

FEDERAL COMMUNICATIONS COMMISSION

KWHITFIE

CLASS OF STATION: FM.

96-7

The following application is submitted for action by the Chief, Mass Media Bureau.

<u>ST</u>	<u>FILE NUMBER</u>	<u>CALL</u>	<u>APPLICANT AND LOCATION</u>	<u>NATURE OF APPLICATION</u>
OR	BPH - 9602061E	KFLY 101.5MHZ	MADGEKAL BROADCASTING, INC. CORVALLIS, OR	ONE STEP APPLICATION TO CHG CHANNEL FROM 268C2 TO 268C

DUCKET FILE COPY ORIGINAL

LICENSE EXPIRATION DATE: Feb 01, 1998

CHIEF, LICENSE DIVISION

RECOMMENDATION: GRANT() CONSTRUCTION DATES, START _____ END _____
 CONTESTED() UNCONTESTED()

APPROVED _____

FOR CHIEF, MASS MEDIA BUREAU

F.C.C. - WASHINGTON, D.C.

LAW OFFICES
REDDY, BEGLEY & McCORMICK
SUITE 350
1001 22ND STREET, N.W.
WASHINGTON, D.C. 20037-1803

DENNIS F. BEGLEY
MATTHEW H. McCORMICK

(202) 659-5700

EDWARD B. REDDY
(1915-1990)

FACSIMILE NUMBER
(202) 659-5711

February 5, 1996

DOCKET FILE COPY ORIGINAL

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
Washington, D.C. 20554

96-7

Re: Station KFLY(FM), Corvallis, Oregon
One-Step Upgrade Modification Application

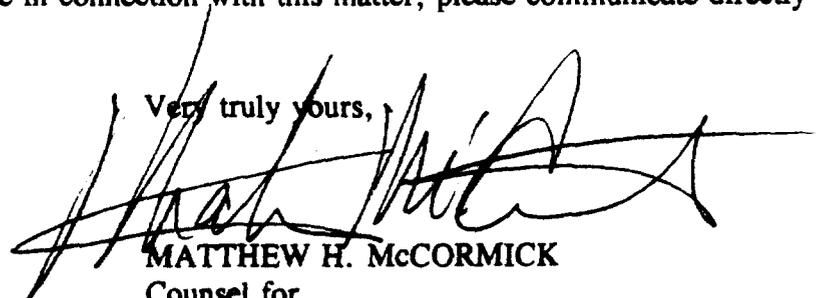
Dear Mr. Caton:

Transmitted herewith in triplicate on behalf of Madgekal Broadcasting, Inc., licensee of Station KFLY(FM), Corvallis, Oregon, is an application for modification of the facilities of Station KFLY(FM). Station KFLY presently operates on Channel 268C2. Through this application, a one-step upgrade to Channel 268C is sought.

Also transmitted herewith is a check in the amount of \$650 in payment of the requisite processing fee.

Should any questions arise in connection with this matter, please communicate directly with this office.

Very truly yours,



MATTHEW H. McCORMICK
Counsel for
MADGEKAL BROADCASTING, INC.

MHM/prm

Approved by OMB
3060-0027
Expires 6/30/95

FCC 301

FEDERAL COMMUNICATIONS COMMISSION
WASHINGTON, DC 20544

FCC MELLON
WGW

FEB 06 1996

FOR
FCC
USE
ONLY

APPLICATION FOR CONSTRUCTION PERMIT
FOR COMMERCIAL BROADCAST STATION

FOR COMMISSION USE ONLY
FILE NO. BPH-960206LE

Section 1 - GENERAL INFORMATION

1. APPLICANT NAME
MADGEKAL BROADCASTING, INC.

MAILING ADDRESS (Line 1) (Maximum 35 characters)
P.O. Box K

MAILING ADDRESS (Line 2) (If required) (Maximum 35 characters)

CITY CORVALLIS	STATE OR COUNTRY (if foreign address) OR	ZIP CODE 97339
TELEPHONE NUMBER (include area code) 541-754-6633	CALL LETTERS KFLY	OTHER FCC IDENTIFIER (IF APPLICABLE)

DUPLICATE

FOR MAILING THIS APPLICATION, SEE INSTRUCTIONS FOR SECTION 1 - GENERAL INFORMATION B.

2. A. Is a fee submitted with this application? Yes No

B. If No, indicate reason for fee exemption (see 47 C.F.R. Section 1.1112) and go to Question 3.
 Governmental Entity Noncommercial educational licensee

C. If Yes, provide the following information:

Enter in Column (A) the correct Fee Type Code for the service you are applying for. Fee Type Codes may be found in the "Mass Media Services Fee Filing Guide." Column (B) lists the Fee Multiple applicable for this application. Enter in Column (C) the result obtained from multiplying the value of the Fee Type Code in Column (A) by the number listed in Column (B).

(A) FEE TYPE CODE	(B) FEE MULTIPLE (if required)	(C) FEE DUE FOR FEE TYPE CODE IN COLUMN (A)	FOR FCC USE ONLY
(1) M P R	0 0 0 1	\$ 650.00	

To be used only when you are requesting concurrent actions which result in a requirement to list more than one Fee Type Code.

(A)	(B)	(C)	FOR FCC USE ONLY
(2) [] [] []	0 0 0 1	\$ []	

ADD ALL AMOUNTS SHOWN IN COLUMN C, LINES (1) THROUGH (2), AND ENTER THE TOTAL HERE. THIS AMOUNT SHOULD EQUAL YOUR ENCLOSED REMITTANCE.

TOTAL AMOUNT REMITTED WITH THIS APPLICATION	FOR FCC USE ONLY
\$ 650.00	

3. This application is for: (check one box) AM FM TV

(b) Channel No. or Frequency
268

(b) Principal Community	City	State
	CORVALLIS	OR

Section I - GENERAL INFORMATION (Page 2)

(c) Check one of the following boxes:

- Application for NEW station
- MAJOR change in licensed facilities; call sign:
- MINOR change in licensed facilities; call sign: KFLY
- MAJOR modification of construction permit; call sign:
- File No. of construction permit:
- MINOR modification of construction permit; call sign:
- File No. of construction permit:
- AMENDMENT to pending application; Application file number:

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

4. Is this application mutually exclusive with a renewal application? Yes No

If Yes, state:

Call letters	Community of License	
	City	State
--	--	

Section V-B - FM BROADCAST ENGINEERING DATA

FOR COMMISSION USE ONLY
 File No. BPH-960206IE
 ASB Referral Date 5-30-96
 Referred by BILL E

Name of Applicant
 MADGEKAL BROADCASTING, INC.

Call letters (if issued)
 KFLY

Is this application being filed in response to a window? Yes No
 If Yes, specify closing date:

Purpose of Application: (check appropriate boxes)

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

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

- Antenna supporting-structure height
- Effective radiated power
- Antenna height above average terrain
- Frequency
- Antenna location
- Class
- Main Studio location
- Other (Summarize briefly)

File Number(s) BLH-5870

1. Allocation:

Channel No.	Principal community to be served:		
	City	County	State
268	CORVALLIS	BENTON	OR

- Class (check only one box below)**
- A B1 B C3
 - C2 C1 C

2 Exact location of antenna.

(a) Specify address, city, county and state. If no address, specify distance and bearing relative to the nearest town or landmark.
 VINEYARD MOUNTAIN, NETTLETON ROAD, 8.3 KM FROM THE BENTON COUNTY COURT HOUSE ON A BEARING OF N353E DEGREES.

(b) Geographical coordinates (to nearest second). If mounted on element of an AM array, specify coordinates of center of array. Otherwise, specify tower location. Specify South Latitude or East Longitude where applicable; otherwise, North Latitude or West Longitude will be presumed.
 NAD 27

Latitude	44	°	38	'	24	"	Longitude	123	°	16	'	25	"
----------	----	---	----	---	----	---	-----------	-----	---	----	---	----	---

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

If Yes, give call letter(s) or file number(s) or both.

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

SECTION V-8 - FM BROADCAST ENGINEERING DATA (Page 2)

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

Latitude -- ° -- ' -- "	Longitude -- ° -- ' -- "
----------------------------------	-----------------------------------

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

Exhibit No. --

Date JANUARY 12, 1996 Office where filed N.W. MOUNTAIN REGIONAL OFFICE
RENTON, WASHINGTON

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

	Distance (km)	Bearing (degrees True)
(a) <u>NONE WITHIN 8 KM.</u>		
(b) _____		

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

- (1) of site above mean sea level; 438.9 meters
- (2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 61.6 meters
- (3) of the top of supporting structure above mean sea level [(aX1) + (aX2)] 500.5 meters

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

- (1) above ground 51.8 meters (H)
- 51.8 meters (V)
- (2) above mean sea level [(aX1) + (bX1)] 490.7 meters (H)
- 490.7 meters (V)
- (3) above average terrain 334.7 meters (H)
- 334.7 meters (V)

8. Attach as an Exhibit sketch(es) of the supporting structure, labelling all elevations required in Question 7 above, except item 7(b)(3). If mounted on an AM directional-array element, specify heights and orientations of all array towers, as well as location of FM radiator.

Exhibit No. E-1

9. Effective Radiated Power:

(a) ERP in the horizontal plane 100.00 kw (H=) 100.00 kw (V=)

(b) Is beam tilt proposed? Yes No

If Yes, specify maximum ERP in the plane of the tilted beam, and attach as an Exhibit a vertical elevational plot of radiated field.

Exhibit No. --

 kw (H=) kw (V=)

*Polarization

10. Is a directional antenna proposed?

Yes No

If Yes, attach as an Exhibit a statement with all data specified in 47 C.F.R. Section 73.316, including plot(s) and tabulations of the relative field.

Exhibit No.
--

11. Will the proposed facility satisfy the requirements of 47 C.F.R. Sections 73.315(a) and (b)?

Yes No

If No, attach as an Exhibit a request for waiver and justification therefor, including amounts and percentages of population and area that will not receive 3.16 mV/m service.

Exhibit No.
--

12. Will the main studio be within the protected 3.16 mV/m field strength contour of this proposal?

Yes No

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

Exhibit No.
--

13. (a) Does the proposed facility satisfy the requirements of 47 C.F.R. Section 73.207?

Yes No

(b) If the answer to (a) is No, does 47 C.F.R. Section 73.213 apply?

Yes No

(c) If the answer to (b) is Yes, attach as an Exhibit a justification, including a summary of previous waivers.

Exhibit No.
--

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

Exhibit No.
--

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

Exhibit No.
--

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

14. Are there: (a) within 60 meters of the proposed antenna, any proposed or authorized FM or TV transmitters, or any nonbroadcast (except citizens band or amateur) radio stations; or (b) within the blanketing contour, any established commercial or government receiving stations, cable head-end facilities, or populated areas; or (c) within ten (10) kilometers of the proposed antenna, any proposed or authorized FM or TV transmitters which may produce receiver-induced intermodulation interference?

Yes No

If Yes, attach as an Exhibit a description of any expected, undesired effects of operations and remedial steps to be pursued if necessary, and a statement accepting full responsibility for the elimination of any objectionable interference (including that caused by receiver-induced or other types of modulation) to facilities in existence or authorized or to radio receivers in use prior to grant of this application. (See 47 C.F.R. Sections 73.315(b), 73.316(a) and 73.318.)

Exhibit No.
E-2

15. Attach as an Exhibit a 75 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V (D). The map must further clearly and legibly display the original printed contour lines and data as well as latitude and longitude markings, and must bear a scale of distance in kilometers.

Exhibit No.
E-3

16. Attach as an Exhibit *(name the source)* a map which shows clearly, legibly, and accurately, and with the original printed latitude and longitude markings and a scale of distance in kilometers:

Exhibit No.
E-4

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

(b) the 3.16 mV/m and 1 mV/m predicted contours; and

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

17. Specify area in square kilometers (1 sq. mi. = 259 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 17 894 sq. km. Population 778 791

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

Exhibit No.
- -

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

(b) the 1 mV/m contour of the licensed main facility for which the applied-for facility will be auxiliary. Also specify the file number of the license.

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

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

Linearly interpolated 30-second database 75 minute topographic map

(Source: NGDS)

Other *(briefly summarize)*

Radial bearing (degrees True)	Height of radiation center above average elevation of radial from 3 to 16 km (meters)	Predicted Distances	
		To the 3.16 mV/m contour (kilometers)	To the 1 mV/m contour (kilometers)
173	SEE EXHIBIT E-5	SEE EXHIBIT E-5	SEE EXHIBIT E-5
0			
45			
90			
135			
180			
225			
270			
315			

*Radial through principal community. If not one of the major radials. This radial should NOT be included in the calculation of HAAT.

20. Environmental Statement/See 47 C.F.R. Section 1.1301 et seq.

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

If you answer Yes, submit as an Exhibit an Environmental Assessment required by Section 1.1311.

Exhibit No.

--

If No, explain briefly why not. SEE EXHIBIT E-6

CERTIFICATION

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

Name (Typed or Printed) ROBERT A. McCLANATHAN, P.E. McCLANATHAN AND ASSOCIATES, INC.	Relationship to Applicant (e.g., Consulting Engineer) PROFESSIONAL ELECTRICAL ENGINEER
Signature <i>R. A. McClanathan</i>	Address (Include ZIP Code) P.O. Box 939 PORTLAND, OR 97207-0939
Date JANUARY 12, 1996	Telephone No. (Include Area Code) (503) 246-8080

SECTION VI - EQUAL EMPLOYMENT OPPORTUNITY PROGRAM

1. Does the applicant propose to employ five or more full-time employees?

Yes No

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

SECTION VII - CERTIFICATIONS

1. Has or will the applicant comply with the public notice requirement of 47 C.F.R. Section 73.3580?

Yes No

2. Has the applicant reasonable assurance, in good faith, that the site or structure proposed in Section V of this form, as the location of its transmitting antenna, will be available to the applicant for the applicant's intended purpose?

Yes No

If No, attach as an Exhibit, a full explanation.

Exhibit No.
--

3. If reasonable assurance is not based on applicant's ownership of the proposed site or structure, applicant certifies that it has obtained such reasonable assurance by contacting the owner or person possessing control of the site or structure.

Name of Person Contacted MICHAEL A. TONDREAU
OREGON PUBLIC BROADCASTING

Telephone No. (include area code) 503-293-1900

Person contacted: (check one box below)

Owner Owner's Agent Other (specify)

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

Yes No

The APPLICANT hereby waives any claim to the use of any particular frequency as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. (See Section 308 of the Communications Act of 1934, as amended.)

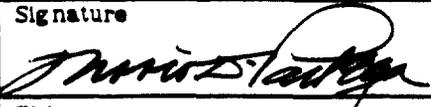
The APPLICANT acknowledges that all the statements made in this application and attached exhibits are considered material representations, and that all exhibits are a material part hereof and incorporated herein.

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

In accordance with 47 C.F.R. Section 1.55, the APPLICANT has a continuing obligation to advise the Commission, through amendments, of any substantial and significant changes in information furnished.

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

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

Name of Applicant MADGEKAL BROADCASTING, INC.	Signature 
Date JANUARY 15, 1996	Title President

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

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

Public reporting burden for this collection of information is estimated to vary from 72 hours 40 minutes to 347 hours 25 minutes with an average of 218 hours 32 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, can be sent to the Federal Communications Commission, Information Resources Branch, Room 416, Paperwork Reduction Project, Washington, D.C. 20554, and to the Office of Management and Budget, Paperwork Reduction Project (3080-0027), Washington, D.C. 20503.

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

McCLANATHAN and ASSOCIATES, INC.

PROFESSIONAL ELECTRICAL ENGINEERS
P.O. BOX 939 - PORTLAND, OREGON 97207-0939
TEL: (503) 246-8080 FAX: (503) 246-6304

EXHIBIT E**ENGINEERING STATEMENT**

for

MADGEKAL BROADCASTING, INC.

concerning

**APPLICATION FOR A CONSTRUCTION PERMIT TO
MAKE MINOR CHANGES TO RADIO STATION
KFLY FM, CORVALLIS, OREGON****FCC File No. BLH-5870****INTRODUCTION**

This statement and attached exhibits have been prepared for Madgekal Broadcasting, Inc., licensee of Radio Station KFLY FM located in Corvallis, Oregon, relative to application for a FCC construction permit to change Class to 268C, change antenna location, HAAT and ERP. These minor changes are permitted by MM Docket No. 92-159 as a one-step process.

The Applicant is the licensee of FM radio station KFLY in Corvallis, Oregon now operating on channel 268C2. It is proposed to move the KFLY transmitter and antenna location to an existing tower site on Vineyard Mountain where a new guyed tower structure will be erected by Oregon Public Broadcasting. The KFLY FM antenna will be side mounted on this new tower which will be within 15 meters of the existing tower supporting the KOAC-TV channel 7 antenna.

Operation will be on channel 268C. The antenna height above average terrain will be increased from 30 to 335 meters and the effective radiated power will be increased from 28.0 kW H to 100.0 kW H&V to comply with CFR 47 Section 73.210(b)(3)(iv) for a Class C station. The transmitter will be remote controlled from the KFLY studio location in Corvallis.

FCC Form 301, Section V-B

Exhibit E-1 is a vertical plan sketch of the proposed ten section circularly polarized FM antenna that will be side mounted on a new guyed steel tower structure with an overall height of 61.6 meters above ground. The FM antenna

will employ one-half wavelength spacing to minimize the downward radio frequency energy radiating from this antenna.

The area surrounding the antenna site is not populated and no adverse effect is expected by blanketing interference. Exhibit E-2 is a statement by the Applicant accepting full responsibility for elimination of any objectionable interference to existing communications services if such should occur from the proposed operation.

Exhibit E-3A, a full scale portion of the Airlie South 7.5 minute Geological Survey map, shows the proposed transmitter and antenna location. Exhibit E-3B is the reduced photographic copy of the entire Airlie South 7.5 minute topographic map.

Exhibit E-4 is a U.S. Geodetic Survey map with county boundaries which shows the predicted 3.16 mV/m (70 dBu) and 1.0 mV/m (60 dBu) coverage contours and the principal community, Corvallis, Oregon located on the N173E degree radial from the proposed antenna site. The average height of terrain for each of 72 radials from the proposed site were obtained from the linearly interpolated 30 second National Geophysical Data Center database. Terrain and Coverage data is tabulated in Exhibit E-5. The distance along these radials to the predicted 3.16 mV/m, 70 dBu, and 1.0 mV/m, 60 dBu contours were determined from reference to propagation data published by the FCC in Figure 1 of Section 73.333 of the Rules. All areas within the community of Corvallis are line-of-sight from the proposed FM antenna location.

Census facts for the population of the area enclosed by the 60 dBu contour were taken from the Official Population Estimates for Oregon Counties and Cities, dated July 1, 1994, published by the Center for Population Research and Census, School of Urban and Public Affairs, Portland State University. The population of the area within the 60 dBu contour was obtained by plotting this contour on a map shown in Exhibit E-4. Where the contour cut a county division, the proportion within was measured with a polar planimeter, assuming uniform population distribution after deducting incorporated towns and cities. These towns and cities deducted, but within the contour, were then added back to the count. The area within the 60 dBu contour was also measured with the polar planimeter.

Exhibit E-6A is an environmental statement evaluating compliance with FCC specified guidelines for human exposure to radio frequency radiation. Exhibit E-6B is a plot of the vertical relative field for the proposed ten section FM antenna with one-half wavelength spacing.

FAA Form 7460-1 has been completed and submitted to that agency in Renton, Washington.

Respectfully submitted,



Robert A. McClanathan, P.E.
McClanathan and Associates, Inc.
Professional Electrical Engineers

January 12, 1996

STATE OF OREGON)
) SS:
County of Multnomah)

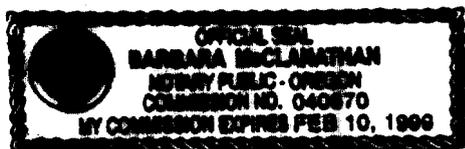
ROBERT A. McCLANATHAN, being duly sworn upon oath, deposes and says:

1. That he is President of McClanathan and Associates, Inc., Professional Electrical Engineers.
2. That he is a licensed Professional Electrical Engineer in the States of California, Oregon, Washington and the District of Columbia and that he is a member of the Association of Federal Communications Consulting Engineers.
3. That he has been engaged in governmental, educational, commercial radio and television broadcast engineering and developments since 1955.
4. That he has been retained by Madgekal Broadcasting, Inc. to prepare the engineering exhibits relative to application for a construction permit to make minor changes to FM Radio Station KFLY in Corvallis, Oregon.

Affiant finally states that the material and exhibits contained in this report were prepared by him or under his direct supervision and that he has checked all results and believes them to be true.

R. A. McClanathan
Robert A. McClanathan, P.E.

Subscribed and sworn to before me this 12th day of January, 1996.



Barbara McClanathan
Notary Public, Oregon

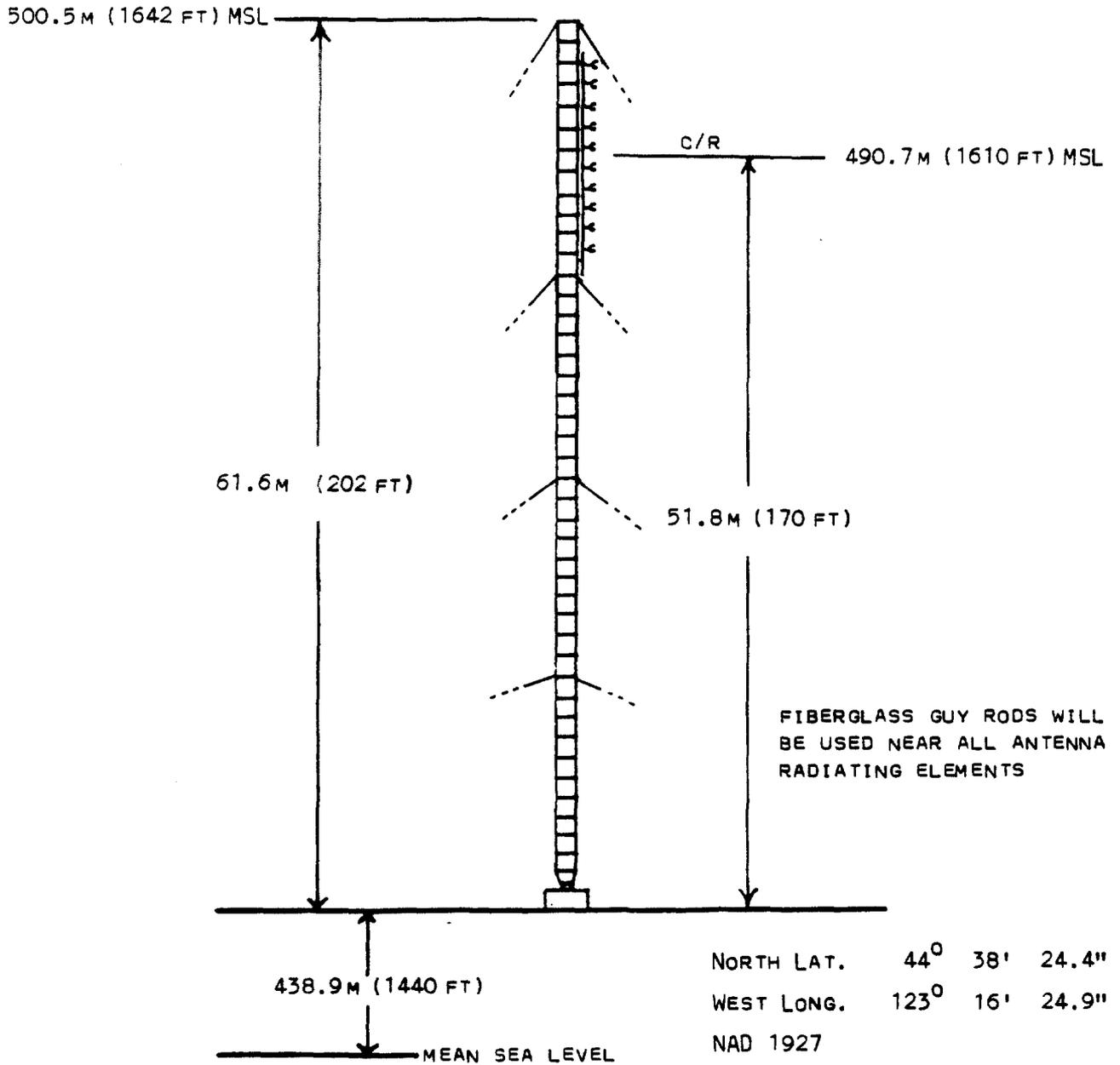
In and for the County of Multnomah, State of Oregon.

INDEX TO EXHIBITS

<u>EXHIBIT</u>	<u>TITLE</u>
E	Engineering Statement
E-1	Vertical Sketch of Proposed Tower and Side Mounted Ten Element 1/2 Wavelength Non-Directional FM Antenna
E-2	Statement Concerning Radio Frequency Interference
E-3A	Transmitter Location Plotted on 7.5' USGS Map
E-3B	Reduced copy of Airlie South, Oregon 7.5' USGS Map
E-4	Map of Predicted 3.16 mV/m, 70 dBu and 1 mV/m, 60 dBu Contours
E-5	Terrain and Coverage Data
E-6A	Environmental Statement Concerning Human Exposure to Radio Frequency Radiation
E-6B	Relative Vertical Field Plot for the Ten Element 1/2 Wavelength Spacing FM Antenna

EXHIBIT E-1

VERTICAL SKETCH OF PROPOSED KFLY FM
TEN BAY FM ANTENNA AND GUYED TOWER
VINEYARD MOUNTAIN, OREGON
MADGEKAL BROADCASTING, INC.



McCLANATHAN & ASSOCIATES

CONSULTING ELECTRONIC ENGINEERS

P. O. BOX 939

PORTLAND, OREGON 97207

1-12-96

EXHIBIT E-2

STATEMENT CONCERNING RADIO FREQUENCY INTERFERENCE

The proposed ten section FM antenna will be side mounted on a new guyed steel tower with an overall height above ground of 61.6 meters. This tower site is located with 15 meters of the existing KOAC-TV channel 7 tower. The existing channel 7 TV antenna is vertically above the proposed KFLY FM antenna. The proposed site is 0.7 kilometers Southwest of an established antenna site on Vineyard Mountain where other FM broadcast and communications facilities are located.

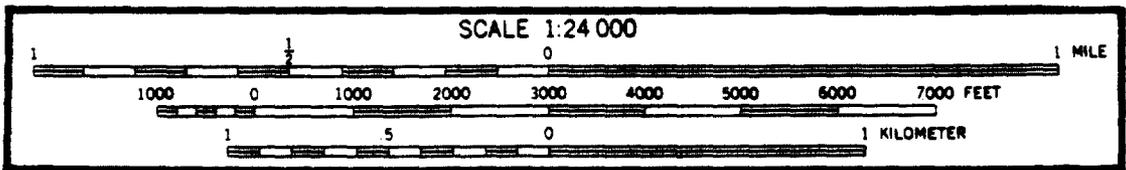
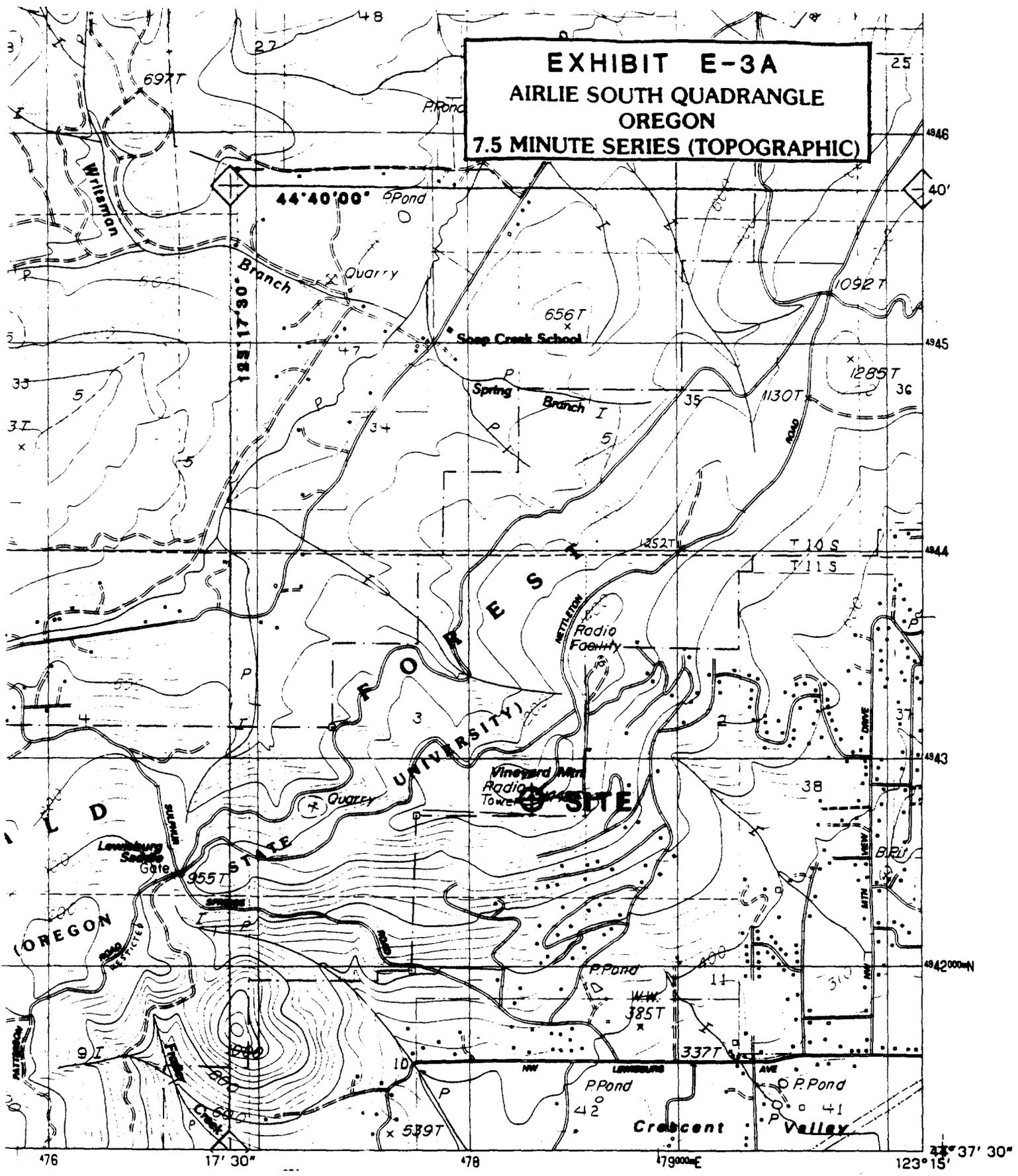
The proposed operation by the Applicant is on 101.5 MHz with an ERP of 100.0 kW employing circular polarization. The height of the antenna supporting structure was selected so that the center of radiation of the proposed ten section FM antenna will be above any future lower power communications antennas located in the vicinity.

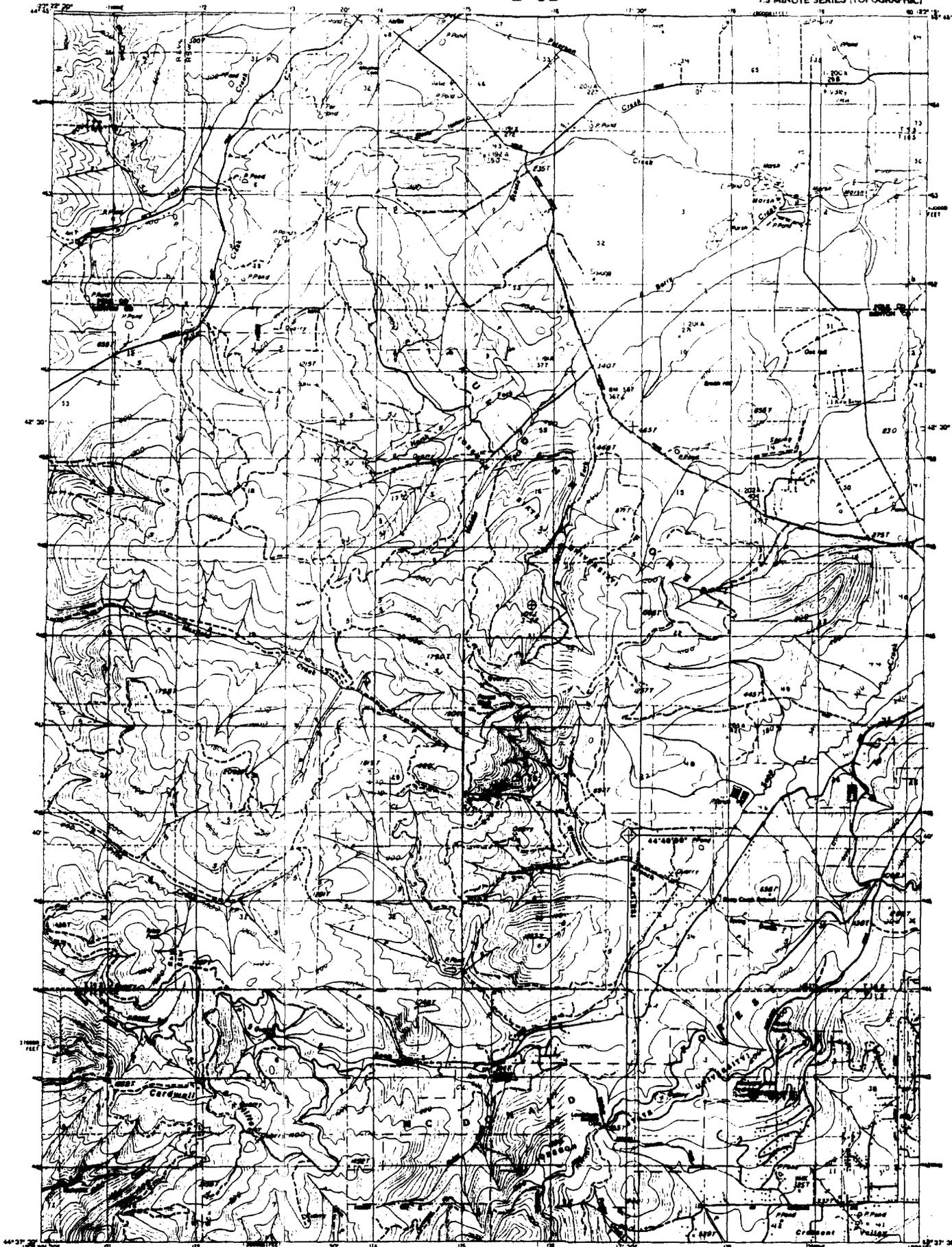
While it is unlikely that transmitter intermodulation products will be produced as a result of the transmitters for KRKT 99.9 MHz, KFAT 106.1 MHz and KHPE 107.9 MHz located 0.7 kilometers away, the Applicant will take care to look for any spurious radiations during the equipment test period when making measurements to show compliance with 47 C.F.R. 73.317 and 73.1590. Particular care will be taken to investigate for any I.M. products on 110.7 and 114.3 MHz in the aeronautical band.

There is a slight possibility that the second harmonic of KFLY, combined with the fundamental of KHPE, $2f(101.5) - f(107.9) = 95.1$ MHz, could result in an intermodulation product on the carrier frequency of KSND located in Lincoln City 62.6 km from Vineyard Mountain. However, Vineyard Mountain is not within the primary coverage contour of KSND. If any such spurious radiations occur that are not in compliance with 73.317(d), the Applicant will install appropriate bandpass filters on the effected transmitter to correct this condition.

It is not expected that there will be any occurrence of Receiver Induced Third Order Intermodulation Effect (RITOIE) as a result of the proposed KFLY operation and the nearby FM stations. It is believed that there will be no adverse effect on existing communications facilities located in the vicinity. In the unpredictable event that intermodulation or other interference should occur as a result of the proposed operation, the Applicant, by signing the certification on Page 2 of Section VII, FCC Form 301, accepts responsibility to immediately take action to correct such adverse conditions by means of standard types of cavity filters and traps

EXHIBIT E-3A
AIRLIE SOUTH QUADRANGLE
OREGON
7.5 MINUTE SERIES (TOPOGRAPHIC)

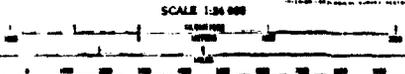




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USE OF THIS MAP.

PROVISIONAL MAP
Produced from original
manuscript drawings. In-
formation shown as of date of
field check.

**CONTINUED SURVEY OF THE
AIRLIE SOUTH QUADRANGLE, OREGON**
TO CORRECT ERRORS IN THE
ORIGINAL SURVEYING DATA
TO CORRECT ERRORS IN THE
ORIGINAL SURVEYING DATA
TO CORRECT ERRORS IN THE
ORIGINAL SURVEYING DATA

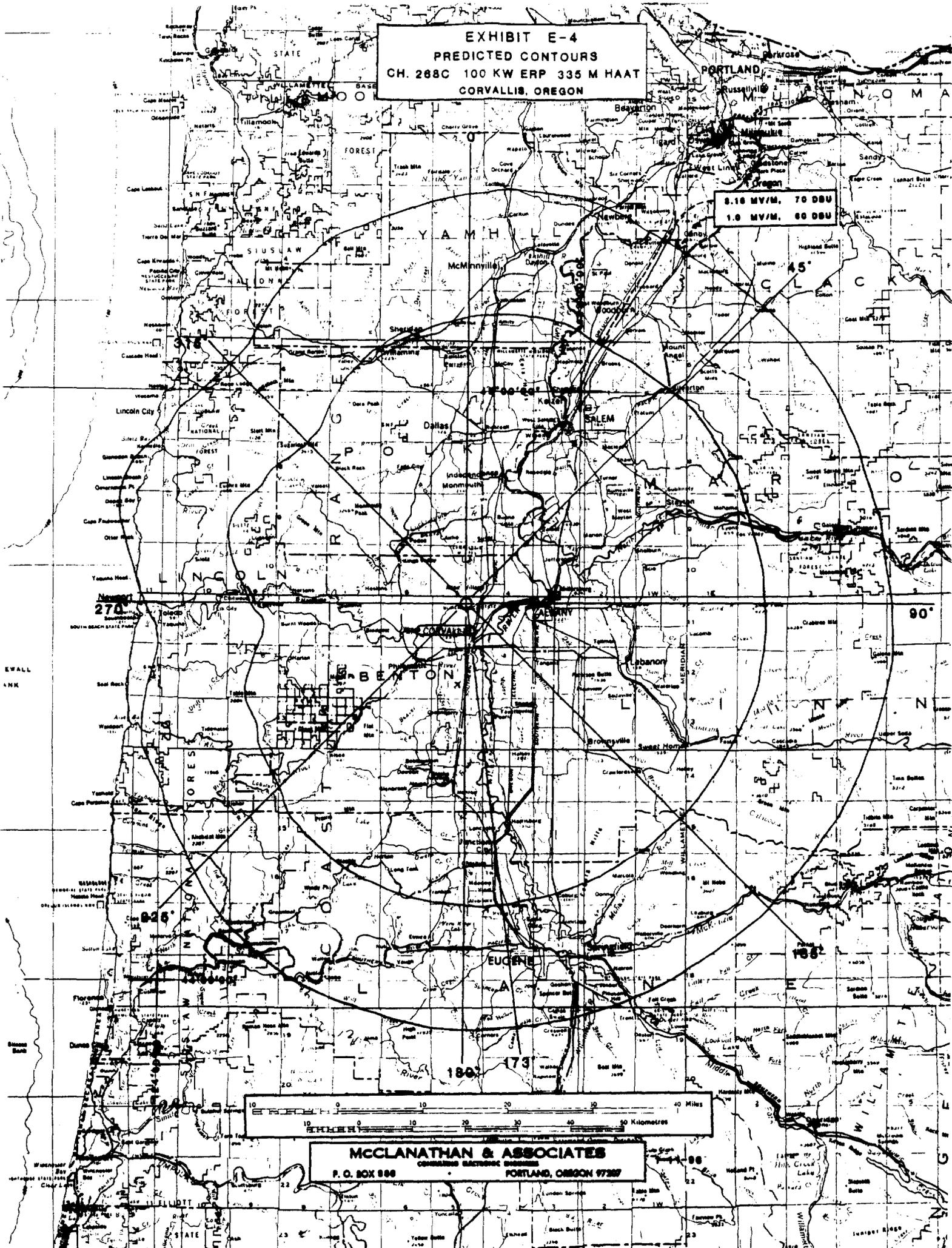


1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50

ROAD LEGEND
Impaved Road
Unimpaved Road
Trail
U.S. State U.S. State State State
AIRLIE SOUTH, OREG.
PROVISIONAL EDITION 1964
44133-75-17-200

EXHIBIT E-4
PREDICTED CONTOURS
CH. 288C 100 KW ERP 335 M HAAT
CORVALLIS, OREGON

8.16 MV/M, 70 DBU
1.0 MV/M, 66 DBU



McCLANATHAN & ASSOCIATES
COMMERCIAL ELECTRONIC ENGINEERS
P. O. BOX 808 PORTLAND, OREGON 97207

EXHIBIT E-5

COMPUTED DISTANCE TO CONTOURS (PART 73)

KFLY

Corvallis, OR; Vineyard Mtn.

Transmitter Latitude: 44:38:24.4N Longitude: 123:16:24.9W

Transmitter center of radiation: 490.7 m AMSL (51.80 m AGL)

Power: 100.000 kW Channel 268

Azimuth (Deg T)	HAAT (m)	Horizontal Relative Field	Equiv Power	Rough Correct	f(50,50) 70.0 dBu (km)	f(50,50) 60.0 dBu (km)
.00	366.09	1.000	100.000	.000	54.33	77.26
5.00	381.54	1.000	100.000	.000	55.23	78.39
10.00	390.44	1.000	100.000	.000	55.72	79.05
15.00	396.10	1.000	100.000	.000	56.04	79.47
20.00	396.39	1.000	100.000	.000	56.06	79.49
25.00	380.91	1.000	100.000	.000	55.19	78.35
30.00	382.22	1.000	100.000	.000	55.27	78.45
35.00	386.65	1.000	100.000	.000	55.51	78.77
40.00	390.81	1.000	100.000	.000	55.75	79.08
45.00	399.78	1.000	100.000	.000	56.24	79.74
50.00	404.71	1.000	100.000	.000	56.52	80.11
55.00	406.47	1.000	100.000	.000	56.62	80.24
60.00	405.40	1.000	100.000	.000	56.56	80.16
65.00	401.17	1.000	100.000	.000	56.32	79.84
70.00	398.69	1.000	100.000	.000	56.18	79.66
75.00	402.95	1.000	100.000	.000	56.42	79.98
80.00	406.07	1.000	100.000	.000	56.60	80.21
85.00	409.16	1.000	100.000	.000	56.77	80.44
90.00	418.91	1.000	100.000	.000	57.31	81.16
95.00	422.84	1.000	100.000	.000	57.53	81.45
100.00	424.78	1.000	100.000	.000	57.64	81.59
105.00	425.18	1.000	100.000	.000	57.66	81.62
110.00	425.08	1.000	100.000	.000	57.66	81.61
115.00	425.20	1.000	100.000	.000	57.67	81.62
120.00	424.83	1.000	100.000	.000	57.64	81.59

COMPUTED DISTANCE TO CONTOURS (PART 73)

KFLY

Corvallis, OR; Vineyard Mtn.

Transmitter Latitude: 44:38:24.4N Longitude: 123:16:24.9W

Transmitter center of radiation: 490.7 m AMSL (51.80 m AGL)

Power: 100.000 kW Channel 268

Azimuth (Deg T)	HAAT (m)	Horizontal Relative Field	Equiv Power	Rough Correct	f(50,50) 70.0 dBu (km)	f(50,50) 60.0 dBu (km)
125.00	424.64	1.000	100.000	.000	57.63	81.58
130.00	425.03	1.000	100.000	.000	57.66	81.61
135.00	424.46	1.000	100.000	.000	57.62	81.57
140.00	424.07	1.000	100.000	.000	57.60	81.54
145.00	423.48	1.000	100.000	.000	57.57	81.49
150.00	422.34	1.000	100.000	.000	57.50	81.41
155.00	421.33	1.000	100.000	.000	57.45	81.34
160.00	419.79	1.000	100.000	.000	57.36	81.22
165.00	418.59	1.000	100.000	.000	57.29	81.13
170.00	416.09	1.000	100.000	.000	57.15	80.95
175.00	412.85	1.000	100.000	.000	56.97	80.71
180.00	409.26	1.000	100.000	.000	56.77	80.44
185.00	401.48	1.000	100.000	.000	56.34	79.87
190.00	394.83	1.000	100.000	.000	55.97	79.37
195.00	389.79	1.000	100.000	.000	55.69	79.00
200.00	384.69	1.000	100.000	.000	55.40	78.63
205.00	378.80	1.000	100.000	.000	55.07	78.19
210.00	364.26	1.000	100.000	.000	54.22	77.13
215.00	341.30	1.000	100.000	.000	52.79	75.44
220.00	326.53	1.000	100.000	.000	51.83	74.36
225.00	289.72	1.000	100.000	.000	49.40	71.56
230.00	275.05	1.000	100.000	.000	48.38	70.34
235.00	258.87	1.000	100.000	.000	47.25	68.98
240.00	227.34	1.000	100.000	.000	45.08	66.33
245.00	233.91	1.000	100.000	.000	45.54	66.90

COMPUTED DISTANCE TO CONTOURS (PART 73)

KFLY

Corvallis, OR; Vineyard Mtn.

Transmitter Latitude: 44:38:24.4N Longitude: 123:16:24.9W

Transmitter center of radiation: 490.7 m AMSL (51.80 m AGL)

Power: 100.000 kW Channel 268

Azimuth (Deg T)	HAAT (m)	Horizontal Relative Field	Equiv Power	Rough Correct	f(50,50) 70.0 dBu (km)	f(50,50) 60.0 dBu (km)
250.00	215.21	1.000	100.000	.000	44.20	65.23
255.00	183.89	1.000	100.000	.000	41.78	62.28
260.00	158.80	1.000	100.000	.000	39.28	59.59
265.00	150.07	1.000	100.000	.000	38.26	58.48
270.00	169.19	1.000	100.000	.000	40.42	60.79
275.00	186.51	1.000	100.000	.000	41.99	62.52
280.00	211.35	1.000	100.000	.000	43.91	64.87
285.00	246.16	1.000	100.000	.000	46.38	67.92
290.00	259.08	1.000	100.000	.000	47.26	69.00
295.00	250.49	1.000	100.000	.000	46.67	68.28
300.00	222.20	1.000	100.000	.000	44.71	65.87
305.00	223.78	1.000	100.000	.000	44.82	66.01
310.00	205.40	1.000	100.000	.000	43.46	64.31
315.00	200.31	1.000	100.000	.000	43.07	63.83
320.00	203.60	1.000	100.000	.000	43.33	64.14
325.00	232.15	1.000	100.000	.000	45.42	66.75
330.00	265.05	1.000	100.000	.000	47.68	69.50
335.00	297.56	1.000	100.000	.000	49.93	72.19
340.00	321.29	1.000	100.000	.000	51.49	73.97
345.00	323.54	1.000	100.000	.000	51.64	74.14
350.00	335.19	1.000	100.000	.000	52.40	74.99
355.00	352.16	1.000	100.000	.000	53.48	76.24

334.71 m Cardinal Average

Contour Areas: 8732.26 17894.24
sq km sq km

EXHIBIT E-6A

ENVIRONMENTAL STATEMENT

An Environmental Assessment (EA) is categorically excluded under 47 C.F.R. Section 1.1306(b) of the FCC Rules and Regulations since the Applicant's proposal does not:

1. Involve a site location specified under 47 C.F.R. Section 1.1307(a)(1) through (7).
2. Involve high intensity lighting under 47 C.F.R. Section 1.1307(a)(8).
3. Result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in 47 C.F.R. Section 1.1307(b), (ANSI C95.1-1982 and ANSI C95.1-1991).

The Maximum Permissible Exposure (MPE) for uncontrolled environments at 101.5 MHz is 0.2 mW/cm^2 . The distance D from the proposed FM antenna radiating a total of 200.0 kW (100.0 H and 100.0 V) ERP to the MPE point may be determined by the equation on page 9 of the FCC OST Bulletin No. 65 dated October 1985. The relative field strength at depression angles towards the ground for the one-half wavelength vertical spaced ten element antenna is less than 0.10 as shown on the attached vertical plane relative field plot Exhibit E-6B. The MPE distance from this antenna for uncontrolled exposure is:

$$D^2 = \frac{(2.56)(1.64)(0.10)^2(200,000 \text{ watts})(1000 \text{ mW/W})}{4(3.1416)(0.2 \text{ mW/cm}^2)}$$

$$D = 1827 \text{ cm} = 18.3 \text{ meters}$$

The center of radiation for the proposed FM antenna is 51.8 meters above ground level and the lowest radiating element is 45.1 meters above ground level. Therefore, the proposed installation does comply with ANSI and FCC specified guidelines for uncontrolled human exposure to radio frequency radiation. The tower structure will be fenced to prevent unauthorized access.

The purpose of installing an antenna with one-half wavelength element spacing is to reduce the vertically radiated field to nearly zero to insure compliance with ANSI and FCC guidelines for protection of human exposure to radio frequency radiation and also to minimize potential for interference to other communications services in the vicinity and below the antenna.

continued