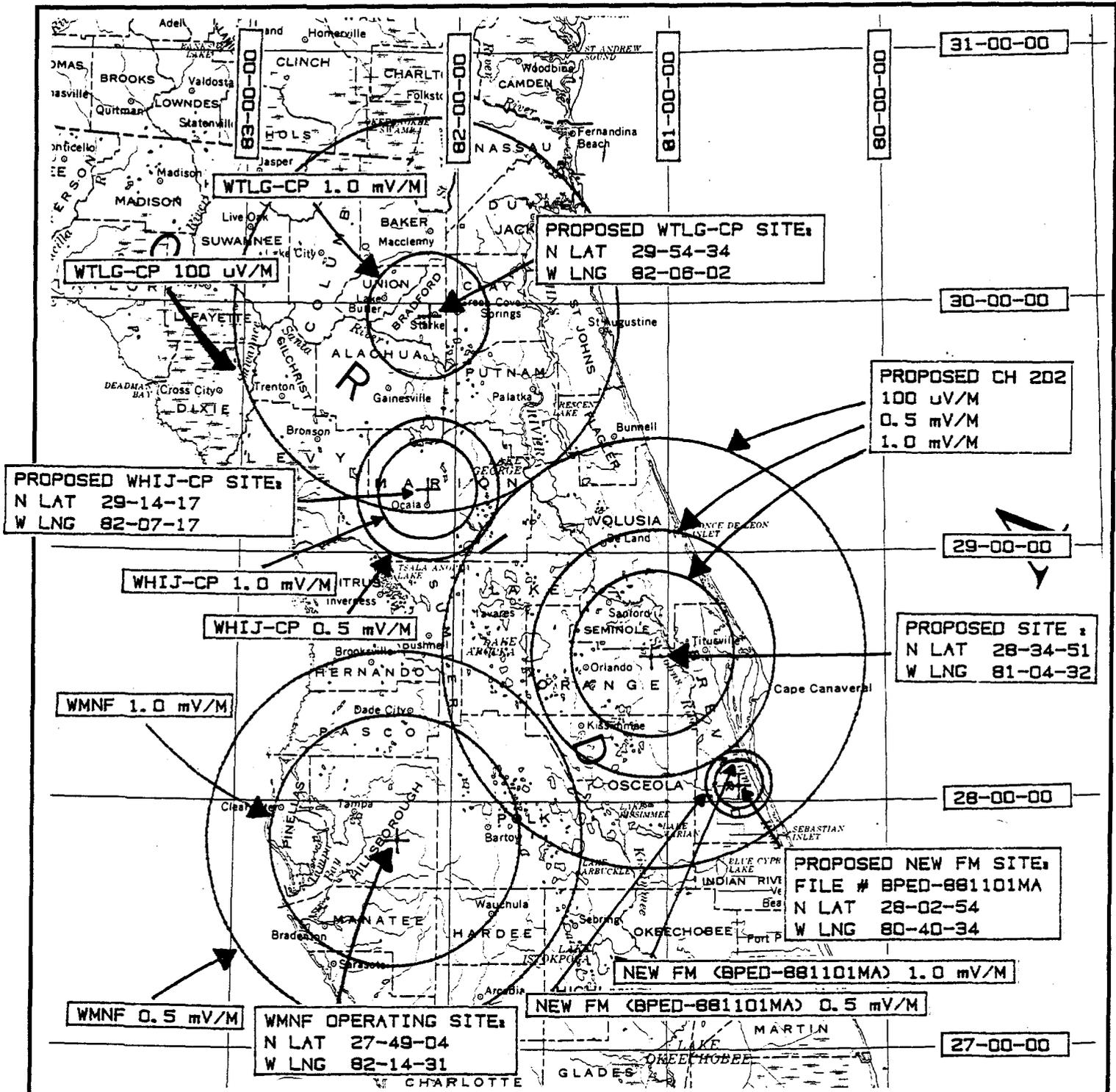
MAP IS A USGS 1:500,000 SCALE OF A PORTION OF THE STATE OF FLORIDA.



**EXHIBIT #4**  
**NEW EDUCATIONAL FM STATION**  
**HISPANIC BROADCAST SYSTEM**  
**CH 202C2 - 88.3 MHZ - 1.9 KW**  
**LAKE MARY, FLORIDA**

OCTOBER 1989

**BROMO** BROADCAST  
**COMMUNICATIONS** TECHNICAL CONSULTANTS  
 St Simons Island, Georgia Washington, D.C.



### CH 202 ALLOCATION STUDY

MAP IS A USGS 1:2,500,000 SCALE OF A PORTION OF THE STATE OF FLORIDA.

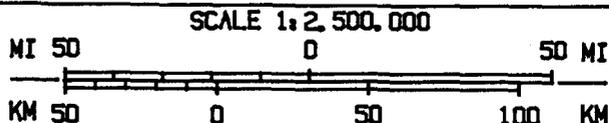


EXHIBIT #5  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHz - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

**BROMO**  
**COMMUNICATIONS**  
BROADCAST  
TECHNICAL CONSULTANTS  
St Simons Island, Georgia Washington, D.C.

EXHIBIT #5A  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

Stations Considered in Allocation Study

WTLG-CP Starke, Florida  
FCC File BPED-871221ME  
Channel 202C2 - 7 kW ERP - 87 m HAAT

WMNF Tampa, Florida  
FCC File #BMLED-860514K  
Channel 203C1 - 70 kW ERP - 158 m HAAT  
(Note: The construction permit to make changes in the  
licensed facility of WMNF was returned to the Commission by  
the licensee)

New FM Application Palm Bay, Florida  
FCC File #BPED-881101MA  
Channel 203A - 1 kW ERP (Vertical) - 30 m HAAT

WHIJ-CP Ocala, Florida  
FCC File #BPED-870922MR  
Channel 201A - 1.26 kW ERP (Vertical) - 120 m HAAT

EXHIBIT #6  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

Intermediate Frequency Interference Study

The proposed new Channel 202 antenna will be located 30 kilometers (18.69 miles) from the proposed use of Channel 255C2 at Orlando, Florida by WURG-FM. The minimum distance separation required by two Class C2 stations for intermediate frequency separation is 20 kilometers.

The proposed antenna is 30 kilometers away from the WURG application site for Channel 255C2, therefore, this proposal meets the Commissions' minimum spacing requirements for intermediate frequency separation.

EXHIBIT #7  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

Channel Six Interference Study

The proposed Channel 202 antenna will be located 2.96 km (1.84 miles) from the WCPX-TV, Channel 6, Orlando, Florida antenna. Although the distance from the WCPX antenna is greater than 0.4 kilometers and does not qualify as a co-located station per §73.525(d) of the Commissions rules, the applicant requests processing under that section.

An attempt was made to locate the proposed antenna on the WCPX tower. A representative of WCPX was contacted to determine the feasibility of locating the new educational FM antenna on that tower. Mr. Robert Diehl has stated (see attached Exhibit #6A for a copy of Deihl's response) that due to various factors that the WCPX tower could not accommodate the new FM antenna.

However, the applicant has not received an objection to locating on another tower (the presently proposed location) from WCPX. Hispanic Broadcast System (Hispanic) has stated and reiterates that it will resolve any complaints or interference to the television stations aural carrier, located at 87.74 MHz, caused by its use of Channel 202, 88.3 MHz on the adjacent tower.

Where possible, Hispanic will install filters on the effected television receivers to eliminate the influence of its FM carrier in the television receiver. Likewise, Hispanic will cooperate with WCPX in addressing any television interference problems reported to them and forwarded to Hispanic, and eliminate the problem to the satisfaction of WCPX and the Commission.

The power of the proposed new educational FM has been reduced to 1.9 kilowatts, the level at which it could operate if co-located with the Channel Six antenna, to minimize any potential interference problems. Hispanic has provided the engineering staff of WCPX with all the appropriate information regarding its use of Channel 202.

Therefore, Hispanic believes that this agreement with WCPX satisfies §73.525 of the Commissions rules. Should the Commission require further detailed information, Hispanic will supply the requested information.



June 29, 1989

Hispanic Broadcast Systems  
c/o Bromo Communications, Inc.  
1200 18th Street N.W. Suite #206  
Washington, D.C. 20036

To Whom it may concern,

Thank you for consulting with WCPX, Ch6, in regard to your seeking of an FM allocation of 88.3 MHz in the Orlando area. I am very concerned of any interference potential that could cause reception problems to our viewers, since our aural carrier is assigned to 87.74 MHz.

As I told you earlier, collocation at our transmitter site cannot happen due to the near saturation point of our 1,500 ft. tower. It presently is accommodating three television and three FM's plus auxiliary equipment for these six operations. This is a jointly owned and operated venture of TV Tower, Inc. TV Tower has declined all space requests for some time now for this reason.

The Gannet tower, which you propose going on is approximately one and one quarter miles from WCPX's transmitter site. While this does not fall under the Commission's guidelines to satisfy co-location, I feel that it is a workable situation. WCPX is willing to cooperate with you on this, as long as you assure me that you will address and solve any and all interference problems that your 88.3 MHz Station may cause to WCPX viewers. The area around the Gannet Tower is sparsely populated and I don't see much of an interference potential at the present time. However, with the growth rate that we are experiencing in the Orlando area, a few years from now this area may become populated.

WCPX is happy to cooperate with you on seeking your license. Best of luck to you on your application.

EXHIBIT #7A  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

Respectfully,

Robert K. Diehl  
Chief Engineer

copy; Michael J. Schweitzer, G.M., file

© P.O. Box 606000 • Orlando, FL 32860 (305) 291-6000 ©

EXHIBIT #8  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA

OCTOBER 1989

Radio Frequency Radiation Statement

The proposed new educational FM antenna will be co-located with WHTQ-FM, WSTF-FM, and WSSP-FM. These three stations operate from a common antenna atop the tower. Each station operates with an effective radiation power of 100 kilowatts. Horizontal/Vertical power with a center of radiation of 477.86 meters (1567.0 feet) above the ground. These three facilities are contributing .0878 mW or 8.8% of the ANSI limit worst case at the base of the tower, as determined from the appropriate formula contained in OST Bulletin Number #65, dated October 1985.

In addition to the FM antennas mentioned above, there is a construction permit held by WRBW, Channel 65, on the structure. The Channel 65 antenna is to be mounted with its center of radiation 464.88 meters (1525.2 feet) above the ground, with an effective radiated power of 5,000 kilowatts. The WRBW antenna will contribute worst case, .3865 mW or 14.9% of the allowable limit at the base of the tower.

The proposed new educational FM two bay antenna will be located with its center of radiation 295.68 meter (970.0 feet) above the ground with an effective radiated power

1.9 kilowatts horizontal/vertical power. The new educational FM will contribute worst case .0015 mW or 0.1% of the ANSI limit of the base of the antenna.

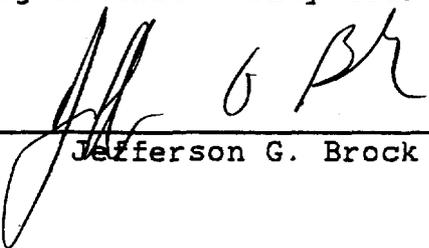
Combining the percentage of each of the above mentioned facilities, we have determined that only 23.8% of the ANSI limit is delivered at the base of the tower. Since this is far below the 100% ANSI limit, the new FM antenna is in compliance with OST Bulletin Number 65, dated October 1985, as is required by the Federal Communication Commission.

## QUALIFICATIONS OF CONSULTANT

Jefferson G. Brock says that he is a Technical Consultant with the firm of Bromo Communications, Inc. Having offices at 1200 18th Street, NW - Suite #206, Washington, DC. Bromo has been engaged by Hispanic Broadcast System to prepare the attached Technical Exhibit.

His qualifications are a matter of record before the Federal Communications Commission. He has been active in Broadcast Engineering since 1979. The attached report was either prepared by him or under his direction and all material and exhibits attached hereto are believed to be true and correct.

Signed this Twenty-fourth day of October, 1989

  
\_\_\_\_\_  
Jefferson G. Brock

ORIGINAL

Posted  
SW

Before the  
FEDERAL COMMUNICATIONS COMMISSION

FCG MAIL SECTION

Washington, D.C. 20554 AUG 3 11 54 AM '90

In re Application of  
HISPANIC BROADCAST SYSTEM, INC.  
For Construction Permit, New Non-  
Commercial FM Station, Lake Mary, FL

)  
) RECEIVED BY  
) File No. BPED-891128ME  
)  
) RECEIVED  
)

AUG 16 1990

To: Chief, FM Branch

FM EXAMINERS

MOTION FOR EXTENSION OF TIME

Hispanic Broadcast System, Inc. ("HBS"), by its counsel, herewith moves for an extension of time in which to respond to the petition to dismiss or deny, filed by Florida Public Radio, Inc. ("FPR") in the above-captioned proceeding. In support whereof, the following is stated:

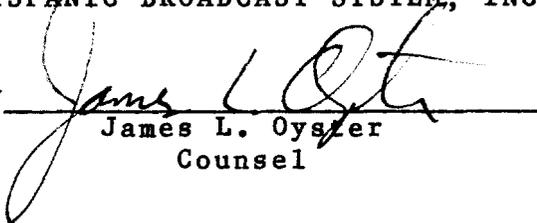
1. The due date for filing a response to the referenced petition is August 8, 1990. Undersigned counsel will be involved in a hearing before Judge Frysiak which commences on August 6, 1990. Consequently, counsel will be unavailable to prepare a response in a timely fashion. It is noted that counsel was not served directly with the petition which was sent directly to the applicant. As a result, counsel did not receive the document until August 1, 1990. Counsel must coordinate the response with engineering counsel and simply did not have the document in time to prepare an adequate response in a timely fashion.

WHEREFORE THE PREMISES CONSIDERED, it is respectfully requested that the date for filing a response to the above-captioned pleading be extended to August 22, 1990.

Respectfully submitted,

Law Offices  
JAMES L. OYSTER  
Rt. 1, Box 203A  
Castleton, VA 22716  
(703) 937-4800

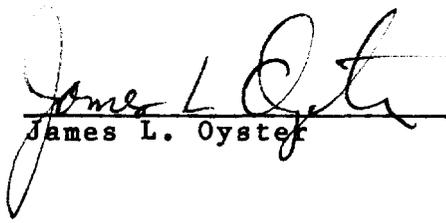
HISPANIC BROADCAST SYSTEM, INC.

By   
James L. Oyster  
Counsel

CERTIFICATE OF SERVICE

James L. Oyster hereby certifies that he has sent a copy of the foregoing by first class U.S. mail, postage prepaid, or by hand delivery, on or before the 2nd day of August, 1990 to the following:

Randy Henry, President  
Florida Public Radio, Inc.  
505 Josephine St.  
Titusville, FL 32796

  
James L. Oyster

*Posted  
P.A.D.*

RECEIVED

'AUG 22 1990

Federal Communications Commission  
Office of the Secretary

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

In re Application of )  
 )  
HISPANIC BROADCAST SYSTEM, INC. )  
 )  
For Construction Permit, )  
Noncommercial FM Broadcast Station, )  
Lake Mary, FL )

File No. BPED-891128ME

RECEIVED

AUG 23 1990

To: Chief, FM Brancy

OPPOSITION TO PETITION TO DISMISS OR DENY

FM EXAMINERS

Hispanic Broadcast System, Inc. ("Hispanic"), by its counsel, herewith submits its opposition to the PETITION TO DISMISS OR DENY filed by Florida Public Radio, Inc. ("FPR") in the above-captioned proceeding. In support whereof, the following is stated:

1. FPR asks the Commission to dismiss or deny the Hispanic application on the grounds that Hispanic has not complied with Section 73.525 of the Commission's Rules regarding protection of television Channel 6. However, FPR makes no showing of its own that the Hispanic proposal would cause objectionable interference to Channel 6.

2. Attached hereto is the Technical Exhibit ("TE-1"), prepared by Bromo Communications, Inc. ("Bromo") on behalf of Hispanic which fully responds to the allegations made by FPR. As indicated in TE-1, Hispanic's proposed facility "will not cause interference to WCPX [Channel 6]." (TE-1, p. 4).

3. In light of the fact that Hispanic's proposal will not cause interference to Channel 6, the procedural arguments raised by FPR must be denied due to the total lack of substantive

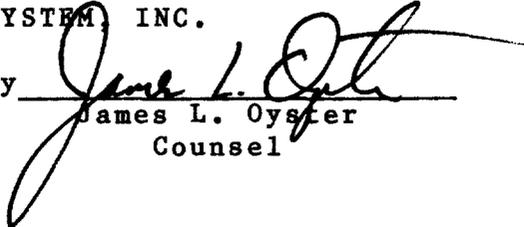
import pertaining thereto.

WHEREFORE THE PREMISES CONSIDERED, it is respectfully requested that the Commission deny the PETITION TO DISMISS OR DENY filed by Florida Public Radio, Inc. in connection with the above-captioned application.

Respectfully submitted,

Law Offices  
JAMES L. OYSTER  
Rt. 1, Box 203 A  
Castleton, VA 22716  
(703) 937-4800

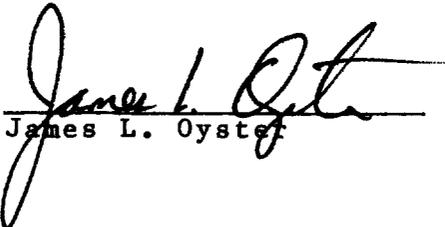
HISPANIC BROADCAST  
SYSTEM, INC.

By   
James L. Oyster  
Counsel

CERTIFICATE OF SERVICE

James L. Oyster hereby certifies that he has sent a copy of the foregoing by first class U.S. mail, postage prepaid, or by hand delivery, on or before the 22nd day of August, 1990 to the following:

Randy Henry, President  
Florida Public Radio, Inc.  
505 Josephine St.  
Titusville, FL 32796

  
James L. Oyster

OPPOSITION TO PETITION TO DISMISS OR DENY  
NEW NON-COMMERCIAL FM  
HISPANIC BROADCAST SYSTEM  
LAKE MARY, FLORIDA  
August 1990

Technical Exhibit  
TE-1

Bromo Communications, Inc.  
1200 Eighteenth Street, NW - Suite #206  
Washington, DC 20036  
(202) 429-0600

©Copyright 1990 - All rights reserved

OPPOSITION TO PETITION TO DISMISS OR DENY  
NEW NON-COMMERCIAL FM  
HISPANIC BROADCAST SYSTEM  
LAKE MARY, FLORIDA  
August 1990

TECHNICAL STATEMENT

1. These technical comments and attached exhibits were prepared on behalf of Hispanic Broadcast System, ("Hispanic"), an applicant proposing to construct a new non-commercial FM station on Channel 202C2 at Lake Mary, Florida. The comments are in opposition to the Petition to Dismiss or Deny filed against Hispanic's application by Florida Public Radio, Inc., ("FPR"). In its Petition, FPR notes that Hispanic and two other of the six mutually exclusive applicants for this non-commercial station are proposing to locate their antenna systems on an existing tower in close proximity to WCPX, Channel 6, Orlando, Florida. FPR states its objection to the form of Hispanic's agreement with WCPX regarding the proposed FM station. Further, FPR objects to Hispanic's request for processing based on "co-location" with Channel 6 per §73.525(d) of the Commission's Rules.

DISCUSSION

2. Hispanic has coordinated its proposal with WCPX and had received a letter from the Chief Engineer of WCPX, Mr. Robert K. Diehl, stating that Channel 6 was "willing to cooperate" with Hispanic. A copy of the letter was attached to Hispanic's application. The WCPX letter also asks that

Hispanic work with Channel 6 to eliminate any possible interference. Hispanic has previously, and again states that it will, cooperate fully with WCPX to address any interference complaints caused by the operation of the non-commercial FM station to WCPX-TV. The WCPX letter from Mr. Diehl, a copy of which is attached here as Exhibit # 1, was reviewed by other WCPX management personnel prior to being mailed to Hispanic.

3. FPR's concern regarding the term "co-location" is based on the distance between WCPX and the proposed FM site; the two facilities are separated by 2.96 kilometers (1.84 miles). In order to be truly co-located under §73.525(d), the distance between the proposals should not exceed 0.4 kilometers. An attempt was made by Hispanic to locate its antenna system on the WCPX tower. However, Hispanic was informed by the co-owner of the WCPX tower that due to the existence of three commercial FM station antennas and three television station antennas, the tower could not accommodate any additional tenants. Therefore, Hispanic tried to locate another structure as close to WCPX as possible. It secured the use of an adjacent tower, utilized by other area FM and television stations. Hispanic voluntarily reduced its proposed effective radiated power to 1.9 kilowatts, the power level at which it could have operated at if it were located on the WCPX tower. Detailed interference showings were not included with Hispanic's application since the relationship between the WCPX protected contours and Hispanic's FM interfering contours were nearly identical to those which would have existed if Hispanic had located its

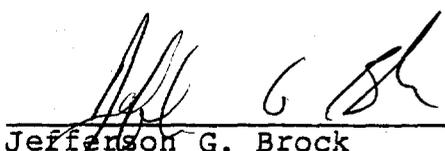
facility on the WCPX tower, under a true co-location situation.

4. Using §73.525(e) regulations, we calculated that Hispanic's facility, operating at its proposed power and height from the adjacent tower, will not cause interference to WCPX. This is based on using a series of WCPX protected contours and the associated non-commercial FM interfering contours from Figure 1, §73.599 of the Commission's Rules (as shown on Exhibit # 2). Distance to WCPX's 47 dBu contour, based on 100 kilowatts at 445 meters height above average terrain, is 115.4 kilometers. Hispanic's interfering contour 50.8 dBu FCC F(50/10) extends 63.1 kilometers. The Hispanic contour falls over 52 kilometers short of reaching WCPX's protected contour. For that matter, at 63.4 kilometers from the WCPX site, Channel 6 has a 68 dBu signal, nearly 20 db higher than Hispanic's interfering contour level of only 50.8 dBu at 63.1 kilometers. The undesired-to-desired ratio is never reached at any of the WCPX contours. Exhibit # 2 shows other WCPX contour values and the associated Hispanic interfering contours, tabulated every three db. The table clearly shows in every instance that Hispanic's proposal will not cause interference to WCPX based on the FM/TV 6 protection ratios contained in Figure 1 of §73.599. The tabulation of protected and interfering contours were made out to the extreme of the Figure 1 sliding scale.

SUMMARY

5. In its application, Hispanic stated in Exhibit # 7 that it had coordinated its proposal with Channel 6 and was willing to continue working with WCPX to eliminate any interference caused to Channel 6 by the non-commercial educational FM station at Lake Mary. Hispanic also noted that it would supply additional information regarding potential interference between its proposal and WCPX should the Commission request it. Since Hispanic has demonstrated that no interference will result from the proper operation of its proposed station to Channel 6, based on §73.525(e), and Hispanic has coordinated its proposal with a representative of the management at WCPX, and secured concurrence, Florida Public Radio's Petition should be dismissed as moot.

Dated: August 20, 1990

  
\_\_\_\_\_  
Jefferson G. Brock  
Bromo Communications, Inc.  
Technical Consultant to:  
Hispanic Broadcast System



June 29, 1989

Hispanic Broadcast Systems  
c/o Bromo Communications, Inc.  
1200 18th Street N.W. Suite #206  
Washington, D.C. 20036

To Whom it may concern,

Thank you for consulting with WCPX, Ch6, in regard to your seeking of an FM allocation of 88.3 MHz in the Orlando area. I am very concerned of any interference potential that could cause reception problems to our viewers, since our aural carrier is assigned to 87.74 MHz.

As I told you earlier, collocation at our transmitter site cannot happen due to the near saturation point of our 1,500 ft. tower. It presently is accommodating three television and three FM's plus auxiliary equipment for these six operations. This is a jointly owned and operated venture of TV Tower, Inc. TV Tower has declined all space requests for some time now for this reason.

The Gannet tower, which you propose going on is approximately one and one quarter miles from WCPX's transmitter site. While this does not fall under the Commission's guidelines to satisfy co-location, I feel that it is a workable situation. WCPX is willing to cooperate with you on this, as long as you assure me that you will address and solve any and all interference problems that your 88.3 MHz Station may cause to WCPX viewers. The area around the Gannet Tower is sparsely populated and I don't see much of an interference potential at the present time. However, with the growth rate that we are experiencing in the Orlando area, a few years from now this area may become populated.

WCPX is happy to cooperate with you on seeking your license. Best of luck to you on your application.

EXHIBIT #7A  
NEW EDUCATIONAL FM STATION  
HISPANIC BROADCAST SYSTEM  
CH 202C2 - 88.3 MHZ - 1.9 KW  
LAKE MARY, FLORIDA  
OCTOBER 1989

Respectfully,

*Robert K. Diehl*  
Robert K. Diehl  
Chief Engineer

copy; Michael J. Schweitzer, G.M., file

Ⓢ P.O. Box 606000 • Orlando, FL 32860 (305) 291-6000 Ⓢ

WCPX LETTER

EXHIBIT #1  
OPPOSITION TO PETITION TO  
DISMISS OR DENY  
NEW NON-COMMERCIAL FM  
HISPANIC BROADCAST SYSTEM  
LAKE MARY, FLORIDA  
AUGUST 1990

**BROMO** BROADCAST  
COMMUNICATIONS TECHNICAL CONSULTANTS  
St Simons Island, Georgia Washington, D.C.

TABLUATED DISTANCES  
 PROTECTED CONTOUR OF WCPX, CHANNEL 6, ORLANDO, FLORIDA  
 AND  
 INTERFERING CONTOURS OF NEW NON-COMMERCIAL FM,  
 LAKE MARY, FLORIDA

WCPX (100 KW & 445 meters HAAT)

New FM (1.9 KW & 306 meters HAAT)

<u>Protected Contour (dBu) (FCC) (50/50)</u>	<u>Dist. (KM)</u>	<u>Interfering Contour (dBu) (FCC) (50/10)*</u>	<u>Dist. (KM)</u>	<u>Contour Buffers (KM)</u>
47 dBu	115.4	50.8 dBu	63.1	52.3
50 dBu	106.9	53.0 dBu	57.2	49.7
53 dBu	99.1	54.4 dBu	53.6	45.5
56 dBu	92.3	56.4 dBu	48.6	43.7
59 dBu	85.5	58.5 dBu	43.2	42.3
62 dBu	78.2	60.5 dBu	38.5	39.7
65 dBu	70.6	62.5 dBu	34.3	36.3
68 dBu	63.4	65.0 dBu	30.2	33.2
71 dBu	56.5	67.6 dBu	26.2	30.3
74 dBu	50.0	70.3 dBu	22.3	27.7
77 dBu	43.5	73.0 dBu	18.6	24.9
80 dBu	37.5	75.8 dBu	15.3	22.2
83 dBu	32.3	78.5 dBu	13.3	19.0
86 dBu	27.5	81.5 dBu	11.2	16.3
89 dBu	23.2	84.0 dBu	9.6	13.6
90 dBu	21.8	84.8 dBu	9.1	12.7

\* Contour value determined per §73.599, Figure 1, FM/TV 6  
 Protection Ratios based on median receivers. WCPX protected  
 contour and New FM interfering contour projected to extreme  
 of sliding scale in Figure 1, §73.599.

INTERFERENCE CALCULATIONS

EXHIBIT #2  
 OPPOSITION TO PETITION TO  
 DISMISS OR DENY  
 NEW NON-COMMERCIAL FM  
 HISPANIC BROADCAST SYSTEM  
 LAKE MARY, FLORIDA  
 AUGUST 1990

**BROMO**  
**COMMUNICATIONS**  
 St Simons Island, Georgia      BROADCAST  
 TECHNICAL CONSULTANTS  
 Washington, D. C.