

**ENGINEERING STATEMENT
CONCERNING ANALYSIS OF TECHNICAL
ARGUMENTS CONTAINED IN
PETITION FOR RECONSIDERATION
IN MM DOCKETS 96-7, 96-12 AND
CONSTRUCTION PERMIT MODIFICATION FOR KFLY(FM)
BANKS, REDMOND, SUNRIVER AND CORVALLIS, OREGON**

JUNE 1998

SUMMARY

The following engineering statement has been prepared on behalf of **CBS Radio License, Inc.**, licensee of KBBT(FM), Banks, Oregon. On May 19, 1998, Madgekal Broadcasting, Inc., licensee of KFLY(FM), Corvallis, Oregon, filed a Petition for Reconsideration in MM Docket Numbers 96-7 and 96-12 concerning its one-step upgrade application for KFLY, Corvallis, Oregon. Madgekal puts forth several engineering comments. The arguments are summarized below and then discussed fully herein. According to Madgekal:

- 1) In a Report and Order released April 3, 1998, Channel 268C3 was allotted to The Dalles at reference coordinates N.L. 45° 34' 00", W.L. 120° 55' 00". The Commission erred in that the allotment coordinates are terrain obstructed to The Dalles and the site will not place a 70 dBu city grade signal over The Dalles.
- 2) The allotment coordinates specified by the Commission for Channel 268C3 in its February, 1996 NPRM (RM-8741), N.L. 45° 31' 28", W.L. 121° 07' 22", are similarly terrain obstructed and do not allow 70 dBu city grade service to The Dalles.
- 3) Reserved Channels 201C3, 211C3, 213C3 and 215C3 are available for use at The Dalles, at an existing site near Stacker Butte, and will meet all FCC Rules and Regulations. For allocation and Channel 6 protection requirement purposes, the site of K256AC was utilized.

- 4) Channel 256C3 is available for allotment to The Dalles at a site known as Haystack Butte, N.L. 45° 41' 01", W.L. 120° 57' 17".
- 5) Channel 256C3 may be allotted at a site which provides line of sight to most of The Dalles, and the facility will provide 70 dBu service to all of The Dalles.

TERRAIN OBSTRUCTION - 70 dBu CITY GRADE SERVICE

The terrain profile plots submitted by Madgekal have been reviewed. *Exhibit 8* is a set of six profiles from the April 1998 allotment coordinates for Channel 268C3 to The Dalles. *Exhibit 9* is a set of eight profiles from the February 1996 coordinates for Channel 268C3 to The Dalles. *Exhibit 10* is a set of ten terrain profiles from Madgekal's proposed Channel 256C3 allotment coordinates to The Dalles.

Review of these profiles, and our independent analysis thereof, shows that the Madgekal terrain profiles are based on 3 second terrain data rather than the 30 second terrain data typically used by the FCC staff for analysis and application processing purposes. Most importantly, based on our experience and independent analysis, use of the 3 second data in this general region tends to increase the height of peaks and decrease the height of some valleys, resulting in path profiles which show as obstructed but which do not show as obstructed when 30 second terrain data is used.

Standard Allocation Branch policy is to assume that a given site will provide 70 dBu service to the allotment community if the site is located within the appropriate 70 dBu distance from the city reference coordinates. In cases where a terrain obstruction has been found to exist between a proposed allotment site and the community of license, it does not necessarily follow that the proposal does not meet the requirements of *Section 73.315*. In Bald Knob and Clarendo, Arkansas, 6 FCC Rcd 7435, 7436 (Assistant Chief, Allocations Branch 1991), the Commission stated that line-of-sight must be obtained over the entire community, and in Jefferson City, Tennessee, 10 FCC Rcd 12207, 12209 (Chief, Allocation Branch 1995), an allotment was denied because the petitioner failed to demonstrate the existence of a site that could provide line-of-sight to the entire community. However, these cases must be taken in the context in which

they were written. Neither petitioner successfully demonstrated that the obstruction would not prevent the proposed site location from serving the community of license with a signal level of 70 dBu or greater. In true fact, the Commission has long held that *73.315(b)* is advisory in nature and not an absolute requirement. See e.g. Jesse Willard Shirley, 36 FCC 2d 127, 128-29, 24 RR 2d 982, 985. On the other hand, *Section 73.315(a)* is controlling, and this Rule demands that 70 dBu service be provided to the community of license.

In the case at hand, Madgekal's consulting engineer has performed no computations for the 70 dBu signal level based on the terrain profiles provided. Despite the fact that the engineering provides no alternative 70 dBu signal level analysis based on terrain profiles, Madgekal's pleading (page 16) states, "severe terrain obstructions render it impossible to deliver a city-grade signal to the community." This statement is factually incorrect as will be shown below and is without support in Madgekal's underlying engineering studies.

The Longley-Rice propagation method, Version 1.2.2, has been accepted by the Commission as an alternate prediction method to be used to accurately determine signal levels over irregular terrain. This is the propagation method described in OET Bulletin No. 69 to be used for analysis of signal levels as set forth in Part 73 of the Rules as implemented by Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket No. 87-268, released February 23, 1998. This method has been used to determine signal levels over The Dalles. Figure 1 depicts The Dalles corporate boundary, the F(50,50) 70 dBu, and the Longley-Rice 70 dBu signal levels based on the February 1996 allotment coordinates. Figure 2 depicts The Dalles corporate boundary, the F(50,50) 70 dBu, and the Longley-Rice 70 dBu signal levels based on the April 1998 allotment coordinates. Both sites show 100%, 70 dBu service to The Dalles, using either the F(50,50) curves or the Longley-Rice propagation method. It is noted that in Pathfinder Communications Corporation (WCUZ-FM), 3 FCC Rcd 4146, 4147, Note 3 (1988), the Commission stated that alternative supplemental methods of determining coverage under *Section 73.313(e)* are allowed, and went on to state, ".....at least 50 percent of a community receives a signal level of 70 dBu or greater, is a reasonable and useful standard for determining adequate community coverage when employing alternate supplemental methods in addition to our propagation curves."

NCE CHANNEL AVAILABILITY

The engineering statement accompanying Madgekal's Petition shows that basic allocation studies were performed at the site of FM translator K256AC for Channels 201, 211, 213 and 215 at an ERP of 0.2 kW and HAAT of 561 meters (minimum Class C3 facilities), and the statement concludes that each channel is available. The studies are found in Exhibit 2, but are not sufficiently thorough to support the conclusion drawn by Madgekal. Attached as Figures 3 and 4 are allocation maps for Channels 213 and 215CE, using the K256AC site & RC with an ERP of 0.2 kW as suggested by Madgekal. Both sites violate *Section 73.509* of the Rules in that there is prohibited overlap of contours to existing stations, and they are not, therefore, available. It is noted that contour locations are based on use of 3 second terrain data rather than the 30 second terrain data used by Madgekal, and the more accurate terrain data yields more accurate contour locations.

This leaves Channels 201 and 211C3. These channels are not involved in prohibited contour overlap even at an ERP of 0.63 kW, which is the correct ERP for full Class C3 facilities at the HAAT of 561 meters.

To determine whether Channels 201C3 and 211C3 are actually available for application, it is necessary to determine if they meet the requirements of *Section 73.525* of the Rules concerning protection to television Channel 6. In this case, station KOIN (TV), Portland, Oregon is an affected Channel 6 facility. Figure 5 is a map depicting the KOIN 47 dBu Grade B contour and the Channel 201C3 48 dBu F(50,10) interference contour. FCC Rule *Section 73.525* allows for a maximum of 4,000 persons inside the area of interference which is the area where interference from Channel 201 would occur within the affected Channel 6 Grade B 47 dBu contour. In this case, an estimate of the total interference to Channel 6 was made by calculating the area and population inside the 48 dBu overlap area within the KOIN 47 dBu contour. The population is 51,177 persons in an area of 7,890 square kilometers.

A similar analysis was performed for Channel 211C3, as shown in Figure 6. Here, the population inside the overlap area is 23,695 persons in an area of 1,056 square kilometers. In both cases, the population far exceeds the 4,000 person maximum. Based on the basic analysis above, it is believed that neither Channel

201 nor 211C3 may be applied for due to interference with television Channel 6 in violation of *Section 73.525* of the Commission's Rules and Regulations.

CHANNEL 256C3 ALTERNATIVE ALLOTMENT FOR THE DALLES

Madgekal provides an allocation study, *Exhibit 4*, and coverage map, *Exhibit 11*, to support its proposition that Channel 256C3 may also be allotted to The Dalles from a site known as Haystack Butte, N.L. 45° 41' 01" W.L. 120° 57' 17". A review of the proposal shows compliance with FCC Rule *Section 73.207*. The proposed site coordinates are located 19.7 km from The Dalles city reference coordinates at a bearing of 240°, which complies with the Channel C3 70 dBu distance of 23.2 kilometers. As Madgekal states, there is good line-of-sight to much, but not all, of The Dalles.

However, the public interest is not fully served by allocating Channel 256C3 to The Dalles because Channel 268C3 is a more effective use of the spectrum. *Figures 7-9* are the 70 dB and 60 dBu contours for the Channel 256C3 proposal and for the two Channel 268C3 allotment sites. Computations of area and population have been made and dictate that Channel 268C3 is the preferred allotment channel as seen below.

<u>Figure</u>	<u>Site</u>	<u>60 dBu Contour</u>	
		<u>Area - Sq. km</u>	<u>Population - Persons</u>
7	256C3	1,580	29,319
8	268C3 - 1996	2,057	49,707
9	268C3 - 1998	2,046	48,075

CONCLUSION

Based on the analysis herein, the following facts are believed to be true:

- 1) Channel 268C3 was allotted to The Dalles, and Longley-Rice studies included herein confirm that The Dalles will be served with a signal level of 70 dBu, or greater, for both the 1998 allotment coordinates and the earlier 1996 allotment coordinates.

- 2) Madgekal has offered four NCE FM channels as being available for use at The Dalles. Based on studies herein, two of the channels violate *Section 73.509* of the Rules and the remaining two channels violate *Section 73.525* of the Rules. Based on these rule violations, it is concluded that LifeTalk's original assertion that no C3 channels are available in the non-commercial band was correct.

- 3) Channel 256C3 may be allotted to The Dalles but, based on the data provided by Madgekal, that allotment would serve approximately 470 square km less land area and approximately 19,000 fewer persons than Channel 268C3.

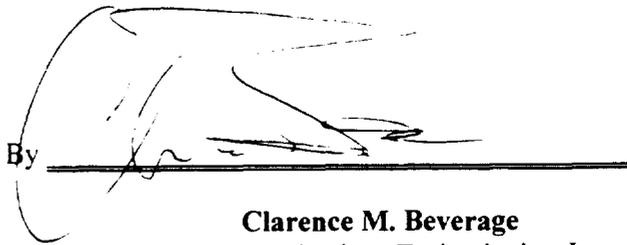
It should also be noted that the allotment of Channel 268C3 at The Dalles, at the 1998 reference coordinates, meets *Section 73.207* distance separation standards to KFLY as a full C1 facility.

KFLY's upgrade options are summarized below in terms of area and population:

<u>Facility</u>	60 dBu	
	<u>Area - Sq. Km</u>	<u>Population - Persons</u>
268C2 License	8,410	438,351
268C1	16,680	737,596
268C	17,900	764,320

The additional 26,724 persons gain associated with a KFLY upgrade from Class C1 to Class C operation appears minimal in comparison to the 299,245 person gain available to KFLY at this time by upgrading from Class C2 to Class C1 facilities.

The foregoing was prepared on behalf of **CBS Radio License, Inc.** by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.

By 

Clarence M. Beverage
for Communications Technologies, Inc.
Marlton, New Jersey

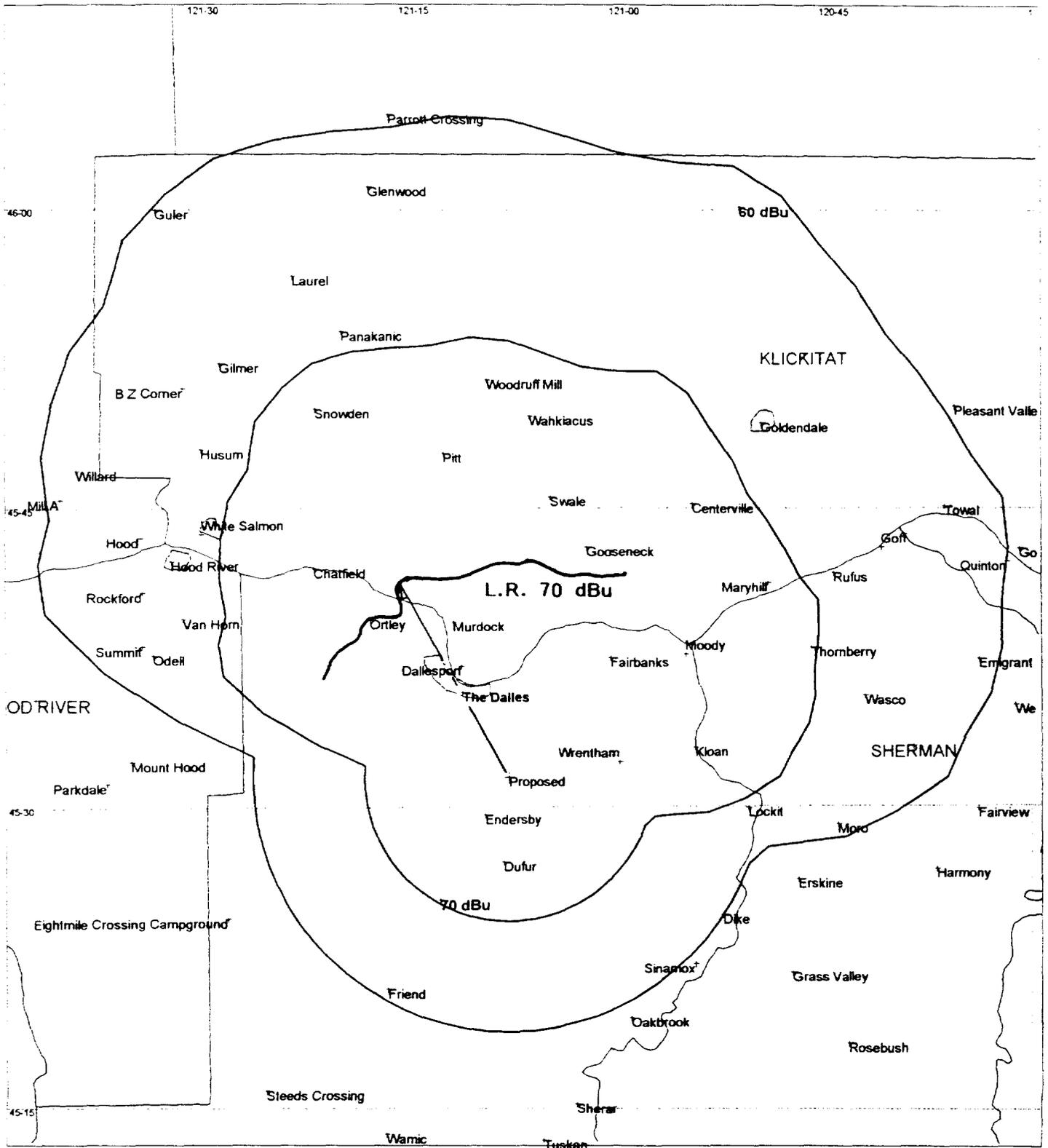
SUBSCRIBED AND SWORN TO before me,

this 26th day of June, 1998,

Esther G. Sperbeck, NOTARY PUBLIC

ESTHER G. SPERBECK
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES OCT. 15, 2002

FIGURE 1 CH 268C3 FEB. 1996 REF. COORD. 25 kW & 100 M

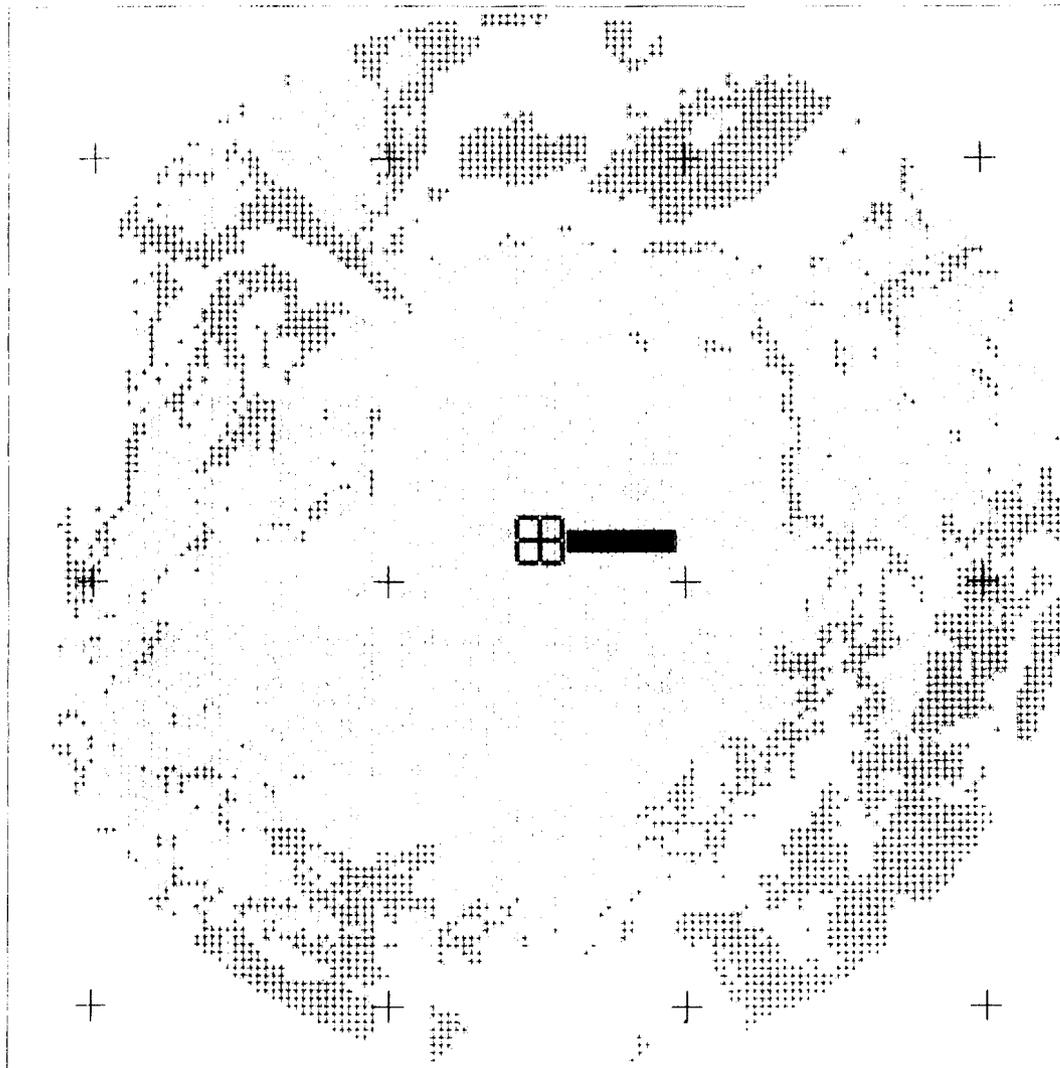


Communications Technologies, Inc. Marlon, NJ June 1998

Scale 1:500000

25 Km

— FM Service — FM City Grade — County Borders — State Borders — Lat-Lon Grids — City Borders



SHDMAP™: 1996.map

Prop. model: Longley-Rice v1.2.2
 Time: 50.0% Loc.: 50.0%
 Prediction Confidence Margin: 0.0dB
 Climate: Continental Temperate
 Groundcover: None
 Atmospheric Abs.: none
 K Factor: 1.333
 RX Antenna - Type: OMNI
 Height: 9.1 m AGL Gain: 0.00 dBd
 Field strength at remote

	>	70.0 dBuV/m
		60.0 to 70.0 dBuV/m
	<	60.0 dBuV/m

Minimum receiver threshold level: -200.0 dBmW

Site	Ant. Elev.	ERPd	Ant. Type	Coordinates
	AMSL (m)	(dBW)	/Orient.	
1996PROP*	491.6	43.98	Omni-H	N45°31'28.00"
group:	1 101.5000	MHz		W121°07'22.00"

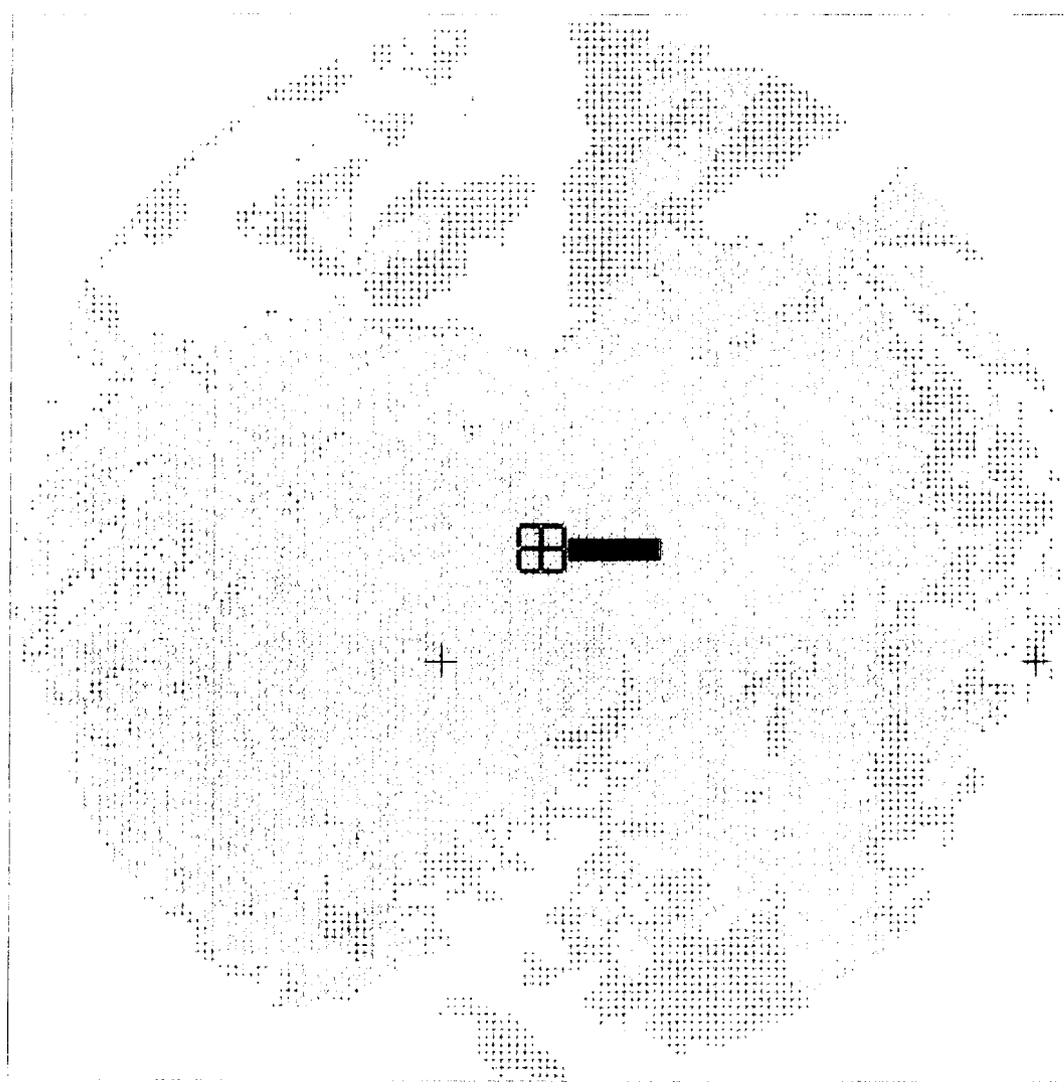


CH 268C3 FEB. 1996 REF. COOR

Communications Technologies, Inc.

FIGURE 1 PAGE 2

JUNE 1998



SHDMAP™: 1998 .map

Prop. model: Longley-Rice v1.2.2
 Time: 50.0% Loc.: 50.0%
 Prediction Confidence Margin: 0.0dB
 Climate: Continental Temperate
 Groundcover: None
 Atmospheric Abs.: none
 K Factor: 1.333
 RX Antenna - Type: OMNI
 Height: 9.1 m AGL Gain: 0.00 dBd

Field strength at remote

	>	70.0 dBuV/m
	.	60.0 to 70.0 dBuV/m
	<	60.0 dBuV/m

Minimum receiver threshold level: -200.0 dBmW

Site	Ant. Elev. (m)	ERPd (dBW)	Ant. Type/Orient.	Coordinates
Proposed*	475.0	43.98	Omni-V	N45°34'00.01"
group:	1 101.5000	MHz		W120°55'00.00"

KILOMETERS



CH 268C3 April 1998 Ref. Coord.

Communications Technologies, Inc.

FIGURE 2 PAGE 2

JUNE 1998

Channel 215 C3 Allocation - The Dalles, Oregon

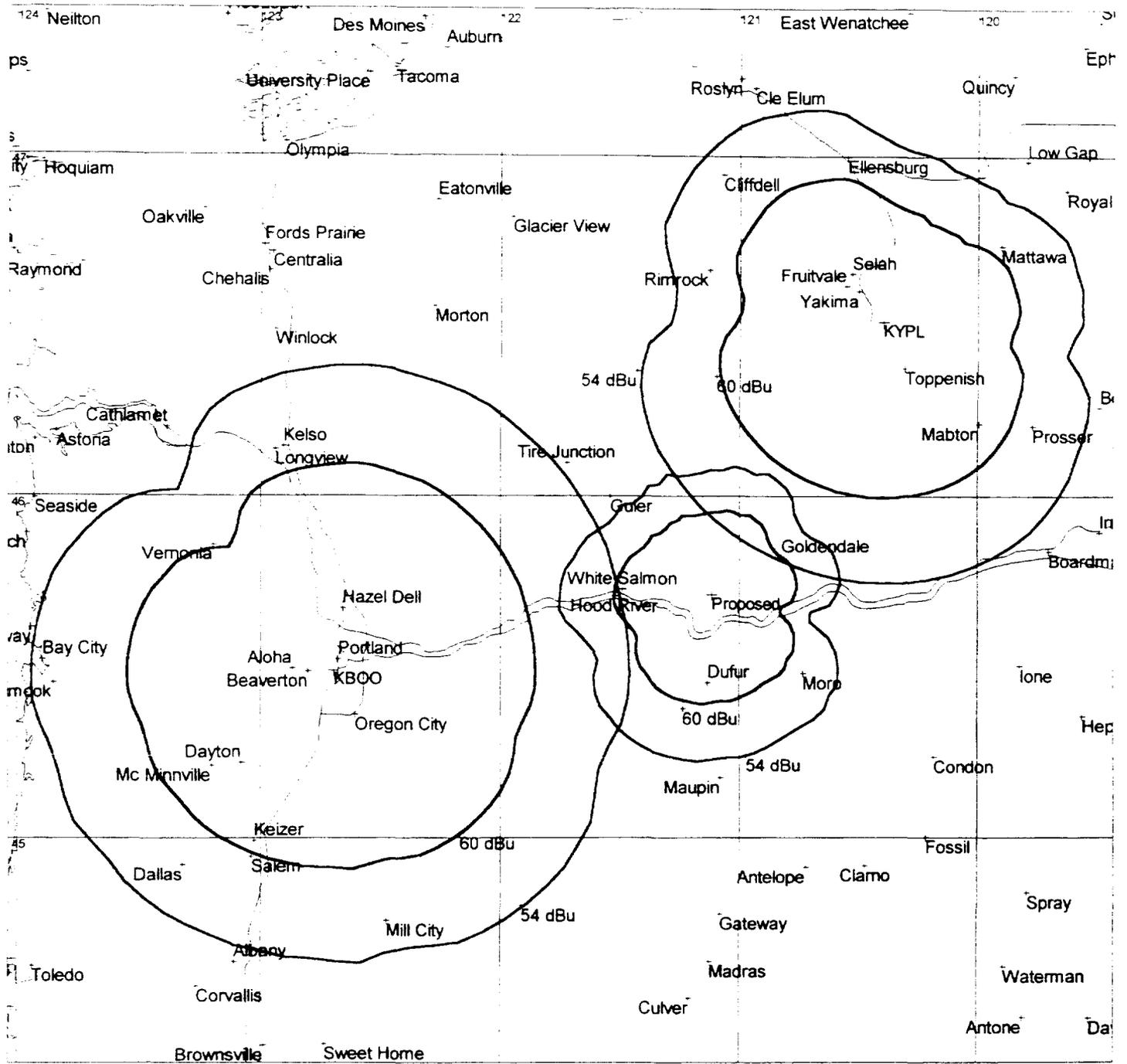


Figure 4

Communications Technologies, Inc. Marlton, NJ 08053 May 1998

Scale 1:1900000

50 Km 

— FM Service — FM Interfering — Highways — State Borders - - - Lat-Lon Grids

KOIN 4. dBu and CH 211 67 dBu Interference Contour

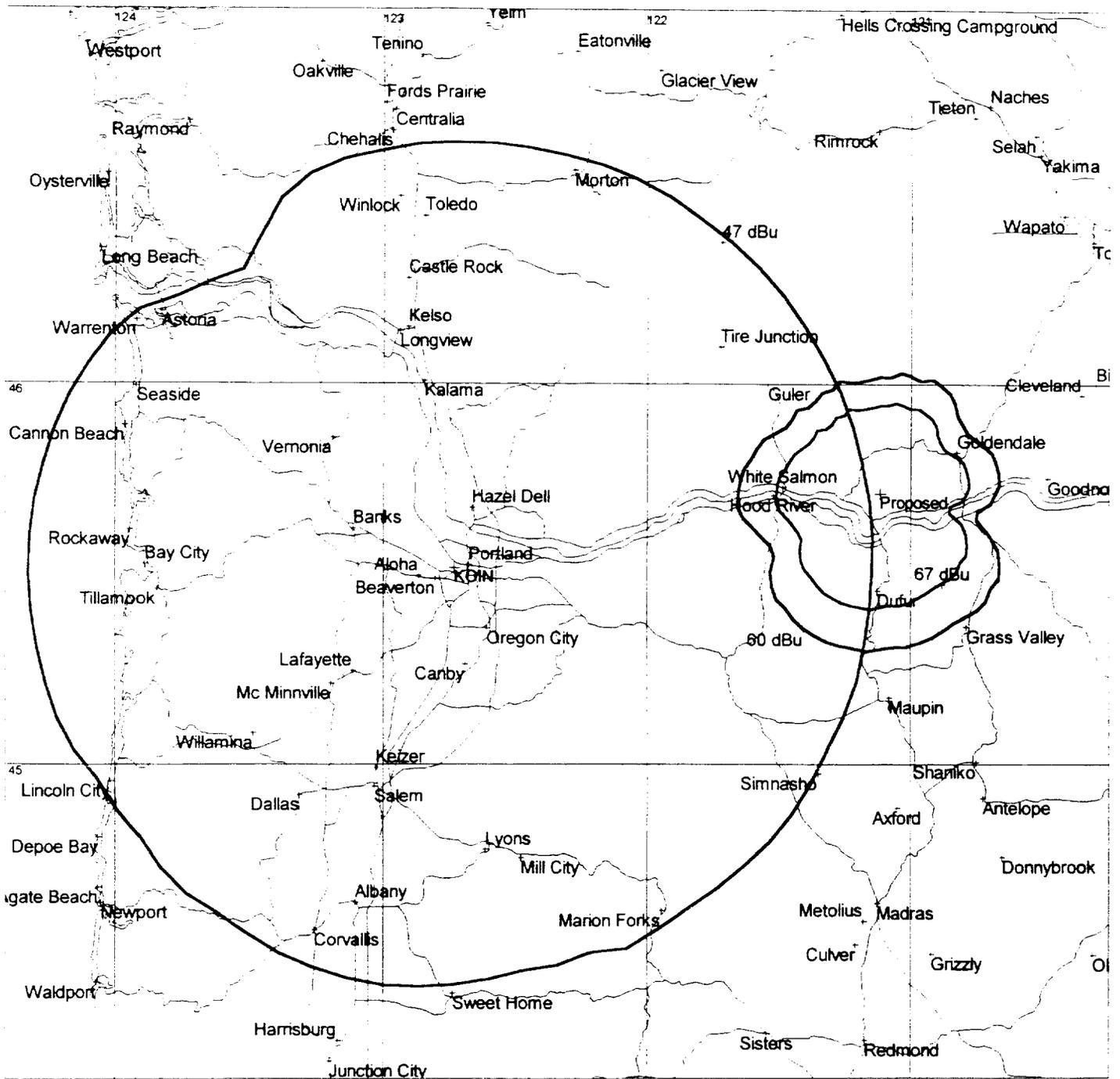


Figure 6

Communications Technologies, Inc. Marlton, NJ 08053 May 1998

Scale 1:1700000

50 Km

— FM Service — FM Interfering — TV Grade 'A' — Highways — State Borders - - - Lat-Lon Grids

FCC F(30,50) 70 and 60 dBu - Haystack.. CH 256C3

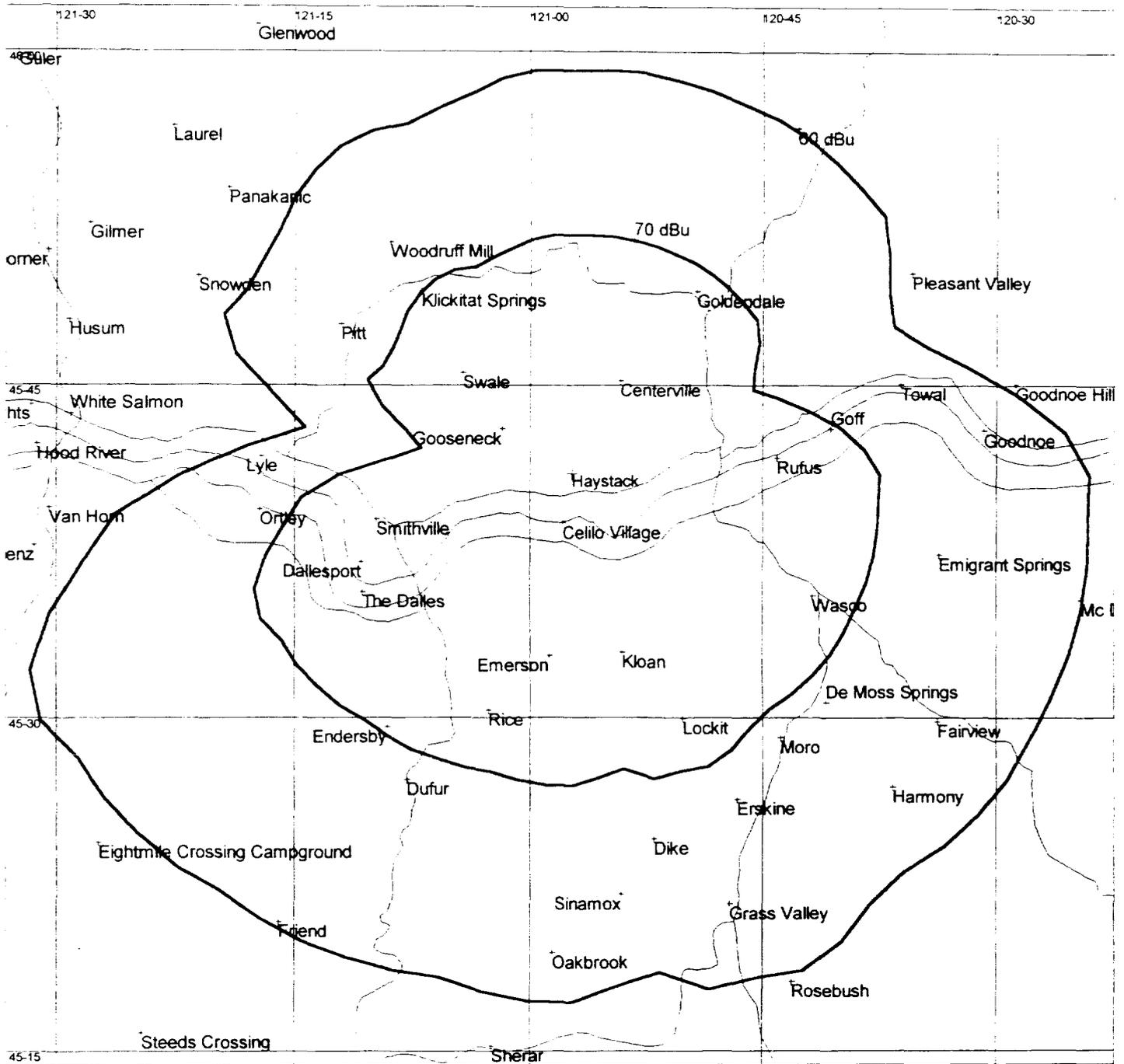


Figure 7

Communications Technologies, Inc. Marlton, NJ 08053 May 1998

Scale 1:480000

25 Km

— FM Service - - Highways — State Borders - - Lat-Lon Grids

FCC F(50,50) 70 and 60 dBu - CH 23C3 1996

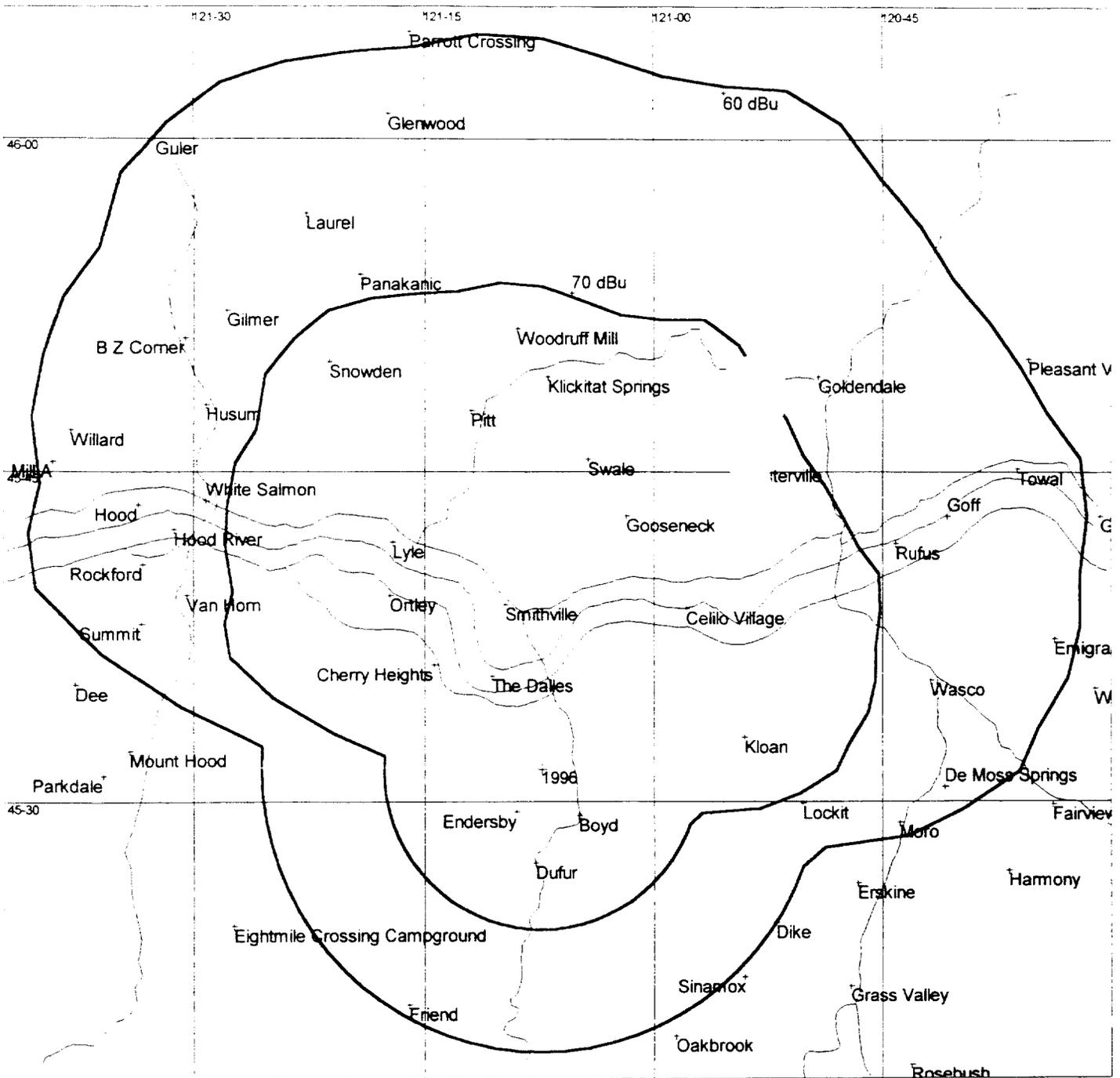


Figure 8

Communications Technologies, Inc. Marlton, NJ 08053 May 1998

Scale 1:490000

25 Km

— FM Service

— Highways

— State Borders

- - Lat-Lon Grids

FCC (50,50) 70 and 60 dBu - CH 2, 33 1998

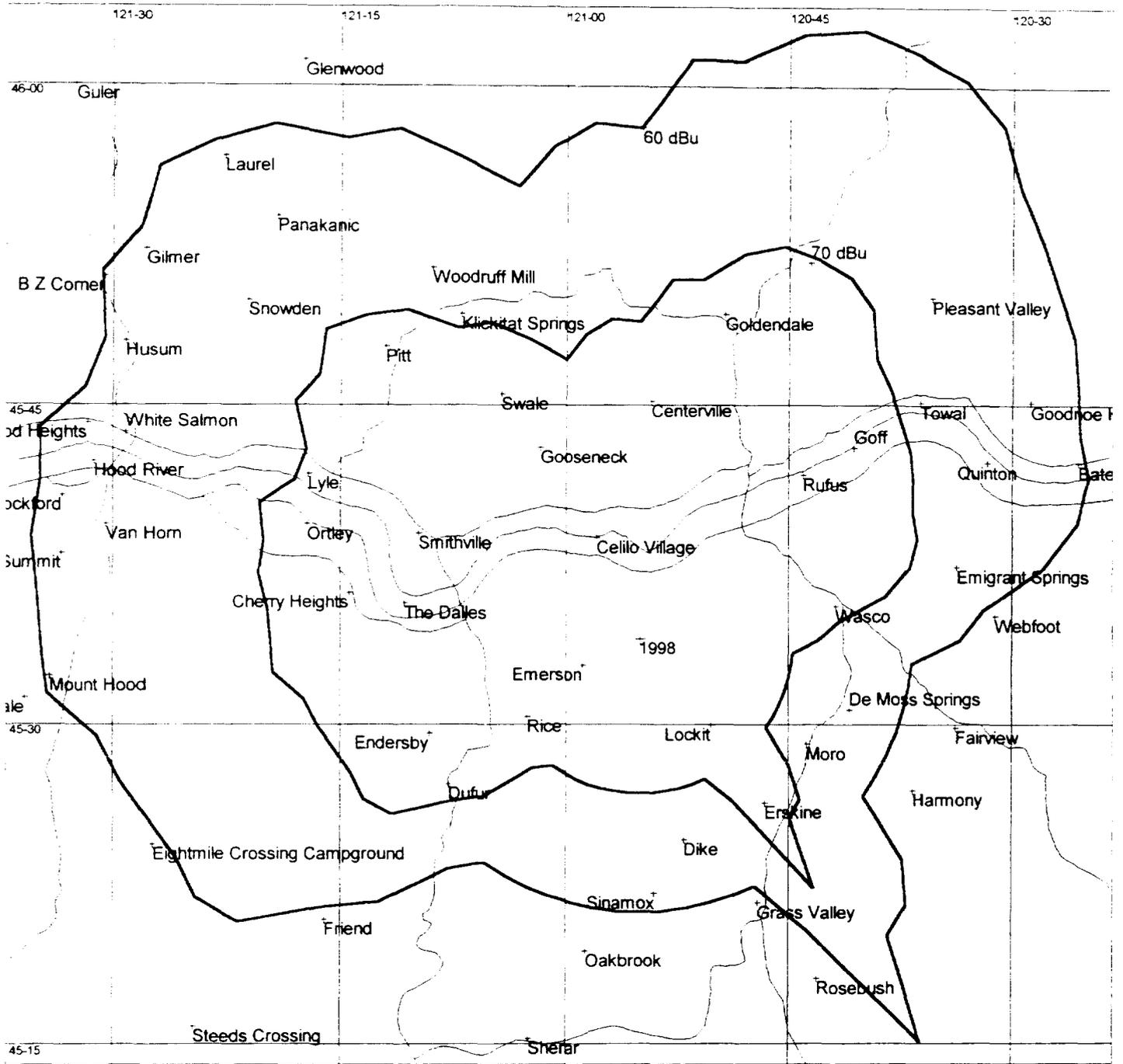


Figure 9

Communications Technologies, Inc. Marlton, NJ 08053 May 1998

Scale 1:500000

25 Km

— FM Service - - - Highways — State Borders - - - Lat-Lon Grids

EXHIBIT I

AREA AND POPULATION COMPARISON

BANKS AND REDMOND, OREGON

MM DOCKET NO. 96-7, RM-8732

AND

THE DALLES, OREGON

MM DOCKET NO. 96-12, RM 8741

JUNE 1996 [Corrected June 1998]*

ALTERNATIVE 1:

<u>Community</u>	<u>Facility</u>	<u>Area</u> <u>Sq. kM</u>	<u>Population</u> <u>Persons</u>
Banks, OR	Ch 298C2	8,486	1,518,676
	Ch 298C1	<u>16,394</u>	<u>1,749,998</u>
	gain	7,908 Sq. kM	221,322 persons 231,322 persons*
Redmond, OR	Ch 298C2	8,263	92,420
	Ch 269C2	<u>8,263</u>	<u>92,420</u>
	gain	0 Sq. kM	0 persons
The Dalles, OR	Ch 268C3	5,167	49,084
	total gain	<u>13,075 Sq. kM</u>	<u>270,406 persons</u>

ALTERNATIVE 2:

Corvallis, OR	Ch 268C2	8,410	438,351
	Ch 268C	<u>17,900</u>	<u>764,320</u>
	gain	9,490 Sq. kM	325,969 persons

Gain-ALTERNATIVE 1 vs. ALTERNATIVE 2 3,585 Sq. kM (55,563) persons

EXHIBIT I

~ 2 ~

ALTERNATIVE 3:

<u>Community</u>	<u>Facility</u>	<u>Area Sq. kM</u>	<u>Population Persons</u>
Banks, OR	Ch 298C2	8,486	1,518,676
	Ch 298C1	<u>16,394</u>	<u>1,749,998</u>
	gain	7,908 Sq. kM	221,322 persons 231,322 persons*
Redmond, OR	Ch 298C2	8,263	92,420
	Ch 269C2	<u>8,263</u>	<u>92,420</u>
	gain	0 Sq. kM	0 persons
The Dalles, OR (Alternate Site)	Ch 268C3	5,390 Sq. kM	48,075 persons
Corvallis, OR	Ch 268C2	8,410	438,351
	Ch 268C1	<u>16,680</u>	<u>737,596</u>
	gain	8,270 Sq. kM	299,245 persons
	total gain	21,568 Sq. kM	568,642 persons 578,642 persons*

- Notes:
1. Population Data from 1990 U.S. Census and counted at the block level.
 2. Area data is total area within the 60 dBu contour. Water or area outside U.S. Corp. Boundary not deducted from total.

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

In the Matter of)	
)	
Amendment of Section 73.202(b),)	MM Docket No. 96-7
Table of Allotments,)	RM-8732
FM Broadcast Stations)	RM-8845
(Banks, Redmond, Sunriver and Corvallis, Oregon))	
)	
In the Matter of)	
)	
Amendment of Section 73.202(b),)	MM Docket No. 96-12
Table of Allotments,)	RM-8741
FM Broadcast Stations)	
(The Dalles and Corvallis, Oregon))	
)	
In re Application of)	
)	
Madgekal Broadcasting, Inc.)	File No. BPH-960206IE
Station KFLY(FM), Corvallis, Oregon)	
)	
For Construction Permit to Modify)	
Licensed Facilities (One-Step Upgrade))	
)	
To: Chief, Allocations Branch		
Mass Media Bureau		

**SUPPLEMENT TO
RESPONSE TO PETITION FOR RECONSIDERATION**

CBS Radio License Inc. ("CBS"), licensee of Station KBBT-FM, Banks, Oregon, by its attorneys, hereby supplements its June 30, 1998 "Response to Petition for Reconsideration" ("Response") in the above-captioned proceeding. In support of this Supplement, the following is shown:¹

¹ To the extent that CBS's supplementary pleading requires specific authorization, pursuant to §1.45(c) of the Commission's Rules, CBS hereby requests such approval in the interest of administrative due process and a complete and accurate public record in this proceeding.

1. The July 22, 1998 "Reply" by Madgekal Broadcasting, Inc. ("MBI"), licensee of Station KFLY(FM), Corvallis, Oregon, to CBS's Response relies heavily upon a further Engineering Report ("Report II") prepared by McClanathan and Associates, Inc. While §1.429(g) is silent on the matter, the Commission's rules generally specify that "Replies...shall be limited to matters raised in the opposition". See §1.106(h) of the Rules. By introducing a new engineering statement into this proceeding as part of its Reply, which makes erroneous statements and conclusions that were not contained in MBI's original Petition for Reconsideration, and upon which CBS has not previously had any opportunity to comment, MBI has essentially raised new matters. Hence, CBS urges that administrative due process warrants that CBS be given a final opportunity to "set the record straight". See Footnote 1 above.

2. To rebut the errors contained in Report II and the related Reply, CBS attaches hereto a further Engineering Statement prepared by Clarence M. Beverage of Communications Technologies, Inc. ("Beverage Statement II"). In it, Mr. Beverage fully responds to six new engineering arguments made by MBI in Report II. As the Reply (at 2) states, the purpose of Report II is to demonstrate that operation of a reserved band Class C3 station at The Dalles is "feasible" and that such a reserved allotment, or the allotment of unreserved Channel 256C3, should be preferred by the Commission to the allotment of Channel *268C3 granted by Report and Order, 13 FCC Rcd 6596 (Mass Media Bur. 1998), in this proceeding. CBS will now show the fallacies in MBI's Reply.

3. First, Beverage Statement II (at 2-3 and Figures 1 and 2) fully rebuts MBI's assertions (Reply at 4-5 and Report II at 1) that "Channel 211 may be used in The Dalles at

lower class A antenna powers,” “a Channel 213C3 station may be located at a site on Stacker Butte near The Dalles,” and “a Class C3 station could be operated on Channel 215 at a hilltop site identified as ‘1048’”. In reality, Channels 211A and 213C3 are not available, because they are precluded by a pending application for a new FM station on Channel 212A at Hood River, Oregon – File No. BPED-980522MB. As to Channel 215, Report II itself (at 1) asserts only that a Class A facility (Channel 215A) could be allotted to The Dalles -- not a Class C3 station. Hence, the Reply has clearly misspoken on that point. Moreover, and most importantly, Mr. Beverage concludes (Beverage Statement II at 3, 4) that, while a Channel 215A facility is technically feasible, it would have an ERP of only 100 watts, a service area of 917 square kilometers, and a population of merely 19,341 persons. In short, it would be a “low powered Class A station” and a “minimal facility” which “compares very unfavorably to the proposed reserved use of Channel 268 as a full C3 facility with 48,075 persons” that was allotted by the Report and Order herein. Id.

4. Second, the Reply (at 5-6) reiterates MBI’s view that severe terrain shielding precludes allotting Channel *268C3 to The Dalles, and MBI attacks CBS’s use of the allegedly “non-standard Longley-Rice Propagation Method” to support CBS’s assertion that The Dalles would receive a 70 dBu signal with Channel *268C3. At the outset, CBS emphasizes that the Response and Beverage Statement I stated and fully demonstrated that the two different transmitter sites specified for Channel *268C3 in this proceeding “both...show 100%, 70 dBu service to The Dalles, using either the F(50,50) curves or the Longley-Rice propagation method” (emphasis added) (Response ¶19 and Beverage Statement I, p. 3 and Figures 1-2). Thus, MBI’s attack on CBS’s Longley-Rice showing, even if meritorious, leaves wholly un rebutted CBS’s

conclusion that terrain shielding does not preclude allotting Channel *268C3 to The Dalles, using the Commission's "standard" propagation method.

5. Moreover, in any event, Beverage Statement II (at 3-4) shows that CBS's use of the Longley-Rice method cannot be classified as "non-standard" since the Commission recently proposed to adopt an analogous "Point-To-Point Contour Prediction Model" in MM Docket No. 98-93 that is based upon the "well accepted [Longley-Rice] model". See Notice of Proposed Rulemaking in MM Docket No. 98-93 (Streamlining of Radio Technical Rules), 63 Fed. Reg. 33892, 33895 (June 22, 1998), and Public Notice, "Technical Information Relating to MM Docket No. 98-93," DA 98-1406, released July 23, 1998. Under these circumstances, MBI's argument (Reply at 5) that Channel 256C3 should be preferred to Channel *268C3 because Channel 256C3 alone would provide line-of-sight coverage to The Dalles falls flat. In point of fact, Channel *268C3 and Channel 256C3 both would provide line-of-sight coverage.

6. Finally, MBI's contention (Reply at 6-7) that allotting Channel 256C3 to The Dalles would be superior to Channel *268C3 is factually and legally erroneous. First, allotting Channel *268C3 to The Dalles permits one community (The Dalles) to have a new service and two communities (Corvallis and Banks) to have upgrades, while allotting Channel 256C3 permits The Dalles to have a new service and only one community (Corvallis) to have an upgrade. MBI cannot be permitted to overlook the fact that its recently-filed one-step upgrade application (File No. BPH-980515IC), which allows it to upgrade its present Corvallis facilities to Class C1, is an indirect result of the Report and Order's allotment of Channel *268C3 to The Dalles. On the other hand, if Channel 256C3 is allotted to The Dalles, CBS will not be able to upgrade its Banks facility at all.

7. In addition, MBI mistakenly argues (Reply at 7) that the greater areas and populations represented by a Channel *268C3 allotment to The Dalles should be ignored “[g]iven the great uncertainty as to where the actual permittee of the proposed new noncommercial station at The Dalles will operate”. However, the Commission routinely makes allotment decisions based upon comparative area and population data. The data in this proceeding are no more “uncertain” than in other allotment cases, since applicants are almost always free to specify transmitter sites that differ from the allotment reference site coordinates. In sum, allotting Channel *268C3 to The Dalles and Channel 298C1 to Banks and granting MBI’s Channel 268C1 Corvallis upgrade application maximize the efficient use of the electromagnetic spectrum and are, therefore, in the paramount public interest.

WHEREFORE, in light of the foregoing, CBS respectfully requests that the Bureau should take this Supplement into account when ruling on MBI’s Petition for Reconsideration and should either grant the parties’ settlement agreement in full or should affirm the allotments made in the Report and Order and grant MBI’s pending upgrade application (File No. BPH-980515IC).

Respectfully submitted,

CBS RADIO LICENSE INC.

By 
Howard J. Braun
Jerold L. Jacobs

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1300 - 19th Street, N.W. Suite 200
Washington, D.C. 20036
(202) 463-4640

Its Attorneys

Dated: August 20, 1998

ENGINEERING STATEMENT
IN RESPONSE TO
REPLY BY MADGEKAL BROADCASTING, INC.
CONCERNING
RESPONSE TO PETITION FOR RECONSIDERATION
FILED BY
CBS RADIO LICENSE INC.
KBBT-FM BANKS, OREGON
MM DOCKET NOS. 96-7 AND 96-12
BANKS, REDMOND, SUNRIVER, CORVALLES
AND THE DALLES, OREGON

AUGUST 1998

**ENGINEERING STATEMENT
IN RESPONSE TO
REPLY BY MADGEKAL BROADCASTING, INC.
CONCERNING
RESPONSE TO PETITION FOR RECONSIDERATION
FILED BY
CBS RADIO LICENSE INC.
KBBT-FM BANKS, OREGON
MM DOCKET NOS. 96-7 AND 96-12
BANKS, REDMOND, SUNRIVER, CORVALLES
AND THE DALLES, OREGON**

AUGUST 1998

SUMMARY

The following engineering statement has been prepared on behalf of **CBS Radio License Inc.** ("**CBS**"), licensee of station KBBT-FM, Banks, Oregon. On June 30, 1998, **CBS** filed its "Response to Petition for Reconsideration" ("Response") in the two above noted proceedings. On July 24, 1998, Madgekal Broadcasting, Inc. ("Madgekal") filed a Reply to the **CBS** Response. This statement addresses six new engineering arguments found in a July 15, 1998 engineering statement prepared by McClanathan and Associates, Inc. which was attached to Madgekal's July 24, 1998 Reply.

The engineering statement accompanying Madgekal's Reply asserts the following six points:

1. Channel 211 may be used in The Dalles area at a lower Class A antenna power.
2. A minimum power, Channel 213C3, facility may be located on Stacker Butte in compliance with *Section 73.525(e)*.
3. Channel 215A can be used at a hilltop site identified as "1048" in compliance with *Section 73.525(e)*.
4. Channel 268C3 is not an appropriate allotment for The Dalles, Oregon due to severe terrain shielding to the populated areas of the corporate city of The Dalles.

5. Allotment of Channel 268C3 to The Dalles will eliminate Channel 215A as an available NCE channel due to the 53 Channel I.F. spacing requirement.
6. Channel 256C3 is a superior allotment for The Dalles as it will preserve the use of Channel 215A for The Dalles.

Responses to Madgekal's engineering statement are fully developed in the following pages.

NCE CHANNEL AVAILABILITY (POINTS 1-3)

In the May 11, 1998 engineering statement prepared by McClanathan on behalf of Madgekal, it was stated that an NCE FM channel study demonstrated that Channels 201, 211, 213 and 215 have possibility for use to serve The Dalles as C3 facilities. Madgekal's most recent engineering statement appears to concede that Channel 201 is not available, classifies Channel 211 as a Class A channel, Channel 213 as a minimum C3 facility, and Channel 215 as a Class A channel.

A review of the current FCC database reveals a pending application for a new NCE FM station on Channel 212A at Hood River, Oregon. The application has been filed by KBPS Public Radio Foundation, FCC File No. BPED-980522MB. *Figure 1*, attached, is a *Section 73.509* allocation study for Channel 213C3 at the suggested Stacker Butte site location. The proposed KBPS Channel 212 site is located inside the Channel 213C3 60 dBu and the KBPS 54 dBu F(50,10) interfering contour encompasses all of The Dalles. Based on this showing, it is believed reasonable to state that Channel 213C3 will be precluded from use at The Dalles upon grant of the KBPS application.

It is noted that Channel 211, like Channel 213, is a first adjacent channel to KBPS's proposed Channel 212A facility and would also be similarly precluded for use in The Dalles.

Channel 215A was studied next. Based on the site "1048" ERP, RC and coordinates found on Madgekal's map labeled "NCE Channel 215A - The Dalles, OR", a Class A facility will meet *Section*

73.509 allocation standards as seen on Figure 2, attached. However, it must be noted that the facility has an ERP of 1 kW and a HAAT of -15.5 meters which is equal to an ERP 0.1 kW at a HAAT of 100 meters. The 60 dBu contour for this minimal facility encompasses an area of 917 square km and a population of 19,341 persons.

CHANNEL 268C3 ALLOTMENT (POINTS 4-6)

Madgekal continues its objection to the use of Channel 268C3 at The Dalles based on a lack of line of sight to portions of the community. Madgekal goes on to state that "National Bureau of Standards Technical Note 101 or Longley-Rice field calculations are not sufficiently accurate to determine the actual received VHF field strength in severely shadowed areas." Madgekal's objection to these methodologies is not surprising given the fact that CBS has demonstrated 70 dBu service to 100% of The Dalles using the Longley-Rice methodology. However, this objection rings hollow against the Commission's proposed use of a new Point-to-Point terrain sensitive propagation model in MM Docket No. 98-93.

In a Public Notice released July 23, 1998 titled "Technical Information Relating To MM Docket No. 98-93", the Commission directed consulting engineers to the FCC Worldwide web site at <http://www.fcc.gov/oet/fm/ptp>. At that address, under the title "The Point-To-Point FM Model Compared to Measurement Data" is the following paragraph:

" In the NPRM, the Commission proposed a point-to-point "PTP" radio propagation prediction model to take into account the effects of terrain while streamlining the technical rules. The standard method for predicting coverage and interference is use of the FCC curves, Section 73.333 of FCC Rules. Because of the limited length (3 to 16 kilometers) of the radials used to determine antenna height above average terrain, the Commission's standard propagation methodology does not accurately account for all terrain effects. The FCC curves represent average situations, so they often fail to account for radio propagation losses due to terrain obstructions. Also, the curves tend to overestimate losses in especially flat areas. The PTP model, on the other hand, examines specific terrain elevation data for each propagation path. It combines a well-accepted model of radio diffraction with a procedure for characterizing terrain obstructions." Emphasis added.

A review of other portions of the FCC Web site indicates that the "well accepted model" used in the proposed Point-to-Point method is in fact taken from NBS Tech Note 101/Longley-Rice. On this basis

CBS is confident in its representation that Channel 268C3 is the superior allotment for The Dalles and that 70 dBu service will be provided to the community.

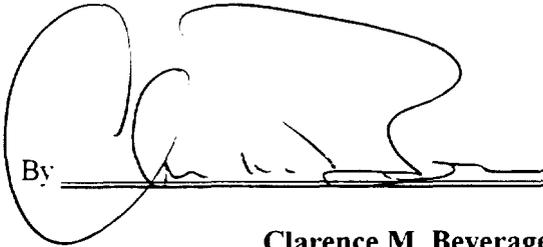
In light of the preceding analysis, it is believed that Madgekal's Points 5 and 6 are not valid. Point 5 suggests that allotting Channel 268C3 to The Dalles would preclude Channel 215A at The Dalles. Channel 268C3 will reach 48,075 persons while the Channel 215A proposal set forth by Madgekal would reach only 19,341 persons, making Channel 268C3 the clear preference from a public interest standpoint. As to Point 6, and given the superior NCE service area associated with Channel 268C3, there is no need to protect Channel 215A as the NCE service it would offer to The Dalles is clearly inferior.

CONCLUSION

Based upon the analysis herein, Madgekal's arguments favoring NCE operation at The Dalles on Channels 211A, 213C3, and 215A are incorrect. The pending application for Channel 212A at Hood River, Oregon precludes both Channel 211A and 213C3 from a site that would adequately serve The Dalles. Channel 215A, as depicted by Madgekal, would operate with the equivalent of 0.1 kW @ 100 M HAAT and serve only as a low powered class A station reaching 19,341 persons within its 60 dBu contour. This compares very unfavorably to the proposed reserved use of Channel 268 as a full C3 facility with 48,075 persons within the 60 dBu contour.

Finally, **CBS** reaffirms the propriety of the Longley-Rice model to demonstrate 70 dBu service to The Dalles from a Channel 268C3 allotment. The Commission's proposal for a superior point-to-point propagation model in MM Docket 98-93 supports use of the Longley-Rice model as a more accurate method of predicting signal levels. In sum, **CBS'** engineering analysis clearly demonstrates that Channel 268C3 is the best NCE allotment for The Dalles, Oregon.

The foregoing was prepared on behalf of **CBS Radio License Inc.** by Clarence M. Beverage of *Communications Technologies, Inc.*, Marlton, New Jersey, whose qualifications are a matter of record with the Federal Communications Commission. The statements herein are true and correct of his own knowledge, except such statements made on information and belief, and as to these statements he believes them to be true and correct.

By 

Clarence M. Beverage
for Communications Technologies, Inc.
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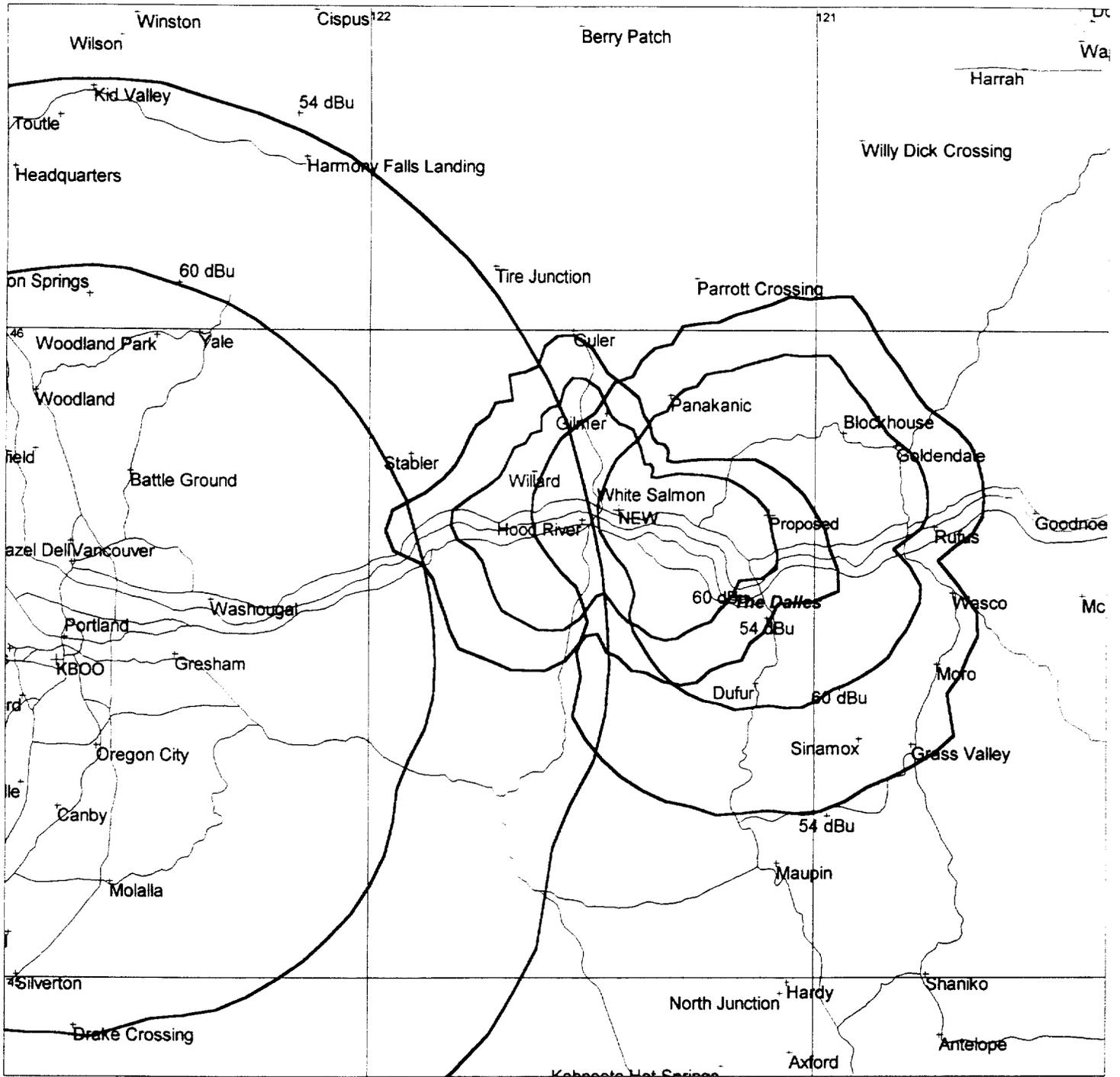
SUBSCRIBED AND SWORN TO before me,

this 19th day of August, 1998,

Esther G. Sperbeck, NOTARY PUBLIC

ESTHER G. SPERBECK
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES OCT. 15, 2002

FIGURE NCE Channel 213C3 - The Des, OR



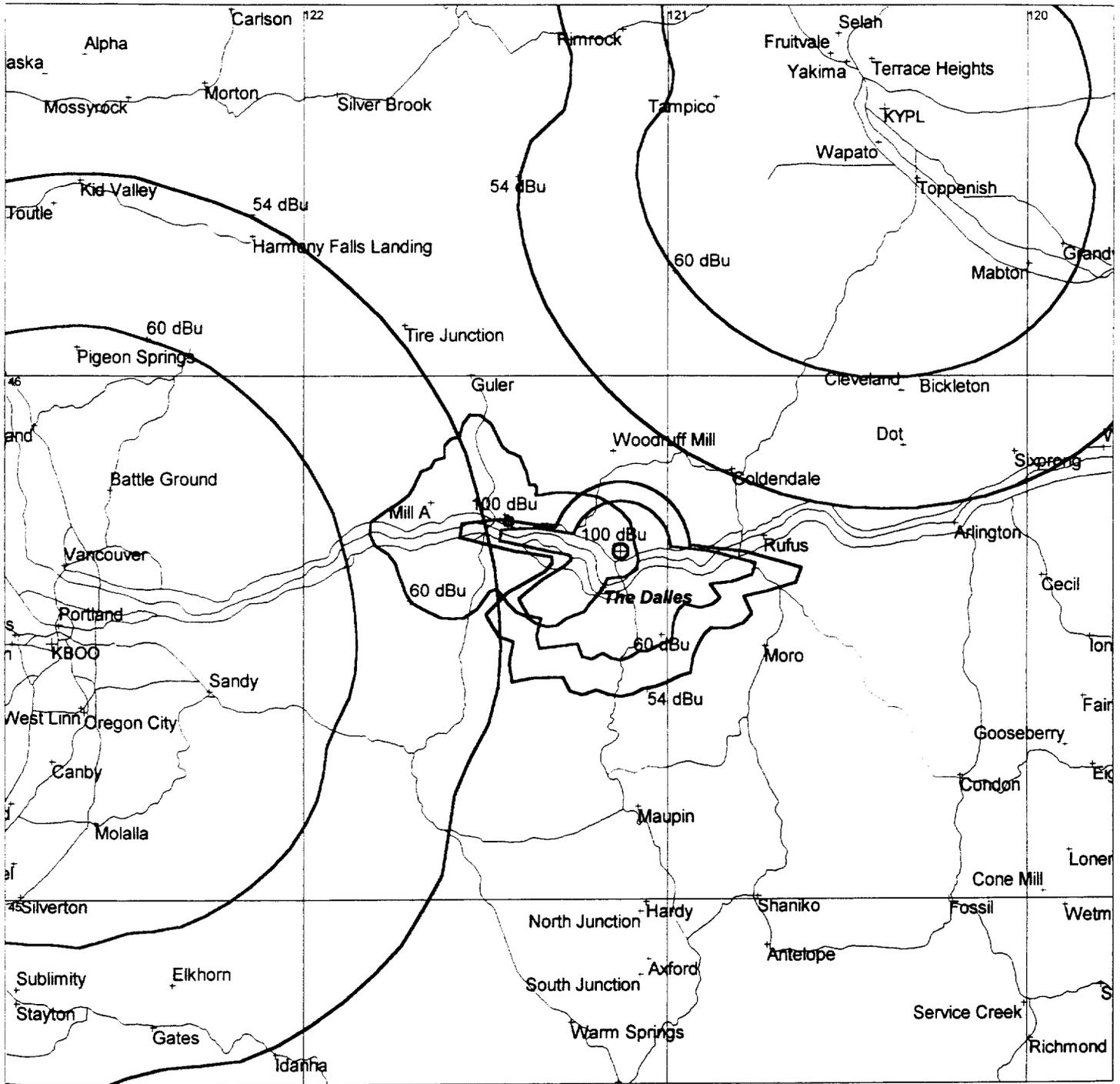
Communications Technologies, Inc. Marlton, NJ 08053

Scale 1:1000000

50 Km

— FM Service - - - FM Interfering — Highways — State Borders - - - Lat-Lon Grids

FIGURE NCE Channel 215A - The Dalles, OR



Communications Technologies, Inc. Marlton, NJ 08053

Scale 1:1300000

50 Km

— FM Service — FM Interfering — Highways — State Borders - - - Lat-Lon Grids

CERTIFICATE OF SERVICE

I, Dolly M. LaFuente, do hereby certify that on this 20th day of August, 1998, I have caused to be mailed, or hand-delivered, a copy of the foregoing **“Supplement to Response to Petition for Reconsideration”** to the following:

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***BY HAND**

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I, Genevieve F. Edmonds, hereby certify that a true and correct copy of the foregoing Response to Application For Review was sent by first-class postage prepaid mail this 27th day of March 2001 to the following:

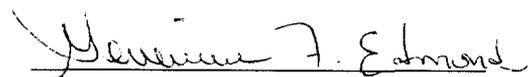
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