

JOHN J. MULLANEY
JOHN H. MULLANEY, P.E. (1994)
ALAN E. GEARING, P.E.
TIMOTHY Z. SAWYER

301 921-0115 Voice
301 590-9757 Fax
mullengr@aol.com E-mail

MULLANEY ENGINEERING, INC.

9049 SHADY GROVE COURT
GAITHERSBURG, MD 20877

ENGINEERING EXHIBIT EE-1:

FIRST BROADCASTING INVESTMENT PARTNERS, LLC

**KAZZ CONSTRUCTION PERMIT APPLICATION
FM CHANNEL 296C3 107.1 MHZ 25.0 KW
DEER PARK, WASHINGTON**

18 FEBRUARY 2004

ENGINEERING EXHIBIT
IN SUPPORT OF
AN APPLICATION FOR CONSTRUCTION PERMIT FOR
FM STATION KAZZ
DEER PARK, WASHINGTON

ENGINEERING EXHIBIT EE-1:

FIRST BROADCASTING INVESTMENT PARTNERS, LLC

**KAZZ CONSTRUCTION PERMIT APPLICATION
FM CHANNEL 296C3 107.1 MHZ 25.0 KW
DEER PARK, WASHINGTON**

18 FEBRUARY 2004

TABLE OF CONTENTS:

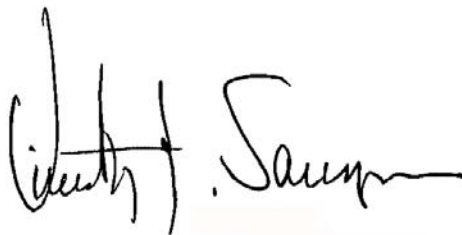
1. F.C.C. Form 301, Section III (certification)
2. F.C.C. Form 301, Section III-B (engineering)
3. Declaration of Engineer
4. Narrative Statement
5. Figure 1, Map Showing Predicted and Proposed Service Contours
6. Figure 2, Vertical Sketch of proposed antenna/tower structure.

DECLARATION

I, Timothy Z. Sawyer, declare and that I have provided engineering services in the area of telecommunications since 1969. My qualifications are a matter of record with the Federal Communications Commission. I am a senior engineer with the firm of Mullaney Engineering, Inc., consulting radio telecommunications engineers with offices in Gaithersburg, Maryland.

The firm of Mullaney Engineering, Inc., has been retained by FIRST INVESTMENT PARTNERS, LLC, to prepare the instant engineering exhibit in support of *an Application to Modify the Licensed Facilities of FM Broadcast Station KAZZ, Deer Park Washington.*

All facts contained herein are true of my own knowledge except those stated to be on information and belief, and as to those facts, I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

A handwritten signature in black ink, appearing to read "Timothy Z. Sawyer", is written over a horizontal line.

Digitized Signature - Original ON FILE - Timothy Z. Sawyer

Timothy Z. Sawyer

Executed on the 18th day of February 2004

ENGINEERING EXHIBIT EE-1:

FIRST BROADCASTING INVESTMENT PARTNERS, LLC

**KAZZ CONSTRUCTION PERMIT APPLICATION
FM CHANNEL 296C3 107.1 MHZ 25.0 KW
DEER PARK, WASHINGTON**

18 FEBRUARY 2004

NARRATIVE STATEMENT:

I. GENERAL:

This engineering statement and the instant engineering exhibit of which it is part have been prepared on behalf of FIRST BROADCASTING INVESTMENT PARTNERS, LLC, (hereinafter "FIP"), licensee of FM Radio Station KAZZ, DEER PARK, WASHINGTON.

FIP, seeks authorization to modify the licensed facilities of FM Broadcast Station KAZZ, Deer Park, Washington. FCC Facility ID: 3922

By means of the instant application, **FIP proposes to increase the overall height of the antenna supporting structure, and make changes to its transmitting antenna system. FIP proposes to increase the antenna height above ground(and sea level) and its corresponding height above average terrain (HAAT).** No other changes are proposed.

The facilities will be built to comply with the *FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields* and the instant proposal is categorically excluded from environmental processing pursuant to the provisions of Section 1.1306 of the Commission's Rules. A more detailed discussion of environmental factors is included under the heading Environmental Considerations below.

Information requested by exhibits in response to questions on Section III-A of FCC Form 301 is incorporated in the following paragraphs, figures, and or tables.

II. ENGINEERING DISCUSSION:

A. Transmitter/Antenna Location:

FIP proposes to raise (increase) the height of its transmitting antenna which is side-mount on an existing supporting structure (steel tower). The height of the supporting structure will be increased 23 meters allowing for an increase in the center of radiation of the antenna to a height above ground of 23 meters. The overall effect(result) will be an antenna height above ground (center of radiation) of 73 meters, antenna height above mean sea level of 851 meters and antenna height above average terrain (HAAT) of 100 meters.

The existing supporting structure has been registered with the FCC and issued the following tower registration number:1005852. The Federal Aviation Administration has been notified ("Notice of Proposed Construction or Alteration" FAA Form 7560-1) of the proposed increase in tower height by 23 meters. Upon receipt of the FAA determination, a modification of the tower registration to specify the new tower height will be submitted to the Commission

A large scale topographical map has not been included as this is the existing transmitting site of KAZZ. A vertical sketch of the supporting structure with antenna location marked upon it is included herein as Figure 2.

B. Proposed Antenna:

FIP proposed to utilize its existing non-directional antenna (Jampro JSCP-4). The maximum effective radiated power (ERP) from the antenna is 25,000 watts (25.0 kW) horizontal and vertical. The gain of the antenna is 2.1 in each radiation plane. The antenna input power (power at the antenna input flange) to achieve an ERP of 25.0 kilowatts is 11.904 kW. The exact transmitter power output (TPO) to achieve the ERP of the station will be computed based upon the type and length of transmission line

and provided to the Commission during the station licensing process. However, for planning purposes, the required transmitter output power is predicted to be within the range of 13.7 to 14.5 kilowatts.

C. Environmental Considerations:

The applicant believes its proposal will not significantly affect the environment for the following reasons.

The proposal does not meet any of the criteria specified in Section 1.1307 of the FCC Rules. More specifically, the proposed facilities are not known to fall within any of the categories enumerated in Sections 1.1307(a)(1)-(7) and will not involve the use of high intensity white lights. Furthermore, operation of the proposed facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

The proposed antenna is 73 meters above ground level, and utilizing a worst-case relative field value of 0.5 from the antenna for all angles 15 degrees and greater below the horizon, the power density at 2 meters above ground was computed to be 00829 mW/cm²

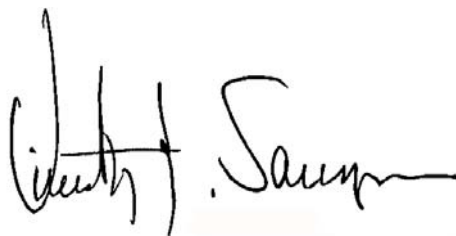
The power density value is less than 8.3 percent of the Commission's standard of 1.0 mW/cm² for a controlled area and less than 41.5% of the Commission's standard of 0.20 mW/cm² for an uncontrolled area. Therefore, the proposal is well within the Commissions standards. The applicant will comply with the Commissions guidelines and standards. Access to the tower is restricted and suitable warning signs have been posted.

III. SUMMARY:

FIP proposes to Modify the licensed facilities of FM Broadcast Station KAZZ, by increasing the height of the antenna supporting structure and increasing the height of its transmitting antenna. KAZZ is a fully-spaced FM Class C3 facility and upon completion of construction, KAZZ will operate at its maximum allowable facilities for a station of its class (i.e., C3).

A grant of this proposal is in the public interest in that it will allow an improvement in the general overall signal level within the current KAZZ service area. Thus allowing better reception of its signal by the general public.

Operation as proposed herein would not cause any normally prohibited contour overlap, and would not have any significant impact on the environment. The proposed operation will not create prohibited interference. The proposed operation is fully in compliance with the Commission's rules and applicable international agreements.

A handwritten signature in black ink, appearing to read "Timothy Z. Sawyer". The signature is fluid and cursive, with the first name "Timothy" and last name "Sawyer" clearly distinguishable.

Digitized Signature - Original ON FILE - Timothy Z. Sawyer

Timothy Z. Sawyer