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JAN - 7 1992

Federal Communications Commission
Office of the Secretary

LAW OFFICES

TIERNEY & SWIFT

SUITE 210

1200 EIGHTEENTH STREET, N. W.

WASHINGTON, D. C. 20036

JOHN L. TIERNEY
RICHARD F. SWIFT

TELEPHONE
(202) 293-7979

JAN 6 10 00 AM '92
AUDIO SERVICES

January 7, 1992

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1992
FM EXAMINERS

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20036

Re: Tom Seabase
FM Channel 292A
Kalispell, Montana
Amendment to
Application for
Construction Permit
File No. BPH-910926MB

Dear Ms. Searcy:

Transmitted herewith in triplicate, on behalf of Tom Seabase, is an amendment to the above-referenced application.

This amendment is filed as a matter of right pursuant to Section 73.3522(a)(6) of the Rules.

Should any questions arise with respect to this amendment, please communicate with this office.

Very truly yours,

Richard F. Swift

Richard F. Swift
Attorney for
Tom Seabase

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JAN - 7 1992

Federal Communications Commission
Office of the Secretary

JAN 6 10 00 AM '92
AUDIO SERVICES DIVISION

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20036

Re: Tom Seabase
Channel 292A
Kalispell, Montana
Amendment to Application
for Construction Permit
File No. BPH-910926MB

Dear Ms. Searcy:

The above-referenced application is hereby amended by submission of the attached information.

Very truly yours,

Tom Seabase

Date: 1/6/92

Tom Seabase
Kalispell, Montana
Form 301, Section II, Para.9
Section IV-B
Exhibit 2 (Amended)
File No. BPH-910926MB

Integration and Divestiture Statement

Tom Seabase will work fulltime, a minimum of forty hours per week, as General Manager of his proposed radio station. As General Manager he will have overall responsibility for the management of the station, including the establishment of station policy, the supervision of employees, insuring the coordination of all departments at the station, securing the proper functioning of station operations and maintaining community relations with the city of Kalispell.

In the event he is awarded a construction permit, Mr. Seabase will resign from or terminate any employment he may then have and make whatever other arrangements are necessary in his schedule to fulfill his fulltime work commitment to the station.

The information concerning Mr. Seabase's local residency previously submitted in Exhibit 2 to the application was incorrect. Mr. Seabase has not formerly lived within the predicted signal contours of his proposed station nor has he been involved in civic activities in Kalispell, Montana. In the event he is awarded a construction permit, he will move to and reside in Kalispell. Mr. Seabase currently resides at Schafer Road in Polson, Montana.

Mr. Seabase will not claim qualitative credit for minority or

female status, and daytime preference. In his present business, Mr. Seabase produces commercial matter for broadcast for which he will claim broadcast experience. Paragraph 9 to Section II of the application is amended to refer to Exhibit 2 and to state that in the event Mr. Seabase is awarded a construction permit, he will divest his interest and terminate his participation in this production business.

Mr. Seabase will provide auxiliary power at both the transmitter and studio sites.

Tom Seabase
Form 301, Section V-B
Kalispell, Montana
File No. BPH-910926MB

RECEIVED

JAN - 7 1992

Federal Communications Commission
Office of the Secretary

Amendment

The attached Engineering Exhibit amends the application by increasing power. There is no change in the proposed site which requires new site certification.

JAN 8 10 00 AM '92
AUDIO SERVICES

W. LEE SIMMONS & ASSOC., INC.
BROADCAST TELECOMMUNICATIONS CONSULTANTS
1036 WILLIAM HILTON PARKWAY, SUITE 200F
HILTON HEAD ISLAND, S.C. 29928

803-785-4445

ENGINEERING EXHIBIT EE:

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT
(414 FEET)

JANUARY 1, 1992

ENGINEERING STATEMENT IN SUPPORT OF
A MODIFICATION OF AN APPLICATION FOR A
NEW FM STATION

(BPH-910926MB)

ENGINEERING EXHIBIT EE:

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT
(414 FEET)

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1. Declaration of Engineer

2. F.C.C. Form 301, Section V-B.

3. Narrative Statement.

4. Figure 1, Topographic Map Showing Proposed Site.

5. Figure 2, Map Showing Proposed Contours.

6. Figure 2-A, Tabulation of Proposed Contours. (Metric Units)

7. Figure 2-B, Tabulation of Proposed Contours. (English Units)

8. Figure 3, Vertical Tower Sketch.

9. Figure 4, Channel Allocation.

STATE OF SOUTH CAROLINA)
)
COUNTY OF BEAUFORT) SS:
)
HILTON HEAD ISLAND)

W. Lee Simmons being first duly sworn upon oath, deposes and states that is he a Broadcast Telecommunications Consultant in the State of South Carolina, that his qualifications are known to the Federal Communictaions Commission, and that his firm has been retained by Tom Seabase to prepare an engineering statement for modification of application for construction permit for a new FM station at Kalispell, Montana.

He further states that under penalty of perjury the calculations, and exhibits were made by him personally, or under his direct supervision and all facts contained therein are true of his own knowledge, except where stated to be on information or belief, and as to those facts, he believes them to be true.

January 1, 1992

W. Lee Simmons

W. Lee Simmons

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

Name of Applicant

Tom Seabase

Call letters *(if issued)*

Is this application being filed in response to a window? [X] Yes [ ] No

If Yes, specify closing date: September 26, 1991

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

- [X] 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
- [X] Effective radiated power
- [ ] Antenna height above average terrain
- [ ] Frequency
- [ ] Antenna location
- [ ] Class
- [ ] Main Studio location
- [X] Other *(Summarize briefly)* Modify application to a higher power

File Number(s) BHP 910926MB

1. Allocation:

Channel No.	Principal community to be served: City	County	State
292	Kalispell	Flathead	Mt

Class *(check only one box below)*

[X] 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.

.95 Kilometer NE of Pleaent Point Lake, Montana

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

Latitude	48°	10'	34"	Longitude	114°	20'	53"

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

If Yes, give call letter(s) or file number(s) or both. K240BT

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.

Exsisting tower, no changes

SECTION V-B – 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? existing tower ☐ 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 _____ Office where filed _____

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

	Landing Area	Distance (km)	Bearing (degrees True)
(a)	Kalispell City Airport	2.5km	45
(b)			

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

(1) of site above mean sea level: 1135 meters

(2) of the top of supporting structure above ground (including antenna, all other appurtenances, and lighting, if any); and 40 meters

(3) of the top of supporting structure above mean sea level: [(a)(1) + (a)(2)] 1175 meters

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

(1) above ground 34 meters (H)

34 meters (V)

(2) above mean sea level [(a)(1) + (b)(1)] 1169 meters (H)

1169 meters (V)

(3) above average terrain Rounded 126 meters (H)

Rounded 126 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. EE

9. Effective Radiated Power:
(a) ERP in the horizontal plane 3.8 kw (H*) 3.8 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 arcs, of all short-spaced assignments, applications and allotments, including a plot showing each transmitter location, with identifying call letters or file numbers, and indication of whether facility is operating or proposed. For vacant allotments, use the reference coordinates as 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 exhibits(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(e) and 73.318.)* Exhibit No. EE

15. Attach as an Exhibit a 7.5 minute series U.S. Geological Survey topographic quadrangle map that shows clearly, legibly, and accurately, the location of the proposed transmitting antenna. This map must comply with the requirements set forth in Instruction V. 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. EE

Existing Tower

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. EE

(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. = 2.59 sq. km.) and population (latest census) within the predicted 1 mV/m contour.

Area 3,145 sq. km. Population 48,414

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)*

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

(Source: NGDC)

[ ] 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)
*			
0	SEE ENGINEERING	EXHIBIT 2-A and 2-B	
45	HAAT BASED ON 8	BEARINGS	
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. EF

If No, explain briefly why not.

Existing tower does not exceed 1.1311. ANSI Study

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)*	Relationship to Applicant *(e.g., Consulting Engineer)*
W. Lee Simmons	Consulting Engineer
Signature: W. Lee Simmons	Address *(Include ZIP Code)* 1036 William Hilton Pky suit 200F Hilton Head Is S.C. 29928
Date: January 1, 1992	Telephone No. *(Include Area Code)* (803) 785-4445

W. LEE SIMMONS & ASSOC., INC.
BROADCAST TELECOMMUNICATIONS CONSULTANTS
1036 WILLIAM HILTON PARKWAY, SUITE 200F
HILTON HEAD ISLAND, S.C. 29928

803-785-4445

ENGINEERING EXHIBIT EE:

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT
(414 FEET)

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement has been prepared on behalf of Tom Seabase. The purpose of this statement is to request a Modification of Application for Construction Permit to build a new FM broadcast facility on Channel 292A at Kalispell, Montana, which will operate with an ERP of 3.8 KW and an HAAT of 126 Meters (414 Feet). As this application must have concurrence with Canada as a Class B1 before it can apply as a 6KW Class A, the original application was filed as a 3 KW station. A Check with the Commission on December 31, 1991 confirms that B1 clearence has been obtained, therefore this minor modification is submitted to conform with the new full Class A power level. No other changes are requested.

The application was filed in response to a Public Notice for a window which closed on September 26, 1991. This application has already been accepted by the Commission under file number BPH-910926MB.

The application is not a major environmental action, as defined by Section 1.1307 of the Commission's Rules. The proposed facility is in full compliance with the FCC / ANSI Radiation Guidelines.

Answers to questions contained in F.C.C. Form 301, Section V-B, are incorporated in the following paragraphs and figures.

II. ENGINEERING DISCUSSION:

A. Proposed Location:

The applicant proposes to locate on the existing tower of K240BT. The tower is approximately 4 kilometers South of Kalispell, Montana. Figure 1 is a Topographic map showing the existing site. The geographic coordinates are:

Latitude: 48° 10′ 34"
Longitude: 114° 20′ 53"

B. Antenna System and Tower:

A dual polarized 3-bay FM antenna will be side mounted near the top of the existing tower which has an overall height of 40 Meters AGL (includes lighting). The antenna will have a center of radiation of 34 Meters AGL or 1169 Meters AMSL. Figure 3 is a sketch of the proposed tower. The antenna has a non-directional power gain of 1.55 H/V.

The antenna will be fed by 22 Meters (75 Feet) of 1 5/8"" coaxial cable, with a rated efficiency of 95.3 percent for this length.

C. Transmitter:

The applicant plans to install a type accepted 3 KW FM transmitter. The transmitter will be operated at 2.57 KW which is within its rated power.

D. Effective Radiated Power:

Giving consideration for the maximum antenna gain, transmitter power and line loss, the maximum Effective Radiated Power is 3.8 KW for the Horizontal and 3.8 KW for the Vertical Component.

A Class-A FM station with 322 kilometers of the Canadian Border is restricted to a maximum of 6.0 KW (ERP) up to a maximum Height Above Average Terrain (HAAT) of 100 Meters if Canadian concurrence is obtained. This proposal will operate with an HAAT that exceeds the maximum and consequently must reduce its ERP in order to obtain equivalent coverage within the 1.0 mV/M contour. The closest part of the Canadian Border is 91.6 kilometers away on a bearing of N-0-E.

Since the station is within 322 kilometers of the Canadian Border the equivalent interference curves have also been used.

Using the curve, it was determined that 3.8 KW at an HAAT of 126 Meters is equivalent to the maximum normally allowed.

E. Auxiliary Power:

The applicant proposes to install an Auxiliary Power Generator to supply electrical power to their proposed studio and transmitter sites.

F. Channel Allocation:

The proposed site is in accordance with the required mileage separations as set forth in Section 73.207(a) and protects the Canadian channels to it full Class B1 requirement. Figure 4 is a channel allocation study from the proposed site.

G. Terrain Profile Data & Coverage:

Terrain profile data was extracted from NGDC 30 Second Digitized Terrain Data Base provided out of Boulder, Colorado. Twenty-four bearings (every 15 degrees) were used but, the standard eight bearings (every 45 degrees) were used to obtain the proposed HAAT.

The predicted service contours, as shown in Figure 2 of the attached report, were computed using a mathematical model adapted for computer use of the data shown in Figure 1 of Section 73.333 (replacement of the Commission's Rules, the so-called "new" F(50,50) curves). This is the Commission's computer program TV FM FS REPORT RS-76-01, dated January 1976.

Figure 2-A & 2-B are tabulations of the distances to these contours in Metric Units (Meters/Kilometers) and in the traditional English Units (Feet/Miles) respectively.

H. Terrain Profile to City of License:

The N-45-E radial is the direct path to the City of License. From the proposed site the 3.16 mV/M City Grade Contour will completely encompass the City of License without major terrain obstruction.

I. Coverage Area and Population:

The area contained within the 60 dbu (1.0 mV/m) contour is 3,145 square kilometers (1214 square miles) and has been computed mathematically.

The population within this contour is 48,417 persons and was obtained by assuming a uniform distribution of population within minor civil divisions & is based upon the 1980 Census.

J. FM Blanketing Contour:

The applicant recognizes it's obligation to resolve related interference complaints for a one year period within its 115 dBu "FM Blanketing Contour" as required by Section 73.318 of the FCC Rules.

The radius around the base of the tower in which Blanketing interference is possible is fairly small and is in a sparsely populated area. Given the height of the tower proposed, no problems are anticipated.

K. Other Services in Area:

There are NO known AM Broadcast Stations within 3.2 kilometers of the proposed site.

There are other transmitting facilities in the area however, based on the type of transmitter proposed, and the frequency & power involved no intermodulation problems with existing transmitting facilities would be expected. In the unlikely event some problems would occur, the applicant will correct such cases in accordance with the Commission's Rules.

L. Environmental Assessment Statement:

The applicant believes its proposal will not significantly effect the environment since it does not meet any of the criteria specified in Section 1.1307 of the rules. Specifically the proposed facility:

1. Will NOT be located in an officially designated wilderness area.
2. Will NOT be located in an officially designated wildlife preserve.
3. Will NOT affect districts, sited, buildings, structures or objects, significant in American history, architecture, archeology or culture, that are listed in the National Register of Historic Places or are eligible for such listing.

4. Will NOT be located in a floodplain.
5. Will NOT result in construction that will involve a significant change in the surface features (eg. wetland fill, deforestation or water diversion).
6. Will NOT involve the use of high intensity white lights on a structure located in a residential neighborhood, as defined by the applicable zoning laws.
7. Will NOT involve the exposure of workers or the general public to levels of radiofrequency radiation in excess of the "Radio Frequency Protection Guide" recommended by ANSI (C95-1-1982).

The following is a more detailed discussion of this protection standard:

a. National Environmental Policy Act of 1969:

In 1969, Congress enacted the National Environmental Policy Act (NEPA), which requires the FCC to evaluate the potential environmental significance of the facilities it regulates and authorizes. Human exposure to Radio Frequency (RF) radiation has been identified as an issue the FCC must consider.

Beginning with the filing of applications after January 1, 1986, broadcast stations will be required to "certify compliance" with FCC prescribed guidelines on human exposure to RF radiation. The FCC is using as its processing guidelines, the American National Standards Institute's (ANSI) RF radiation protection guides (ANSI C95.1-1982). These exposure limits are expressed in terms of milli-watts per square centimeter.

These exposure limits are time averaged over any six minute period and vary depending upon the frequency involved:

Frequency Range (MHz)			Power Density (mW/cm^2)	
0.3	to	3	100	AM
3	to	30	$900/(Freq^2)$	
30	**to**	**300**	**1.0**	**VHF TV & FM**
300	to	1,500	Freq/300	UHF TV
1500	to	100,000	5.0	

(same as ANSI standard)

In the following formula:

$$D = \frac{SQRT(F^2 * [HERP + VERP])}{1.667 * SQRT(PD) * 3.2808}$$

Where:

D = the closest distance in meters that a human should come to an operating antenna (to obtain feet multiply by 3.2808)
F = typical relative field factor in downward direction (F = 1 is worst case main lobe)
HERP = Horizontal ERP in watts (above a dipole)
VERP = Vertical ERP in watts (above a dipole)
PD = highest Power Density in milli-watts/cm^2
SQRT = Square Root
Freq = Frequency in mega-cycles

The vertical radiation pattern of the FM antenna specified in this application is very narrow and therefore the power density as seen by an observer on the ground near the base of the tower will be less than 10 percent of the total ERP or .38 KW.

The application of the above equation (assuming maximum ERP), in our case, for a frequency of 106.3 MHz and a Power Density of 1.0 milli-watts results in a minimum distance of 11.27 meters (37 feet) from the antenna. Inasmuch as the lowest element on the proposed antenna will be approximately 31 meters (101 feet) above ground, it is self-evident that no hazard from radiation will exist to persons at ground. With regard to people which need to climb the tower, the tower will be fenced and/or marked by appropriate warning signs to insure safety, and if maintenance is to performed on the tower the station will sign off the air to insure compliance with the ANSI standard.

III. SUMMARY:

Tom Seabase proposes to modify its application to construct a new FM facility on Channel 292A at Kalispell, Montana. This engineering proposal is in full compliance with the Commission's Rules.

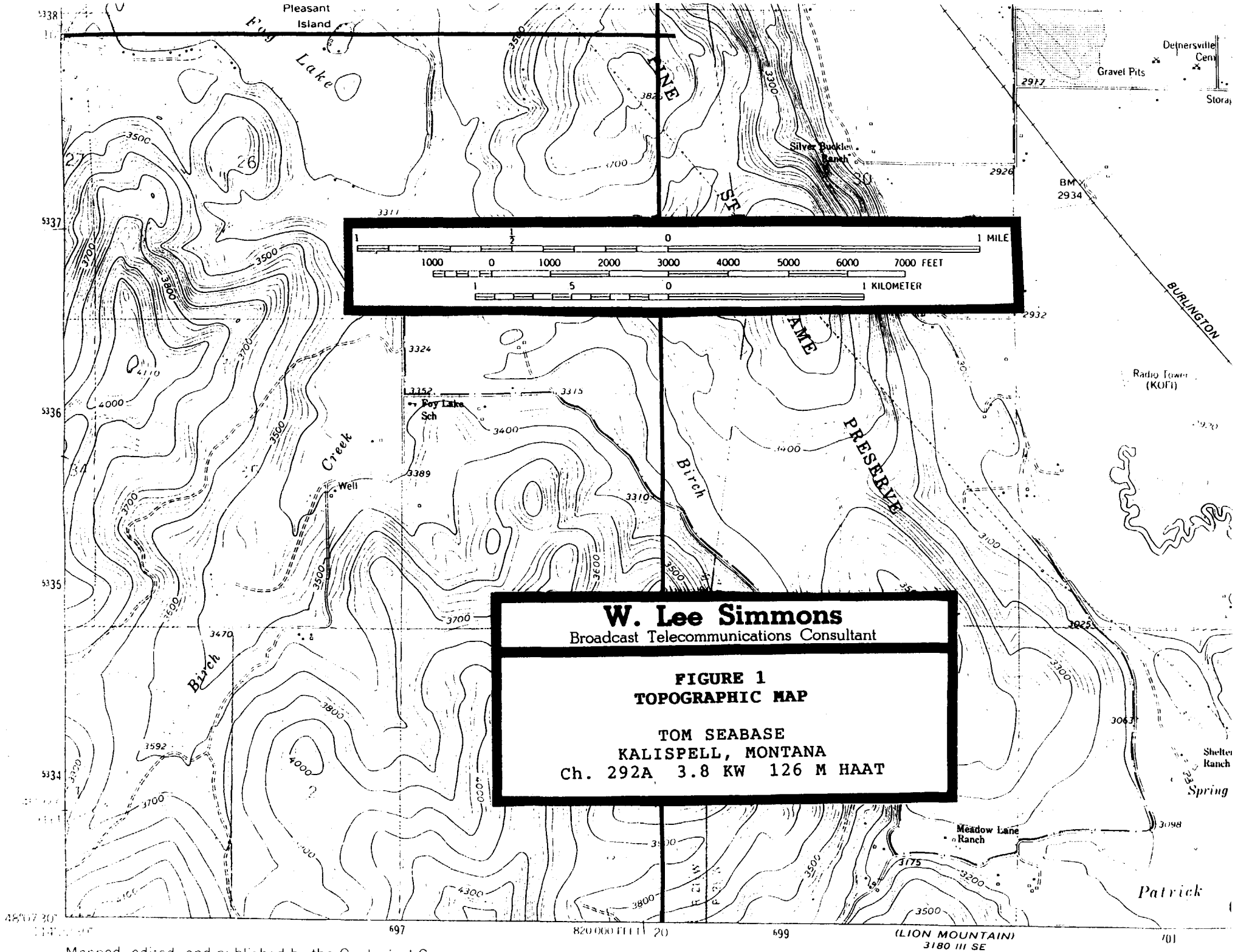
IV. ENGINEER-APPLICANT AGREEMENT

W. Lee Simmons and Associates Inc. assumes no liability for any errors or omissions in the information hereby provided, and shall not be liable for any injuries or damages (including consequential) which might result from use of this engineering report. W. Lee Simmons and Associates Inc. assumes no liability for this report if it is accepted or rejected by the Federal Communications Commission. The Applicant agrees with the stated terms and conditions or this report is considered null and void and is not to be utilized in any way or filed with the Federal Communications Commission.

W. Lee Simmons

W. Lee Simmons
Broadcast Telecommunications Consultant

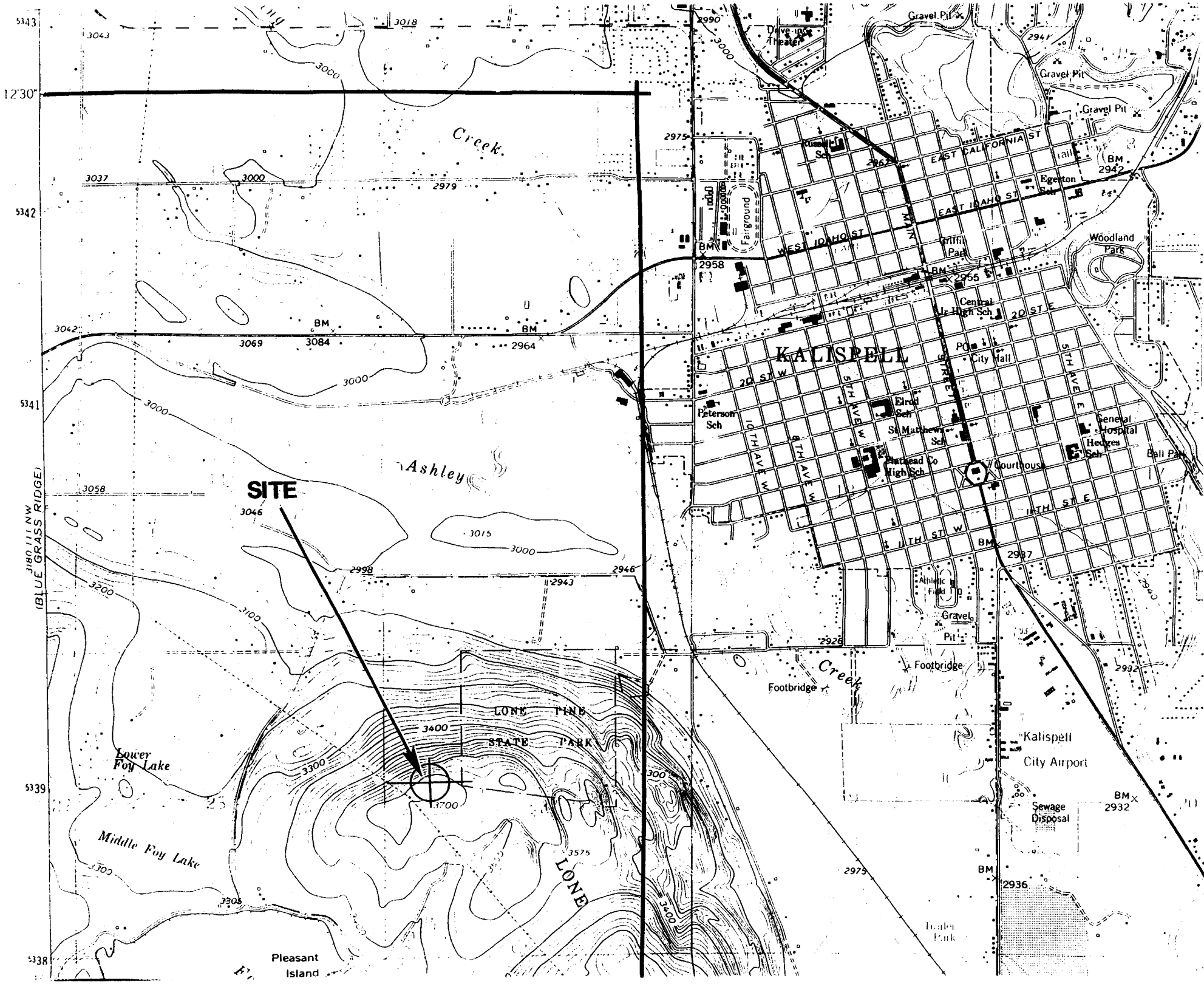
January 1, 1992



W. Lee Simmons
Broadcast Telecommunications Consultant

FIGURE 1
TOPOGRAPHIC MAP

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT


SITE
KALISPELL
LONE PINE STATE PARK
Lower Foy Lake
Middle Foy Lake
Ashley Creek
Creek
Pleasant Island
(BLUE GRASS RIDGE)
EAST CALIFORNIA ST
EAST IDAHO ST
WEST IDAHO ST
20 ST W
20 ST E
10TH ST W
10TH ST E
5TH AVE W
5TH AVE E
6TH AVE W
10TH AVE W
Fairground
Griffin Park
Woodland Park
Central Jr High Sch
City Hall
Courthouse
Peterson Sch
Elrod Sch
St Matthews Sch
Flathead Co High Sch
General Hospital
Hedges Sch
Ball Park
Athletic Field
Gravel Pit
Footbridge
Kalispell City Airport
Sewage Disposal
Dodge Park
Dave Inc Theater
Osborne Sch
Egerton Sch
12'30"
5343
5342
5341
5339
5338
3180 III NW
3043
3018
3000
2979
3037
3042
3069
3084
2964
3058
3046
3015
2998
2943
2946
3200
3100
3400
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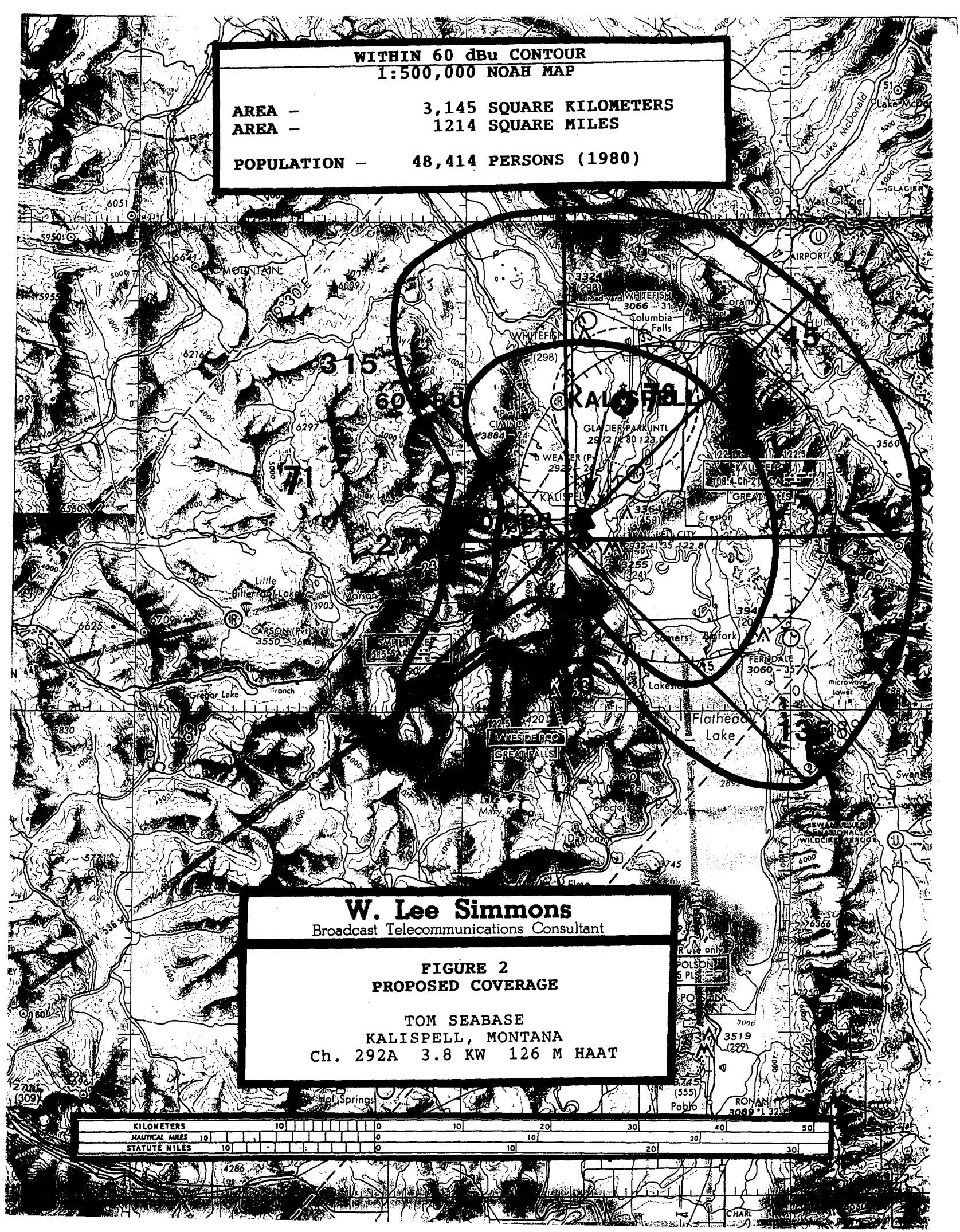
WITHIN 60 dBu CONTOUR
1:500,000 NOAH MAP
AREA - 3,145 SQUARE KILOMETERS
AREA - 1214 SQUARE MILES
POPULATION - 48,414 PERSONS (1980)
W. Lee Simmons
Broadcast Telecommunications Consultant
FIGURE 2
PROPOSED COVERAGE
TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT
KILOMETERS
NAUTICAL MILES
STATUTE MILES
KALISPELL
GLACIER PARK INTL
WHITEFISH
Columbia Falls
Flathead Lake
Lake McDonald
Lake Mary Ronan
Polson
Pablo
Hot Springs
Bigfork
Somers
Lakeside
Proctor
Rollins
Dayton
Ferndale
Creston
Marion
Little Bitterroot Lake
Gregor Lake
Swan River National Wildlife Refuge
Lake McDonald
West Glacier
Apgar
Coram
Martin City
Kalispell City
Great Falls
Lakes Dr Co
Smith Valley
Carson (PV)
Cimino
Weaver (PV)
Airport
Glacier
Mountain
Tally Lake
Ashley Lake
Swan
Charl
315
60 dBu
71
45
136
145
480
536
78

FM COVERAGE
****

TOM SEABASE KALISPELL, MONTANNA

CHANNEL NO. 292 A FREQUENCY 106.3 MHZ

CENTER OF RADIATION 1169.0 METERS AMSL

COORDINATES: 48-10-34 / 114-20-53

BEARING DEGREES		3-16 KM AVERAGE	C.R. HAAT	E.R.P. (KW)	DISTANCE TO CONTOURS (KM) 115.0	70.0	60.0
0.	*	928.8	240.2	3.8	0.8	22.4	38.0
15.		921.1	247.9	3.8	0.8	22.7	38.5
30.		909.5	259.5	3.8	0.8	23.2	39.3
45.	*	909.7	259.3	3.8	0.8	23.2	39.3
60.		906.1	262.9	3.8	0.8	23.3	39.4
75.		893.7	275.3	3.8	0.8	24.0	40.2
90.	*	887.6	281.4	3.8	0.8	24.1	40.6
105.		886.8	282.2	3.8	0.8	24.1	40.6
120.		887.0	282.0	3.8	0.8	24.1	40.6
135.	*	903.0	266.0	3.8	0.8	23.5	39.6
150.		1047.2	121.8	3.8	0.8	15.9	27.8
165.		1234.5	-65.5 D	3.8	0.8	7.9	14.2
180.	*	1436.0	-267.0 D	3.8	0.8	7.9	14.2
195.		1335.0	-166.0 D	3.8	0.8	7.9	14.2
210.		1249.6	-80.6 D	3.8	0.8	7.9	14.2
225.	*	1060.5	108.5	3.8	0.8	15.0	26.6
240.		1125.4	43.6	3.8	0.8	9.5	16.9
255.		1165.2	3.8 D	3.8	0.8	7.9	14.2
270.	*	1155.8	13.2 D	3.8	0.8	7.9	14.2
285.		1166.2	2.8 D	3.8	0.8	7.9	14.2
300.		1191.3	-22.3 D	3.8	0.8	7.9	14.2
315.	*	1060.6	108.4	3.8	0.8	15.0	26.6
330.		962.2	206.8	3.8	0.8	20.9	35.7
345.		940.4	228.6	3.8	0.8	21.9	37.3

AVERAGE (8) * 1042.8 126.2 Meters

AREA IN SQUARE KILOMETERS 1.86 1078. 3145.

115.0 DBU BLANKET CONTOUR IS COMPUTED VIA SECTION 73.318

W. Lee Simmons
Broadcast Telecommunications Consultant

FIGURE 2-A
PROPOSED CONTOURS
(METRIC UNITS)

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT

FM COVERAGE
****

TOM SEABASE KALISPELL, MONTANNA

CHANNEL NO. 292 A FREQUENCY 106.3 MHZ

CENTER OF RADIATION 3835. FEET AMSL

COORDINATES: 48-10-34 / 114-20-53

BEARING DEGREES		2-10 MILE AVERAGE	C.R. HAAT	E.R.P. (KW)	DISTANCE TO CONTOURS (MI) 115.0	70.0	60.0
0.	*	3047.	788.	3.8	0.5	13.9	23.6
15.		3022.	813.	3.8	0.5	14.1	23.9
30.		2984.	851.	3.8	0.5	14.4	24.4
45.	*	2985.	851.	3.8	0.5	14.4	24.4
60.		2973.	863.	3.8	0.5	14.5	24.5
75.		2932.	903.	3.8	0.5	14.9	25.0
90.	*	2912.	923.	3.8	0.5	15.0	25.2
105.		2909.	926.	3.8	0.5	15.0	25.2
120.		2910.	925.	3.8	0.5	15.0	25.2
135.	*	2963.	873.	3.8	0.5	14.6	24.6
150.		3436.	400.	3.8	0.5	9.9	17.3
165.		4050.	-215. D	3.8	0.5	4.9	8.8
180.	*	4711.	-876. D	3.8	0.5	4.9	8.8
195.		4380.	-545. D	3.8	0.5	4.9	8.8
210.		4100.	-264. D	3.8	0.5	4.9	8.8
225.	*	3479.	356.	3.8	0.5	9.3	16.5
240.		3692.	143.	3.8	0.5	5.9	10.5
255.		3823.	12. D	3.8	0.5	4.9	8.8
270.	*	3792.	43. D	3.8	0.5	4.9	8.8
285.		3826.	9. D	3.8	0.5	4.9	8.8
300.		3908.	-73. D	3.8	0.5	4.9	8.8
315.	*	3480.	356.	3.8	0.5	9.3	16.5
330.		3157.	678.	3.8	0.5	13.0	22.2
345.		3085.	750.	3.8	0.5	13.6	23.2
AVERAGE (8)	*	**3421.**	**414.**	**Feet**			
AREA IN SQUARE MILES					**0.72**	**416.**	**1214.**

115.0 DBU BLANKET CONTOUR IS COMPUTED VIA SECTION 73.318

W. Lee Simmons
Broadcast Telecommunications Consultant

FIGURE 2-B
PROPOSED CONTOURS
(ENGLISH UNITS)

TOM SEABASE
KALISPELL, MONTANA
Ch. 292A 3.8 KW 126 M HAAT