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September 10, 1997

Mohnkern Electronics, Inc.
1442 W. Moore Ave.
Terrell, Texas 75160

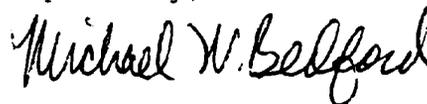
We have compiled the accompanying statement of assets, liabilities and equity of Mohnkern Electronics, Inc. dba Radio Station KPYK as of December 31, 1996, December 31, 1995, and December 31, 1994, and the related statement of revenue and expenses for the years then ended, on the federal income tax basis of accounting in accordance with standards established by the American Institute of Certified Public Accountants.

A compilation is limited to presenting in the form of financial statements information that is the representation of management. We have not audited or reviewed the accompanying financial statements and, accordingly, do not express an opinion or any other form of assurance on them.

Management has elected to omit substantially all of the disclosures required by generally accepted accounting principles. If the omitted disclosures were included in the financial statements, they might influence the user's conclusions about the company's financial position, and results of operation. Accordingly, these financial statements are not designed for those who are not informed about such matters.

With the consent of its shareholders, the Company has elected to have its income taxed under Section 1372 of the Internal Revenue code. In lieu of corporation income taxes, this section provides that the shareholders will be taxed on their proportionate share of the Company's taxable income. Therefore, no provision or liability for federal income taxes has been included in these financial statements.

Respectfully,



Michael W. Bedford
Certified Public Accountant

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

In re Application of)
)
Lakeshore Broadcasting, Inc.) File No. BPH-930119MB
)
For Construction Permit for a)
New FM Broadcast Station on)
Channel 229A at)
North Madison, Ohio)

MEMORANDUM OPINION AND ORDER

Adopted: September 15, 1998; Released: September 22, 1998

By the Commission:

1. The Commission has before it an Application for Review filed on behalf of Lakeshore Broadcasting, Inc. ("Lakeshore"), former applicant for a new FM station at North Madison, Ohio.

2. Lakeshore seeks review of a decision entered by the Office of the Managing Director denying its petition for reconsideration and reinstatement of its application nunc pro tunc. Lakeshore's application was dismissed for failure to remit its hearing fee in accordance with the deadline established in this proceeding. In its Application for Review, Lakeshore essentially reiterates the same arguments considered by the Managing Director, that the Commission should be required to provide broadcast applicants with personal or actual notice of applicable hearing fee deadlines, rather than establishing such deadlines by public notice.

3. The Managing Director's decision was fully consistent with section 8(c)(2) of the Communications Act, 47 U.S.C. § 158(c)(2), and sections 1.1112(a) and 1.1116(a) and (b) of the Commission's implementing regulations, 47 C.F.R. §§ 1.1112(a) and 1.1116(a) and (b), which provide that absent timely filed fees, applications are subject to dismissal. Moreover, the Managing Director's decision was consistent with Commission precedents that have considered and rejected the same arguments advanced by Lakeshore in its application for review. See East Coast Communications Limited Partnership, 11 FCC Rcd 18221 (1996); Macon Broadcasting, Inc., 8 FCC Rcd 8669 (1993) Gerald E. Davis and Jo Ann Dunn, 9 FCC Rcd 3016 (1994); see also AC Broadcasting, Inc., 10 FCC Rcd 3254 (1995); Public Notice, Fee Decisions of the Managing Director (Letter to Mr. Hayes), 9 FCC Rcd 767, 774 (1994); Public Notice, Fee Decisions of the Managing Director (Letter to Mr. Fitch), 9 FCC Rcd 356, 366 (1993); Public Notice, Fee Decisions of the Managing Director (Letter to Mr. Weisbroth), 7 FCC Rcd 2414, 2422 (1992). Specifically, the Commission has determined that the Commission public notices specifying hearing fee deadlines, as provided for under sections 73.3573(g)(2)(i) and (ii), 47

C.F.R. §§ 73.3573(g)(2)(i) and (ii), afford sufficient notice to applicants, and that, absent timely filed section 8 hearing fees, broadcast applications will be dismissed.¹

4. Lakeshore neither submitted a timely hearing fee, nor established good cause for waiver of the hearing fee deadline. See 47 U.S.C. §158(d)(2); 47 C.F.R. § 1.1117. We thus affirm the Managing Director's decision dismissing Lakeshore's underlying application and will not reinstate Lakeshore's application on review.

5. ACCORDINGLY, IT IS ORDERED, that pursuant to 47 U.S.C. §154(i); 47 C.F.R. § 1.115(g), the application for review filed by Lakeshore Broadcasting, Inc. IS DENIED.

FEDERAL COMMUNICATIONS COMMISSION

Magalie Roman Salas
Secretary

¹ In its application for review, Lakeshore cites Comuni-Centre Broadcasting, Inc. v. FCC, 856 F.2d 1551 (D.C.Cir. 1988) and Nancy Naleszkiewicz, 7 FCC Rcd 1797 (1992), for the proposition that absent prejudice to other parties, dismissal is too harsh a penalty for a late filing. Comuni-Centre and Nancy Naleszkiewicz involved late-filed pleadings and a late-filed notice of appearance, respectively. Neither involved the untimely submission of section 8 filing fees, and therefore, neither of those cases implicates our rules and precedents governing timely submission of fees in comparative licensing cases.

FEDERAL COMMUNICATIONS COMMISSION

Washington, D. C. 20554

September 29, 1998

OFFICE OF
MANAGING DIRECTOR

DOCKET FILE COPY ORIGINAL

Peter D. O'Connell, Esquire
Wiley, Rein & Fielding
1776 K Street, N.W.
Washington, D.C. 20006

Re: Request for Reduction of Regulatory Fees
Multimedia, Inc.
Fee Control # 9709228835549003
Fee Paid: \$28,850

Dear Mr. O'Connell:

This is in response to the request filed on behalf of Multimedia, Inc. for a reduction in the Fiscal Year (FY) 1997 regulatory fees assessed for VHF Television Satellite Station KNAZ-TV, Flagstaff, Arizona and 16 Broadcast Auxiliary stations.

You maintain that although KNAZ-TV is located in the Phoenix, Arizona, market, it does not serve Phoenix. You assert that KNAZ-TV should be regarded and assessed the regulatory fee for a non-top 100 or remaining market station. Multimedia, Inc. paid a total of \$28,850 in FY 1997 regulatory fees, for a VHF Television Station serving the 11th through 25th largest markets, and for 16 Broadcast Auxiliary Stations.

Our review of the record shows that KNAZ-TV is within the Phoenix, Arizona, market. However, KNAZ-TV's predicted Grade B contour does not reach Phoenix. The Television and Cable Fact Book, Vol. 65, A-63 (1997), indicates that KNAZ-TV's service area encompasses 109,710 television households, which are fewer than the number of television households served by a television station located in a top 100 market. Thus, KNAZ-TV will be assessed a regulatory fee comparable to that of a VHF Station in the remaining market category, or \$2,725, together with an additional \$400 in fees for its 16 Broadcast Auxiliary stations. Absent significant changes in population or coverage area, KNAZ-TV will be considered as a remaining market station in succeeding years. A copy of this letter should be retained and included with any future correspondence concerning the imposition of regulatory fees for KNAZ-TV.

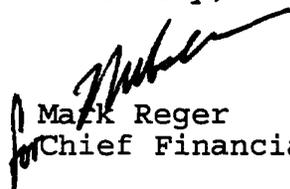
Mr. Peter D. O'Connell

2

Accordingly, your petition is granted. Multimedia, Inc. has paid a total of \$28,850 in regulatory fees for KNAZ-TV and its Broadcast Auxiliary Stations. Thus, it is entitled to a refund \$25,725. A check, made payable to the maker of the original check, and drawn in the amount of \$25,725, will be sent to you at the earliest practicable time.

If you have any questions concerning the refund, please call the Chief, Fee Section at (202) 418-1995.

Sincerely,


Mark Reger
Chief Financial Officer

9709228835549003

Jenny

BEFORE THE
Federal Communications Commission
WASHINGTON, D.C. 20554

Jan 26 1997
FCC File No. _____

In the Matter of)
)
Multimedia, Inc.,)
Licensee of VHF Television Station) FCC File No. _____
KNAZ-TV)
Flagstaff, Arizona)

To: Chief, Mass Media Bureau

PETITION FOR REDUCTION OF REGULATORY FEE

Multimedia, Inc., licensee of television station KNAZ-TV, Flagstaff, Arizona ("KNAZ-TV"), hereby petitions the Commission for a reduction of the station's 1997 regulatory fee to a fee comparable to that of a commercial VHF station in a "Remaining Market" category. KNAZ-TV requests a refund of \$25,725.00 which reflects the difference between the 1997 regulatory fee assessment and the amount charged to stations in the "Remaining Market" category. Additionally, KNAZ-TV also requests that it be assessed future regulatory fees commensurate with this redesignation.

In support of its Petition, KNAZ-TV submits that the "good cause" standard of Section 1.1166 of the Commission's Rules has been met, and in support of such, declares the following:

1. In the case of stations that do not in fact serve the principal metropolitan areas of their assigned markets, it is the FCC's policy to assess regulatory fees based on "the number of television households served" so that the stations will be charged "the same fee as stations serving markets with the same number of television households."¹

¹ See In re Implementation of Section 9 of the Communications Act Assessment and Collection of Regulatory Fees for the 1994 Fiscal Year, Memorandum
Continued on following page

2. KNAZ-TV is a commercial VHF television station licensed to Flagstaff, Arizona, and is listed as within the Phoenix, Arizona, Designated Market Area ("DMA") in the 1997 edition of the Television and Cable Factbook and the 1997 Cable & TV Station Coverage Atlas.²

3. The Phoenix DMA, as defined by both of the above cited sources, is the seventeenth (17) largest in the nation and includes 1,212,850 Nielsen DMA Television Households.³ According to the Commission's schedule for 1997 regulatory fees, KNAZ-TV owes \$28,450.00 in regulatory fees, by virtue of its status as a Commercial VHF Station in Markets 11-25.⁴

4. KNAZ-TV has timely remitted the full \$28,450.00 in regulatory fees due, and accompanies such payment with this Petition for Reduction of Regulatory Fee.

5. In support of its request for a reduction in fees, KNAZ-TV represents that it does not in fact operate (nor serve the viewers) in the Phoenix, Arizona, television market. KNAZ-TV is licensed to and located in Flagstaff, Arizona, approximately 135 miles from Phoenix, and is located well outside of Phoenix's metropolitan area. See Exhibit 1 (portraying signal coverage).

6. KNAZ-TV recently submitted to the Commission an engineering study in conjunction with its license assignment. The study focused on the potential for Grade B contour overlap between KNAZ-TV and KPNX-TV, a major television station serving the entire Phoenix-Mesa television viewing area. The engineering report from this study,

Opinion and Order, FCC 95-257, 10 FCC Rcd. 12759, ¶ 22 (1995) (hereinafter Memorandum Opinion and Order).

² See Television & Cable Factbook, Volume 65 A-1 (Albert Warren, ed., 1997); 1997 Cable & TV Station Coverage Atlas 376 (Albert Warren, ed., 1997).

³ See id.

⁴ See FY 1997 Mass Media Regulatory Fees, Public Notice, Aug. 1, 1997, at 7.

relevant portions of which are attached as Exhibit 2, concluded that as a result of the mountainous terrain lying between the two transmitters, the viewer population living in the overlapping area was de minimus: 0.03% of the total population within the KPNX-TV Grade B contour and 0.28% of the total population within the KNAZ-TV Grade B contour. See Exhibit 2, at 8-9. As such, the KNAZ-TV transmitter, which is located approximately eighteen miles southeast of Flagstaff, and approximately 115 miles from Phoenix, does not provide even a Grade B signal to the Phoenix metropolitan area. Likewise, Phoenix television stations do not provide Grade B signals to Flagstaff or the area surrounding Flagstaff.

7. KNAZ-TV is not carried by cable systems serving the Phoenix metropolitan area. See Exhibit 3 (1997 Television and Cable Factbook listing all programming carried by cable operators serving the Phoenix cable area). Additionally, independent demographic and financial studies indicate that KNAZ-TV has no measurable audience share in the Phoenix market. See Exhibit 4.⁵

8. Exhibit No. 1 reflects that KNAZ-TV serves 74,860 cable TV households and 34,850 non-cable TV households for a total of 109,710 households. This figure is much smaller than the 255,740 television households that are located within the Savannah, Georgia, television market, the 100th largest television market in the nation.⁶ VHF stations located in markets smaller than Savannah are required to pay a regulatory fee of only \$2,725.00.⁷ KNAZ-TV serves such a smaller market, and thus should be assessed a comparable regulatory fee.

9. In addition to Commission policy as set out in its Memorandum Opinion and Order, KNAZ-TV also cites, as precedent for this request for reduction of fees, the

⁵ BIA Publications, Inc., Investing in Television, 1996 Market Report (May 1996).

⁶ See supra note 3.

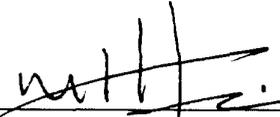
⁷ See supra note 5.

following Commission actions: Letter from Marilyn J. McDermott, Associate Managing Director for Operations to Thomas J. Hutton, February 14, 1996 (granting a fee reduction for KMOH-TV, Kingman, Arizona); Letter to Bradford D. Cagey, February 10, 1995; Letter to Dr. Robert J. Pelletier, February 10, 1995.

Pursuant to the facts set forth above and in accordance with the policy stated in the Memorandum Opinion and Order, KNAZ-TV requests a reduction in its regulatory fees for fiscal year 1997 from \$28,450.00 to \$2,725.00, which represents the fees assessed on VHF stations in markets below the top 100 (i.e. those serving fewer than 255,740 television households). KNAZ-TV requests a refund of \$25,725.00 which reflects the difference between the 1997 regulatory fee assessment and the amount charged to stations in the "Remaining Market" category. KNAZ-TV requests that this refund be tendered at the earliest possible date. Additionally, KNAZ-TV requests that it be considered as a "Remaining Market" for purposes of regulatory fee assessments in succeeding years.

Respectfully submitted,

Multimedia, Inc.

By: 

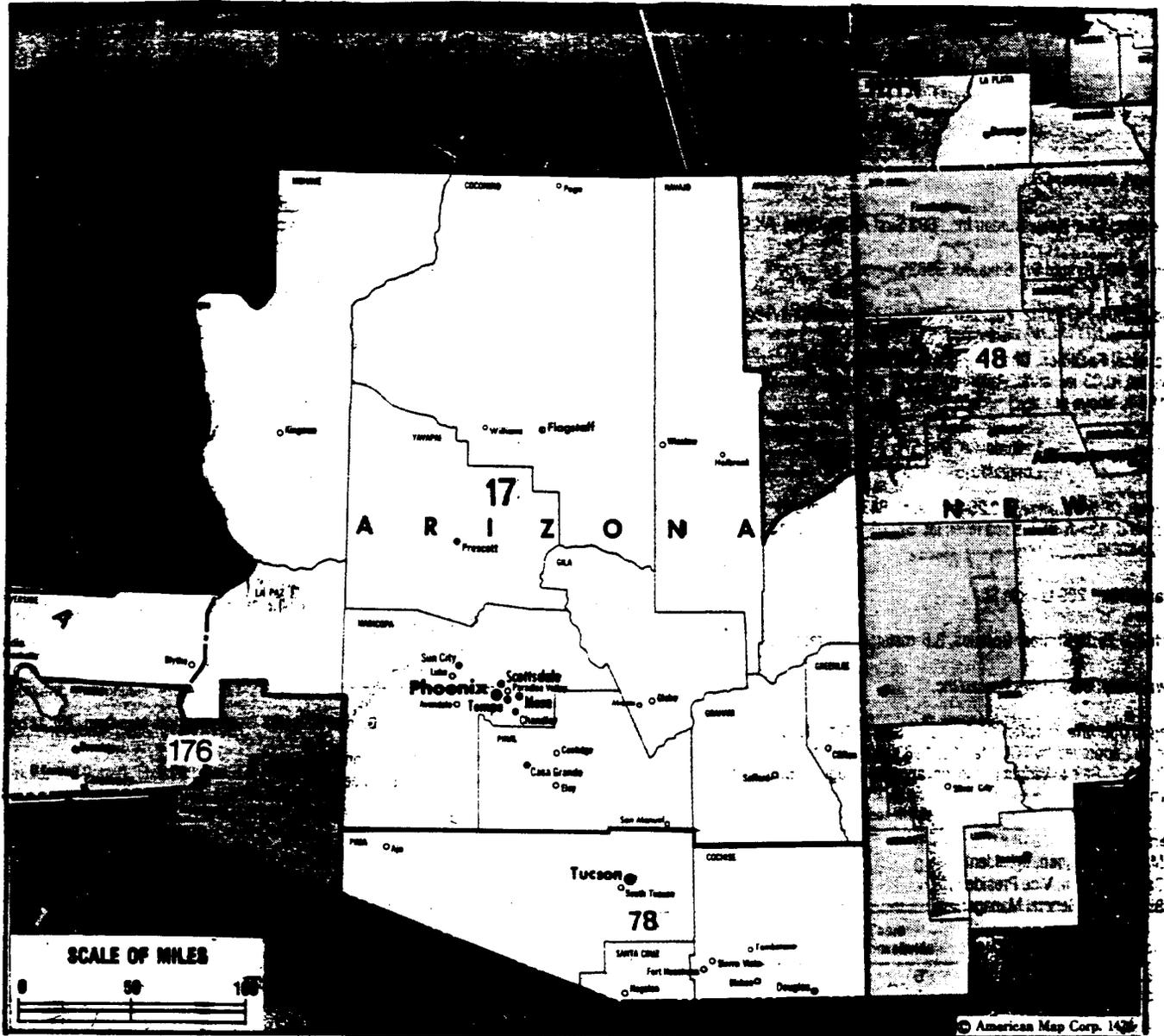
Peter D. O'Connell
Michael L. Francesconi

REED SMITH SHAW & McCLAY
1301 K Street, NW, Suite 1100--East Tower
Washington, D.C. 20005-3317

Its Attorneys

September 16, 1997

Exhibit 1



MARKET	NIELSEN DMA TV HOUSEHOLDS	RANK	MARKET AREA COMMERCIAL STATIONS
Phoenix, AZ	1,212,850	17	KASW (61), KMOH-TV (6), KNAZ-TV (2), KNCV-TV (15), KPAZ-TV (21), KPHO-TV (5), KPNX (12), KSAZ-TV (10), KTVK (3), KTVW-TV (33), KUSK (7), KUTP (45), KWBF (13)
Albuquerque-Santa Fe, NM	554,290	48	KASA-TV (2), KASY-TV (50), KBIM-TV (10), KCHF (11), KHFT (29), KLUZ-TV (41), KNAT (23), KOAT-TV (7), KOB-TV (4), KOBF (12), KOBR (6), KOCT (6), KOVT (10), KREZ-TV (6), KRPV (27), KRQE (13)
Tucson, AZ	354,320	78	KGUN (9), KHRR (40), KMSB-TV (11), KOLD-TV (13), KTTU-TV (18), KVOA (4)
Yuma, AZ-El Centro, CA	84,300	175	KEYC-TV (9), KSWT (13), KYMA (11), XHBC-TV (3)

State Cross Reference List	
Communities that receive programs of stations that are located elsewhere.	
KPNX-TV, Mesa	See Phoenix, AZ
KUSK, Phoenix	See Prescott, AZ
KEYC-TV, Yuma	See El Centro, CA

Arizona Station Totals as of November 1, 1996-			
	VHF	UHF	TOTAL
Commercial Television Stations	15	7	22
Educational Television Stations	2	1	3
	17	8	25

Arizona—Flagstaff

KNAZ-TV

Ch. 2

Network Service: NBC.

Licensee: Grand Canyon TV Co. Inc., Box 3360, Flagstaff, AZ 86003.

Studio: 2201 N. Vickey Dr., Flagstaff, AZ 86001.

Phone: 520-526-2232. Fax: 520-526-8110.

Technical Facilities: Channel No. 2 (54-60 MHz). Authorized power: 20-kw visual, 5-kw aural. Antenna: 1540-ft. above av. terrain, 284-ft. above ground, 8684-ft. above sea level.

Latitude 34° 58' 06"
Longitude 111° 30' 28"

Transmitter: Mormon Mountain, 18-mi. SSE of Flagstaff.

Multichannel TV Sound: Stereo only.

Satellite Earth Station: Harris, 6-meter; Harris receivers.

News Services: AP, NPS.

Ownership: Grand Canyon TV Co. Inc. (Group Owner).

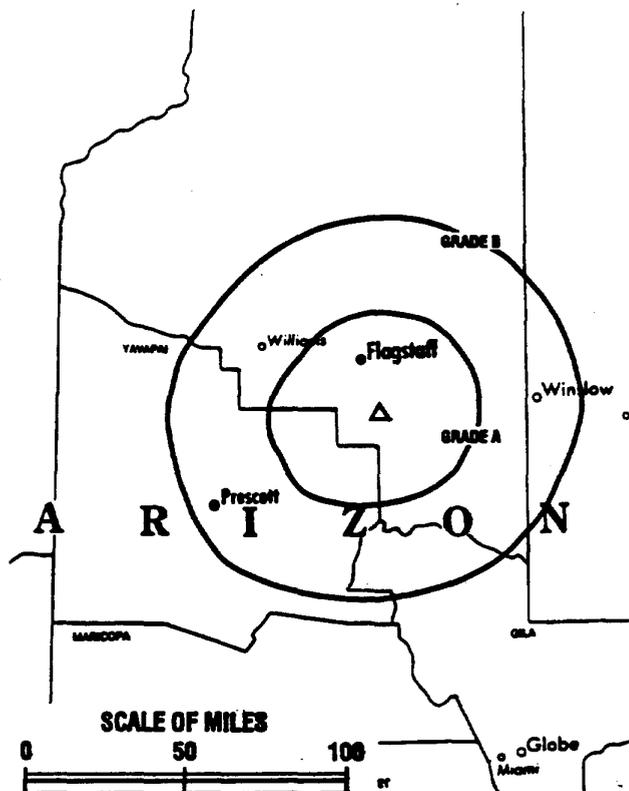
Began Operation: May 2, 1970. Transfer of control from Alfred Greenfield, Receiver, to W. A. Franke, Robert Johnson, John Michaels & Gene Gawthrop approved by FCC May 7, 1992. Sale to Grand Canyon TV Co. approved by FCC Nov. 16, 1988 (Television Digest, Vol. 29:3). Transfer of control to individual shareholders of Capitol approved by FCC Jan. 5, 1984. Sale to Capitol Bcstg. Co. by Wendell Elliot Jr., et al., approved by FCC Jan. 7, 1981.

Represented (sales): Katz Continental Television.

Represented (legal): Dow, Lohnes & Albertson.

Personnel:

Dan Robbins, Vice President & General Manager.
Stan Koplowitz, General Sales Manager.
Nick Matesi, News Director.
Marge Divine, Program Director.
Gary Kabrick, Chief Engineer.



KNAZ-TV BPCT-810317KF Granted 6/18/81 © American Map Corp., No. 14244

Highest 30 Sec. Rate: \$300.

City of License: Flagstaff. Station DMA: Phoenix. Rank: 17.

Circulation ©1996 Nielsen. Coverage based on Nielsen study.

Grand Total	Cable TV Households	Non-cable TV Households	Total TV Households
Estimated Station Totals*	74,860	34,850	109,710
Average Weekly Circulation (1996)	32,857	11,578	44,435
Average Daily Circulation (1996)			20,085
Station DMA Total	Cable TV Households	Non-cable TV Households	Total TV Households
Estimated Station Totals*	74,860	34,850	109,710
Average Weekly Circulation (1996)	32,857	11,578	44,435
Average Daily Circulation (1996)			20,085

*Estimated station totals are sums of the Nielsen TV and Cable TV household estimates for each county in which the station registers viewing of more than 5% as per the Nielsen Survey Methods.

Exhibit 2

**ATTACHMENT 1
ENGINEERING STATEMENT
RE: LOCATIONS OF GRADE B CONTOURS
TELEVISION BROADCAST STATIONS
KPNX CHANNEL 12 MESA, ARIZONA
KNAZ-TV CHANNEL 2 FLAGSTAFF, ARIZONA**

INTRODUCTION

This statement was prepared on behalf of Multimedia, Inc. ("Multimedia"), the proposed buyer of television broadcast station KNAZ-TV Flagstaff, AZ. Multimedia is affiliated with the licensee of television broadcast station KPNX Mesa, AZ and since there is the potential for Grade B contour overlap between the two stations, Multimedia must address the conditions outlined in Section 73.3555 of the Commission's Rules.

Section 73.3555(b) TELEVISION CONTOUR OVERLAP (DUOPOLY) RULE states: "No license for a TV broadcast station shall be granted to any party (including all parties under common control) if the grant of such license will result in overlap of the Grade B contour of that station (computed in accordance with 73.684) and the Grade B contour of any other TV broadcast station directly or indirectly owned, operated or controlled by the same party."

An analysis of the potential for Grade B contour overlap was conducted by the office of the undersigned, with the contours computed in accordance with Section 73.684 of the Commission's Rules. Based on the standard prediction method described in that

section, the Grade B contour of KPNX overlaps the Grade B contour of KNAZ-TV (the station Multimedia is seeking to acquire). Section 73.684(f) of the Rules does, however, recognize that in cases where terrain in one or more directions departs widely from the average 3 to 16 kilometer sector, or where the terrain is so extreme that a mountain ridge may indicate the practical limit of service, supplemental showings concerning contour distances determined by other means may be made.

This statement and the attached figures, prepared in support of a request for a waiver of Section 73.3555(b) of the Commission's Rules, present an analysis of the potential for overlap of the Grade B contours of KPNX, Mesa, AZ and KNAZ-TV Flagstaff, AZ. The analysis provides Grade B contour data using the standard prediction method and an alternative method that is permitted, as described in Section 73.684 (f) of the Rules.

The supplemental showing is based on a technical analysis utilizing the National Telecommunications and Information Administration's Irregular Terrain Model (ITM), computer program version 1.2.2, in the point-to-point mode. Terrain analysis using the ITM model has been submitted to the Commission on numerous occasions. Version 1.2.2 of the ITM model was used in this case because the Commission's staff, acting on their own motion, in a case involving Medford and Eugene, OR utilized version 1.2.2 of the ITM model to perform a technical analysis of Grade B contour overlap in preference to version 1.2.1 that was used by the proponent in that case. That case, BALCT-

921201KF and BALCT-921201KG, involved the assignment of KDRV(TV) Medford, by Sunshine Television, Inc., to Soda Mountain Broadcasting, Inc., the licensee of KEZI(TV) Eugene, OR. That case is hereinafter referred to as Sunshine. In a similar case involving the assignment of television station KEVU Eugene, OR to California Oregon Broadcasting, Inc. ("COBI"), licensee of television broadcast station KOB1 Medford, OR, the same technical analysis, version 1.2.2 of the ITM model was employed. Case BALCT-940124KG will be hereinafter referred to as COBI. The result of the Commission's analysis as noted in the Memorandum Opinion and Order in Sunshine was that the overlap based on the use of the ITM Model, although not de minimis, was within the range that has been authorized in previous cases and therefore the waiver request was granted. In the COBI case, the Commission cited their own technical analysis using version 1.2.2 of the ITM Model as the basis for determining contour overlap and accordingly granted the waiver request.

GRADE B CONTOURS - STANDARD PREDICTION METHOD

Attached to this statement as Figure 1 is a map showing the Grade B contours of KPNX and KNAZ-TV. The contour distances were predicted every forty-five degrees of azimuth using the standard prediction method described in Section 73.684 of the Commission's Rules. The 3 to 16 kilometer terrain data for all radial azimuths were calculated using a computer data base system to retrieve and average stored topographic data. The data used is the NGDC 30 Second Point Height Data File and the method of average calculation is the same as that specified in Docket 84-705 and

Section 73.312 of the FCC Rules.

The Grade B service areas and the areas of Grade B overlap shown on Figure 1 were analyzed for population, and for area in square kilometers. The results of those analyses are tabulated on Figure 2. The population was determined by a computer database system which tallies the population of the 1990 Census blocks and subgroups lying within a defined area. The areas were determined by measuring the map areas with a polar planimeter and converting the land area in square inches to land area in square kilometers by multiplying by a factor based on the scale of the map.

The assignment application to which this statement is attached will also include the acquisition of television broadcast station KMOH-TV Kingman, AZ by Multimedia. Attached as Figure 1A is a map showing the predicted Grade B contours of KMOH-TV in relation to the predicted Grade B contours of KPNX and KNAZ-TV. There is no overlap of the Grade B contours of KMOH-TV with either KPNX or KNAZ-TV.

SUPPLEMENTAL CONTOUR SHOWING

Utilizing the standard prediction method described in Section 73.684 of the FCC Rules, the proposed acquisition of KNAZ-TV by Multimedia will result in Grade B contour overlap as shown on Figure 1. Section 73.684 of the Rules describes contour prediction based on standard prediction methods using the F(50,50) estimated field strength curves in the FCC Rules. Those curves assume terrain with an average roughness height

factor of 50 meters. Attached as Figure 3 is a series of profile graphs showing a sample of the terrain in the area between the transmitter sites. The graphs demonstrate the ruggedness of the terrain and show numerous high ridges blocking line-of-sight transmissions in many directions. The profile graphs were prepared from terrain data extracted from the USGS 30 Second Point Height Data File. The terrain data is averaged at each point along a radial using the linear interpolation method described in the FCC rules. Since the terrain throughout the KPNX/KNAZ-TV service area departs widely from the FCC prediction standard, an alternative prediction method and supplemental Grade B contour showing is appropriate, as the FCC concluded in Sunshine and in COBI.

The FCC has on several occasions, such as in Sunshine and COBI, cited above, accepted supplemental showings of contours where the potential for overlap exists. The ITM model of radio frequency propagation is an implementation of the Longley-Rice model which has been in general use for many years. In Sunshine and COBI, the ITM program was employed by the proponents and the FCC in a point-to-point mode of calculation, predicting the field strength at various locations along a radial from the transmitter site. In addition, the nature of the intervening terrain and the presence of other factors such as urban clutter and/or vegetation loss may be considered to adjust the estimated field strength. The extent of service was defined by determining the distance along a path beyond which line-of-sight no longer exists and at which point the median value of the adjusted predicted signal falls below the level in question. This

method, though based on the precise calculation of field strength provided by the ITM prediction method, may require a significant degree of individual judgement in assessing the non-computed adjustments and median level.

In this report, the distance to the Grade B contours from the pertinent stations was predicted using the method described above, the method used by the FCC in Sunshine and COBI. The NTIA-ITM Irregular Terrain model, version 1.2.2, was used as the field strength prediction routine in a computer program designed to simulate the method described by the FCC in the Memorandum Opinion and Order in Sunshine and in the decision in COBI. In the computer program written for this particular case, the field strength is predicted along a radial path, starting approximately one mile from the transmitter, and at fixed intervals of 0.2 miles along the remainder of the radial path. Other parameters which may be adjusted in the ITM program were set at the values recommended by NTIA. A complete tabulation of the ITM program input parameters common to all calculations is attached as Table 1.

The terrain data used by the computer program written for this case is the same 30 Second Point Height Data used to prepare the profile graphs shown in Figure 3. Averaging the terrain data by the FCC linear interpolation method, and the inherent limitations of the database itself, both limit the absolute terrain accuracy. This limitation results in a calculated field strength different from that which would be calculated if the precise elevations were used at each point along a radial path. This "error", however,

tends to reduce the field strength change between line-of-sight and the following shadowed points.

When the terrain database does not precisely match a terrain peak, both the actual elevation from below the peak and the averaging with other lower points tend to return a lower than actual elevation. For a point that is still determined to be in line-of-sight there is no difference in the signal level. For following points in valleys, however, the terrain limitation and averaging works in the opposite direction, returning an elevation that is generally higher than actual. The ITM model then calculates a slightly higher field strength based on the effective reduction in the shadowing (lower peaks and higher valleys) used in the calculation. The end result is that the median field strength along a path is overestimated and using this overestimated value results in a greater distance to median Grade B contour. The use of actual terrain data along paths would tend to show lower signal levels and reduced distances to Grade B contours.

The computer program generated a field strength versus distance graph for each of the radial directions of interest. Those radials were chosen to cover the entire expanse of the predicted KPNX/KNAZ-TV Grade B overlap area with a step size of 5 degrees. The graphs attached as Figures 4 and 5 show the ITM predicted signal strength for stations KPNX and KNAZ-TV along each path and also the inverse distance predicted signal level. The distances to the terrain obstructed Grade B contours was judged to be the point at which the predicted field strength median value fell below the

Grade B level. The median value was determined in a 20 kilometer span of predicted field strength positioned along a radial. A "window" covering a 20 kilometer span was moved outward along the radial to establish the point at which the median value of the 20 kilometer window fell below Grade B level. The field strength graphs show the final window span and the resulting distance at which the median value fell below Grade B.

The terrain limited Grade B contour distances determined by the use of the ITM computer model and the field strength versus distance graphs of Figures 4 and 5 are tabulated on Figure 6 for KPNX and KNAZ-TV. Those distances were plotted on the map of Figure 7 and connected by an interpolation method to establish a smooth curve Grade B contour.

The map of Figure 7 shows the Grade B contours of KPNX and KNAZ-TV based on the technical analysis using the ITM Model. The terrain limited Grade B service areas and the resulting overlap as shown on Figure 7 were analyzed for population and area in square kilometers. The results of the analysis are tabulated on Figure 8.

The population within the overlap area, 560 is 0.03% of the total population of 2,235,960 within the KPNX Grade B contour, and 0.28% of the total population of 202,030 within the KNAZ-TV Grade B contour. The land area within the overlap area

is 314 square kilometers, 0.76% of the total within the KPNX Grade B contour, 41,490 square kilometers and 0.71% of the total within the KNAZ-TV Grade B contour, 44,060 square kilometers. The population in the overlap area is de minimus (less than 1%) when compared with the Grade B totals of both KPNX and KNAZ-TV. The land area figure is also de minimus when compared to the KPNX and KNAZ-TV Grade B contours.

The method of analysis for determining the population and area figures shown on Figure 8 is the same as that described in the preceding section covering the analysis of contours and overlap area using the standard prediction method.

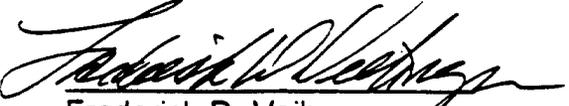
CONCLUSION

Television broadcast stations KPNX and KNAZ-TV operate in areas of rugged terrain with variations in terrain of several thousand feet throughout the service areas. In the areas of predicted Grade B overlap, the terrain departs widely from the average 3 to 16 kilometer sector and with the rare exception of a path directly along a river valley, essentially all transmission paths are interrupted by terrain obstructions. In this environment, clearly the standard FCC field strength prediction method is inappropriate.

The best alternative prediction method, that is fully recognized and utilized by the FCC, employs the NTIA ITM Model. That method has been used to provide the information in this statement. All such methods have their limits, however, in this case the limitations tend to over estimate the Grade B contour distance and the resulting

contour overlap. The contour overlap that remains, even for this conservative estimation, is a small fraction of the actual Grade B service areas.

Respectfully submitted,
LOHNES AND CULVER



Frederick D. Veihmeyer

January, 1997

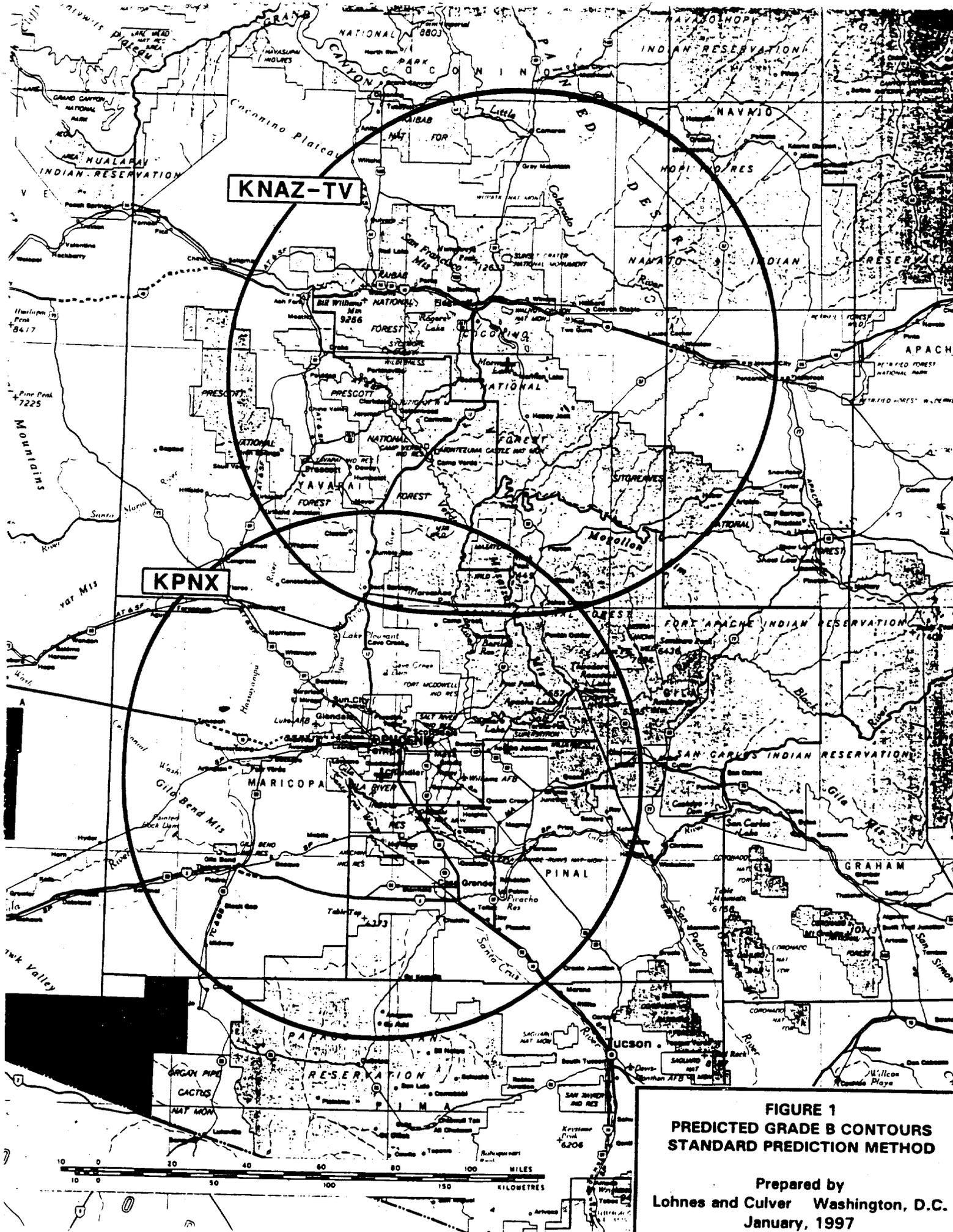


FIGURE 1
PREDICTED GRADE B CONTOURS
STANDARD PREDICTION METHOD

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**FIGURE 2
POPULATION AND AREA DATA
GRADE B CONTOURS
STANDARD PREDICTION METHOD
KPNX 316KW 1781 FT. AAT CH. 12
MESA, ARIZONA
KNAZ-TV 100KW 1601 FT. AAT. CH. 2
FLAGSTAFF, ARIZONA**

POPULATION

	<u>1990 CENSUS</u>
KPNX - Grade B	2,235,960
KPNX/KNAZ-TV Overlap	4,530(0.20%)
KNAZ-TV Grade B	202,030
KNAZ-TV/KPNX Overlap	4,530(2.24%)

AREA

	<u>SQUARE KILOMETERS</u>
KPNX - Grade B	41,490
KPNX/KNAZ-TV Overlap	3,900(9.4%)
KNAZ-TV Grade B	44,060
KNAZ-TV/KPNX Overlap	3,900(8.85%)

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