

of explanatory exhibits.

SECTION II - Legal and Financial

| | | |
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| 1. | <p>Certification. Applicant certifies that it has answered each question in this application based on its review of the application instructions and worksheets. Applicant further certifies that where it has made an affirmative certification below, this certification constitutes its representation that the application satisfies each of the pertinent standards and criteria set forth in the application instructions and worksheets.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| 2. | <p>Eligibility. Each application must answer "Yes" to one and "No" to two of the three following certifications. An applicant should not submit an explanatory exhibit in connection with these Question 2 "No" responses.</p> <p>The applicant certifies that it is:</p> <p>a. a nonprofit educational institution; or</p> <p>b. a governmental entity other than a school; or</p> <p>c. a nonprofit educational organization, other than described in a. or b.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> |
| 3. | <p>For applicants checking "Yes" to question 2(c) and applying for a new noncommercial educational television station only, the applicant certifies that the applicant's officers, directors and members of its governing board are broadly representative of the educational, cultural, and civic segments of the principal community to be served.</p> | <p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p> |
| 4. | <p>a. The applicant certifies that the Commission has previously granted a broadcast application identified here by file number that found this applicant qualified as a noncommercial educational entity with a qualifying educational program, and that the applicant will use the proposed station to advance a program similar to that the Commission has found qualifying in applicant's previous application.</p> <p>b. Applicants who answered "No" to Question 4(a), must include an exhibit that describes the applicant's educational objective and how the proposed station will be used to advance an educational program that will further that objective according to 47 C.F.R. Section 73.503 (for radio applicants) and 47 C.F.R. Section 73.621 (for television applicants).</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>FCC FileNumber BPED- 20041123AHK</p> <p>[Exhibit 2]</p> |
| 5. | <p>The applicant certifies that its governing documents (e.g., articles of incorporation, by-laws, charter, enabling statute, and/or other pertinent organizational document) permit the applicant to advance an educational program and that there is no provision in any of those documents that would restrict the applicant from advancing an educational program or complying with any Commission rule, policy, or provision of the Communications Act of 1934, as amended.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| 6. | <p>a. Parties to the Application. List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary.</p> <p>[Enter Parties/Owners Information]</p> <hr/> <p style="text-align: center;">Parties to the Application</p> <p>List separately each party to the application including, as applicable, the applicant, its officers, directors, five percent or greater stockholders, non-insulated partners, members, and all other persons and entities with attributable interests. If another entity hold an attributable interest in the applicant, list separately, as applicable, its officers, directors, five</p> | |

percent or greater stockholders, non-insulated partners, and board members. Create a separate row for each individual or entity. Attach additional pages if necessary.

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|---|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| LYNN MORRISON-HAMILTON P.O. BOX 1941, 715 9TH STREET WEST, HAVRE, MT 59501 | US | CHAIRMAN | <input checked="" type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|--|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| STEPHEN M. BARRETT 4343 SOURDOUGH ROAD, BOZEMAN, MT 59715 | US | VICE CHAIR | <input checked="" type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|--|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| TODD BUCHANAN BUCHANAN CAPITAL 201 N. BROADWAY, BILLINGS, | US | MEMBER | <input type="radio"/> Yes <input checked="" type="radio"/> No | | | 0 | 0 |

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|----------|--|--|--|--|--|--|
| MT 59101 | | | | | | |
|----------|--|--|--|--|--|--|

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|--|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| KERRA MELVIN 1401 WEST GRANITE STREET, BUTTE, MT 59701 | US | STUDENT REGENT | <input type="radio"/> Yes <input checked="" type="radio"/> No | | | 0 | 0 |

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|--|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| DR. JANINE PEASE 1222 PONDEROSA DR., BILLINGS, MT 59102 | US | MEMBER | <input checked="" type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: Total Assets (equity plus debt) |
|--|------------------|--|--|---|----------------------|-----------------|---|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| LILA TAYLOR PO BOX 595, ROUTE KIRBY, BUSBY, MT 59016 | US | MEMBER | <input checked="" type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

| | | | | | |
|--------------|-----|----------------|--------------|----------|-------|
| (a) Name and | (b) | (c) Positional | (d) Director | (e)% of: | (f) % |
|--------------|-----|----------------|--------------|----------|-------|

| Residence Address(es) | Citizen-ship | Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | or Member of Governing Board | Ownership(O) or Voting Stock(VS) or Membership (M) | | | of: of Total Assets (equity plus debt) |
|--|--------------|---|--|--|----------------------|-----------------|--|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| CLAYTON CHRISTIAN 320 W. BROADWAY, STE A, MISSOULA, MT 59802 | US | MEMBER | <input checked="" type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

| (a) Name and Residence Address(es) | (b) Citizen-ship | (c) Positional Interest: Officer, director, investor/creditor attributable under the Commission's equity/debt plus standard, etc | (d) Director or Member of Governing Board | (e)% of: Ownership(O) or Voting Stock(VS) or Membership (M) | | | (f) % of: of Total Assets (equity plus debt) |
|--|------------------|--|---|---|----------------------|-----------------|--|
| | | | | Owner-ship (O) or | Voting Stock (VS) or | Member-ship (M) | |
| BOARD OF REGENTS-MONTANA UNIVERSITY SYSTEM, KGLT STRAND UNION BUILDING, MONTANA STATE UNIVERSITY, P.O. BOX 174240, BOZEMAN, MT 59717 | US | N/A | <input type="radio"/> Yes <input type="radio"/> No | | | 0 | 0 |

b. Applicant certifies that equity and financial interests not set forth above are non-attributable pursuant to 47 C.F.R. Section 73.3555 and that there are no agreements or understandings with any non-party that would give influence over the applicant's programming, personnel, or finances to that non-party. Yes No [Exhibit 3]

7. **Other Authorizations.** List call signs, locations, and facility identifiers of all other broadcast stations in which applicant or any party to the application has an attributable interest pursuant to the notes to 47 C.F.R. Section 73.3555. N/A [Exhibit 4]

8. **Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: Yes No

a. any broadcast application in any proceeding where character issues were left unresolved or were resolved adversely against the applicant or party to the application; See Explanation in [Exhibit 5]

| | | |
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| | or b. any pending broadcast application in which character issues have been raised. | |
| 9. | <p>Adverse Findings. Applicant certifies that, with respect to the applicant, any party to the application, and any non-party equity owner in the applicant, no adverse finding has been made, nor has an adverse final action been taken by any court or administrative body in a civil or criminal proceeding brought under the provisions of any law related to any of the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another government unit; or discrimination.</p> <p>If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of the the court or administrative body and the proceeding (by dates and file numbers), and a description of the disposition of the matter. Where the requisite information has been earlier disclosed in connection with another application or as required by 47 C.F.R. Section 1.65, the applicant need only provide: (i) an identification of that previous submission by reference to the file number in the case of an application, the call letters of the station regarding which the application or Section 1.65 information was filed, and the date of filing; and (ii) the disposition of the previously reported matter.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 6]</p> |
| 10. | <p>Alien Ownership and Control. Applicant certifies that it complies with the provisions of Section 310 of the Communications Act of 1934, as amended, relating to interests of aliens and foreign governments.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 7]</p> |
| 11. | <p>Program Service Certification. Applicant certifies that it is cognizant of and will comply with its obligations as a commission licensee to present a program service responsive to the issues of public concern facing the station's community of license and service area.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| 12. | <p>Local Public Notice. Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| 13. | <p>Anti-Drug Abuse Act Certification. Applicant certifies that neither applicant nor any party to the application is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| 14. | <p>Equal Employment Opportunity (EEO). If the applicant proposes to employ five or more full-time employees, applicant certifies that it is filing simultaneously with this application a Model EEO Program Report on FCC Form 396-A.</p> | <p><input type="radio"/> Yes <input type="radio"/> No <input checked="" type="radio"/> N/A</p> |
| <p>QUESTIONS 15, 16 AND 17 APPLY ONLY TO APPLICANTS FOR NEW STATIONS. OTHER APPLICANTS CAN PROCEED TO QUESTION 18.</p> | | |
| 15. | <p>Financial. The applicant certifies that sufficient net liquid assets are on hand or that sufficient funds are available from committed sources to construct and operate the requested facilities for three months without revenue.</p> <p>If "No" to 15., answer question 16. and 17.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 8]</p> |
| 16. | <p>Is this application contingent upon receipt of a grant from the National Telecommunications and Information Administration?</p> | <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> |
| 17. | <p>Is this application contingent upon receipt of a grant from a charitable organization, the approval of the budget of a school or university, or an appropriation from a state, county, municipality or other political subdivision?</p> | <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> |
| <p>NOTE: If Yes to 16. or 17., the application cannot be granted unconditionally until all of the necessary funds are committed or appropriated. In the case of grants from the National Telecommunications and Information Administration, no further action on the applicant's part is required. If the applicant relies on funds from a source specified in Question 17., the applicant must advise the Commission when the funds are committed or appropriated. This should be accomplished by letter amendment to the application. Applicants should take note that the Commission's construction period is not considered "tolled" by funding difficulties and that any permit granted conditionally on funding will expire if the station is not constructed for any reason, including lack of funding.</p> | | |
| <p>QUESTIONS 18 AND 19 DO NOT APPLY TO APPLICATIONS FOR NEW STATIONS. APPLICANTS FOR</p> | | |

NEW FM STATIONS CAN PROCEED TO SECTION III. APPLICANTS FOR NEW TV STATIONS CAN PROCEED TO SECTION IV.

Holding Period.

| | | |
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| 18. | Applicant certifies that this application does not propose a modification to an authorization that was awarded on the basis of a preference for fair distribution of service pursuant to 47 U.S.C. Section 307(b). | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| | If "No," answer a. and b. below. If applicant answers "No" to 18. above and cannot answer "Yes" to either a. or b. below, the application is unacceptable. | |
| | a. Applicant certifies that the proposed modification will not downgrade service to the area on which the Section 307(b) preference was based. | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| | b.A pplicant certifies that although it proposes to downgrade service to the area on which the Section 307(b) preference was based, applicant has provided full service to that area for a period of four years of on-air operations. | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| 19. | Applicant certifies that this application does not propose a modification to an authorized station that received a credit for superior technical parameters under the point system selection method in 47 C.F.R. Section 73.7003. | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| | If "No," applicant must be able to answer "Yes" to a. below or provide an exhibit that makes a compelling showing that the downgrade would be in the public interest. | |
| | a. Applicant certifies that the population and area within the proposed service contour (60 dBu (FM) or grade B (TV)) are greater than or equivalent to those authorized. | <input type="radio"/> Yes <input checked="" type="radio"/> No [Exhibit 9] |

Section III

Fair Distribution of Service Pursuant to 47 U.S.C. Section 307(b) (New and Major Changes to FM Radio Only) (Other applicants can proceed to Section IV).

| | | |
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| 1. | Applicant certifies that the proposed station will provide a first noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour and (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit. | <input type="radio"/> Yes <input checked="" type="radio"/> No [Exhibit 10] |
| 2. | Applicant certifies that the proposed station will provide a second noncommercial educational aural service to (a) at least 10 percent of the people residing within the station's 60 dBu (1mV/m) service contour and (b) to a minimum of 2,000 people. Applicants answering "Yes" must provide an Exhibit. | <input type="radio"/> Yes <input checked="" type="radio"/> No [Exhibit 11] |

Section IV Point System Factors - New and Major Change Applications Only (used to select among mutually exclusive radio and television applications for new stations and major modifications) **NOTE:** Applicants will not receive any additional points for amendments made after the close of the application filing window.

| | | |
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| 1. | Established Local Applicant: Applicant certifies that for at least the 24 months immediately prior to application, and continuing through the present, it qualifies as a local applicant pursuant to 47 C.F.R. Section 73.7000, that its governing documents require that such localism be maintained, and that it has placed documentation of its qualifications as an established local applicant in a local public inspection file and has submitted to the Commission copies of the documentation. | <input checked="" type="radio"/> Yes <input type="radio"/> No |
| 2. | Diversity of Ownership: (a) Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized station (comparing radio and television to television, including non-fill-in translator stations other than those identified in 2(b) below) in which any party to the application has an attributable interest as defined in 47 C.F.R. Section 73.3555, that its governing documents require that such diversity be maintained, and that it has placed documentation of its diversity qualification in a local public inspection file and has submitted to the Commission copies of the documentation. | <input type="radio"/> Yes <input checked="" type="radio"/> No |
| | (b) Is the application's certification to 2(a) based on its exclusion of translator station(s) that will | <input type="radio"/> Yes <input checked="" type="radio"/> No |

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| <p>be replaced with a full service station pursuant to the authorization requested here?</p> <p>If Yes, applicant must include an exhibit identifying the translator station authorization for which it will request cancellation upon commencement of operation of the proposed full service station (i.e., upon its filing of a license application and receipt of program test authority).</p> | <p>[Exhibit 12]</p> |
| <p>3. State-wide Network: Applicant certifies that (a) it has NOT claimed a credit for diversity of ownership above; (b) it is one of the three specific types of organizations described in 47 C.F.R. Section 73.7003(b)(3); and (c) it has placed documentation of its qualifications in a local public inspection file and has submitted to the Commission copies of the documentation.</p> | <p><input type="radio"/> Yes <input checked="" type="radio"/> No</p> |
| <p>4. Technical Parameters: Applicant certifies that the numbers in the boxes below accurately reflect the new area and population that its proposal would serve with a 60 dBu (FM) or Grade B (TV) signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) (FM) and 73.683(TV) and that it has documented the basis for its calculations in the local public inspection file and has submitted copies to the Commission. Major modification applicants should include the area of proposed increase only (exclude any area already within the station's existing service area). (Points, if any, will be determined by FCC)</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> |
| <p>New area served in square kilometers (excluding areas of water):</p> | <p>395</p> |
| <p>Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:</p> | <p>49456</p> |

SECTION V - Tie Breakers - New and Major Change Applications Only (used to choose among competing radio and television applications receiving the same number of points in Section IV)

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| <p>1. Existing Authorizations. By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of relevant broadcast station authorizations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV (2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. 3 (number of commercial and non-commercial licenses and construction permits)</p> |
| <p>2. Pending Applications. By placing a number in the box, the applicant certifies that it and other parties to the application have, as of the date of filing and pursuant to 47 C.F.R. Section 73.3555, attributable interests in the stated number of pending applications for new or major changes to relevant broadcast stations. Radio applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial, and FM translator stations other than fill-in stations or those identified in IV(2)(b) above. TV applicants should count all attributable full service TV stations, commercial and noncommercial, and TV translator stations other than fill-in stations or those identified in IV(2)(b) above. 1 (number of pending commercial and non-commercial applications)</p> |

Section VI -- Certification

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| <p>I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith. I acknowledge that all certifications and attached Exhibits are considered material representations. I hereby waive 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 request an authorization in accordance with this application. (See Section 304 of the Communications Act of 1934, as amended.)</p> | |
| <p>Typed or Printed Name of Person Signing PHILIP H. CHARLES</p> | <p>Typed or Printed Title of Person Signing GENERAL MANAGER</p> |
| <p>Signature</p> | <p>Date 10/15/2007</p> |

Section VII Preparer's Certification

I certify that I have prepared Section VII (Engineering Data) on behalf of the applicant, and that after such preparation, I have examined and found it to be accurate and true to the best of my knowledge and belief.

| | |
|---------------------------------|---|
| <p>Name ERIK C. SWANSON</p> | <p>Relationship to Applicant (e.g., Consulting Engineer) TECHNICAL CONSULTANT</p> |
|---------------------------------|---|

| | | |
|--|---------------------------------------|-----------|
| Signature | | Date |
| | | 9/21/2007 |
| Mailing Address | | |
| HATFIELD & DAWSON CONSULTING ENGINEERS 9500 GREENWOOD AVE N | | |
| City | State or Country (if foreign address) | Zip Code |
| SEATTLE | WA | 98103- |
| Telephone Number (include area code) | E-Mail Address (if available) | |
| 2067839151 | ESWANSON@HATDAW.COM | |

WILLFUL FALSE STATEMENTS 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).

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| Section VII - FM Engineering | |
| TECHNICAL SPECIFICATIONS | |
| Ensure that the specifications below are accurate. Contradicting data found elsewhere in this application will be disregarded. All items must be completed. The response "on file" is not acceptable. | |
| TECH BOX | |
| 1. | Channel Number: 203 |
| 2. | Class (select one): <input type="radio"/> D <input checked="" type="radio"/> A <input type="radio"/> B1 <input type="radio"/> B <input type="radio"/> C3 <input type="radio"/> C2 <input type="radio"/> C1 <input type="radio"/> C0 <input type="radio"/> C |
| 3. | Antenna Location Coordinates: (NAD 27) Latitude: Degrees 45 Minutes 39 Seconds 59 <input checked="" type="radio"/> North <input type="radio"/> South Longitude: Degrees 111 Minutes 2 Seconds 47 <input checked="" type="radio"/> West <input type="radio"/> East |
| 4. | Proposed Assignment Coordinates: (NAD 27) - RESERVED CHANNELS ABOVE 220 ONLY <input checked="" type="checkbox"/> Not Applicable Latitude: Degrees Minutes Seconds <input type="radio"/> North <input type="radio"/> South Longitude: Degrees Minutes Seconds <input type="radio"/> West <input type="radio"/> East |
| 5. | Antenna Structure Registration Number: <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Notification filed with FAA |
| 6. | Overall Tower Height Above Ground Level: 37 meters |
| 7. | Height of Radiation Center Above Mean Sea Level: 1528 meters(H) 1528 meters(V) |
| 8. | Height of Radiation Center Above Ground Level: 35 meters(H) 35 meters(V) |
| 9. | Height of Radiation Center Above Average Terrain: -101 meters(H) -101 meters(V) |
| 10. | Effective Radiated Power: 0.5 kW(H) 0.5 kW(V) |
| 11. | Maximum Effective Radiated Power: <input checked="" type="checkbox"/> Not Applicable kW(H) kW(V) (Beam-Tilt Antenna ONLY) |
| 12. | Directional Antenna Relative Field Values: <input checked="" type="checkbox"/> Not applicable (Nondirectional) Rotation (Degrees): <input type="checkbox"/> No Rotation |

| Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value | Degrees | Value |
|---------------------|-------|---------|-------|---------|-------|---------|-------|---------|-------|---------|-------|
| 0 | | 10 | | 20 | | 30 | | 40 | | 50 | |
| 60 | | 70 | | 80 | | 90 | | 100 | | 110 | |
| 120 | | 130 | | 140 | | 150 | | 160 | | 170 | |
| 180 | | 190 | | 200 | | 210 | | 220 | | 230 | |
| 240 | | 250 | | 260 | | 270 | | 280 | | 290 | |
| 300 | | 310 | | 320 | | 330 | | 340 | | 350 | |
| Additional Azimuths | | | | | | | | | | | |

Relative Field Polar Plot

NOTE: In addition to the information called for in this section, an explanatory exhibit providing full particulars must be submitted for each question for which a "No" response is provided.

CERTIFICATION

AUXILIARY ANTENNA APPLICANTS ARE NOT REQUIRED TO RESPOND TO ITEMS 12-15.

13. **Main Studio Location.** The proposed main studio location complies with 47 C.F.R. Section 73.1125. Yes No
See Explanation in [Exhibit 13]

14. **Community Coverage.** The proposed facility complies with 47 C.F.R. Section 73.315. (Channels 221 and above) or 47 C.F.R. Section 73.515 (Channels 220 and below). Yes No
See Explanation in [Exhibit 14]

15. **Interference.** The proposed facility complies with all of the following applicable rule sections. Yes No
Check all that apply:
See Explanation in [Exhibit 15]

Contour Overlap Requirements.

a. 47 C.F.R. Section 73.509
Exhibit Required. [Exhibit 16]

Spacing Requirements.

b. 47 C.F.R. Section 73.207 with respect to station(s)

Grandfathered Short-Spaced.

c. 47 C.F.R. Section 73.213(a) with respect to station(s)
Exhibit Required. [Exhibit 17]

Contour Protection.

d. 47 C.F.R. Section 73.215(a) with respect to station(s)
Exhibit Required. [Exhibit 18]

Television Channel 6 Protection.

e. 47 C.F.R. Section 73.525 with respect to station(s)
Exhibit Required. [Exhibit 19]

16. **Reserved Channels Above 220.**

a. **Availability of Channels.** The proposed facility complies with the assignment requirements of 47 C.F.R. Section 73.203. Yes No
See Explanation in [Exhibit 20]

17. **International Borders.** The proposed antenna location is not within 320 kilometers of the common border between the United States and Canada or Mexico. Yes No
 Canada
 Mexico
If "No," specify the country and provide an exhibit of compliance with all provisions of the relevant International Agreement. [Exhibit 21]

| | | |
|---|--|---|
| 18. | <p>Environmental Protection Act. The proposed facility is excluded from environmental processing under 47. C.F.R. Section 1.1306 (i.e., The facility will not have a significant environmental impact and complies with the maximum permissible radiofrequency electromagnetic exposure limits for controlled and uncontrolled environments). Unless the applicant can determine compliance through the use of the RF worksheets in Worksheet #7, an Exhibit is required.</p> <p>By checking "Yes" above, the applicant also certifies that it, in coordination with other users of the site, will reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic exposure in excess of FCC guidelines.</p> | <p><input checked="" type="radio"/> Yes <input type="radio"/> No</p> <p>See Explanation in [Exhibit 22]</p> |
| 19. | <p>Community of License Change - Section 307(b). If the application is being submitted to change the facility's community of license, then the applicant certifies that it has attached an exhibit containing information demonstrating that the proposed community of license change comports with the fair distribution of service policies underlying Section 307(b) of the Communications Act of 1934, as amended (47 U.S.C. Section 307(b)).</p> <p>An exhibit is required unless this question is not applicable.</p> | <p><input type="radio"/> Yes <input type="radio"/> No</p> <p><input checked="" type="radio"/> N/A</p> <p>[Exhibit 23]</p> |
| PREPARER'S CERTIFICATION ON PAGE 8 MUST BE COMPLETED AND SIGNED. | | |

Exhibits

Exhibit 4

Description: OTHER AUTHORIZATIONS

KGLT 6085 BOZEMAN, MT FM
 K208BX 4288 LIVINGSTON, MT TX
 K251AC 6090 HELENA, MT FX

Attachment 4

Exhibit 14

Description: COMMUNITY COVERAGE

Attachment 14

| Description |
|-----------------------------------|
| BOZEMAN 203A CONTOUR MAP |
| BOZEMAN 203A TRANSMITTER SITE MAP |

Exhibit 16

Description: ALLOCATION STUDY

Attachment 16

| Description |
|------------------|
| ALLOCATION STUDY |

Exhibit 19

Description: TV CHANNEL 6

PLEASE SEE THE ALLOCATION STUDY ATTACHED AT EXHIBIT 16.

Attachment 19

Exhibit 22

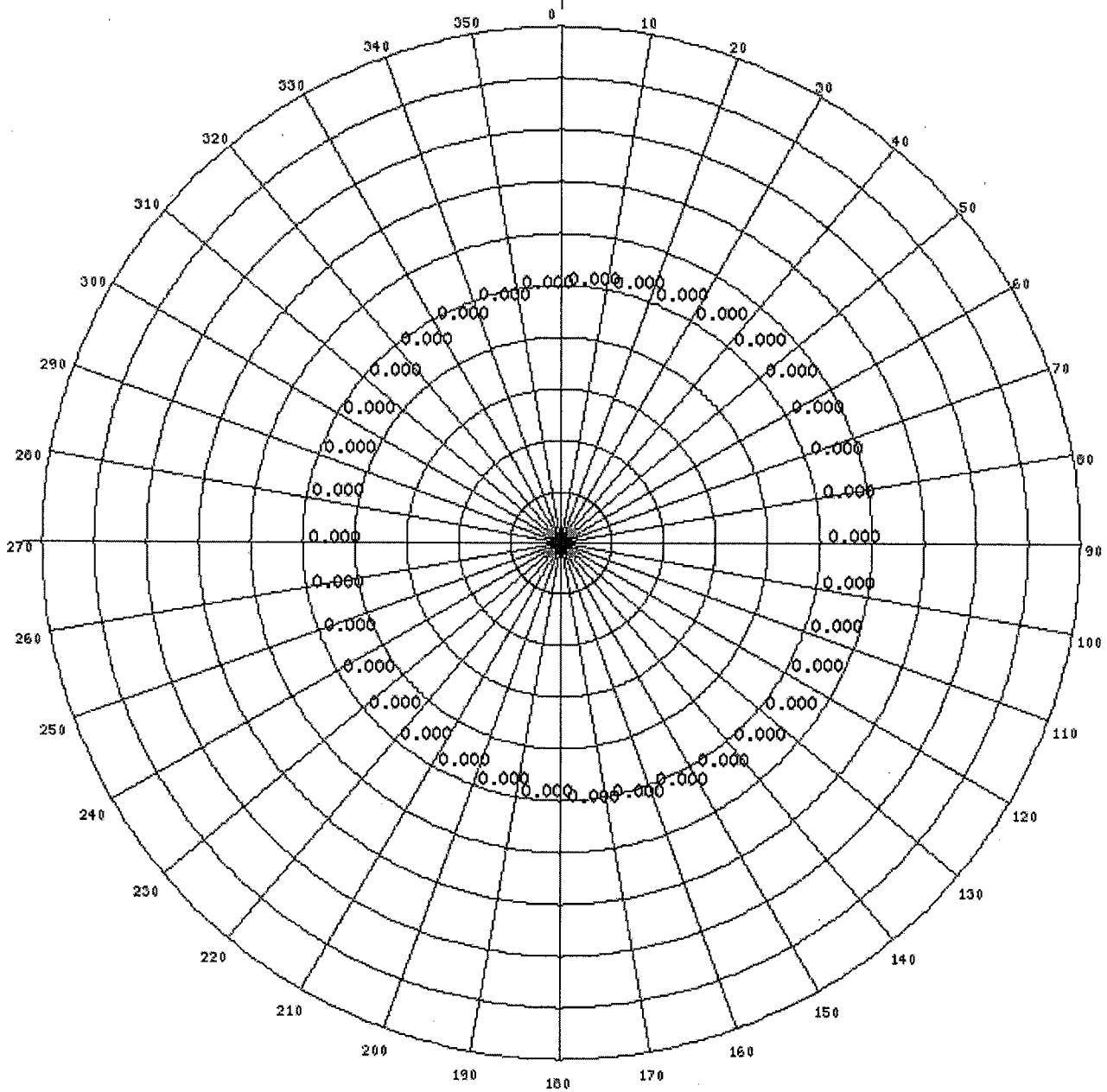
Description: ENVIRONMENTAL

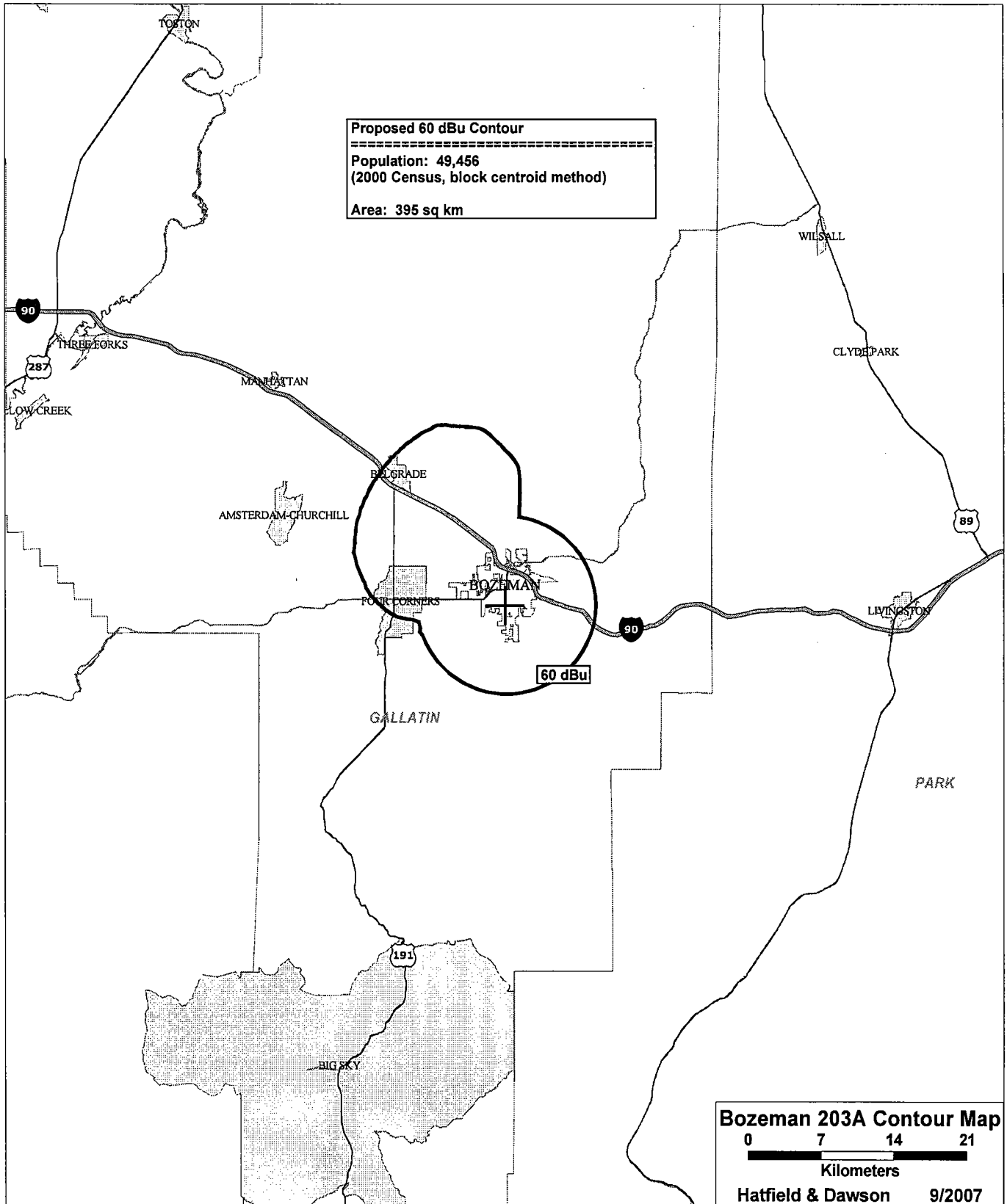
Attachment 22

| Description |
|-------------------------|
| BOZEMAN 203A NIER STUDY |

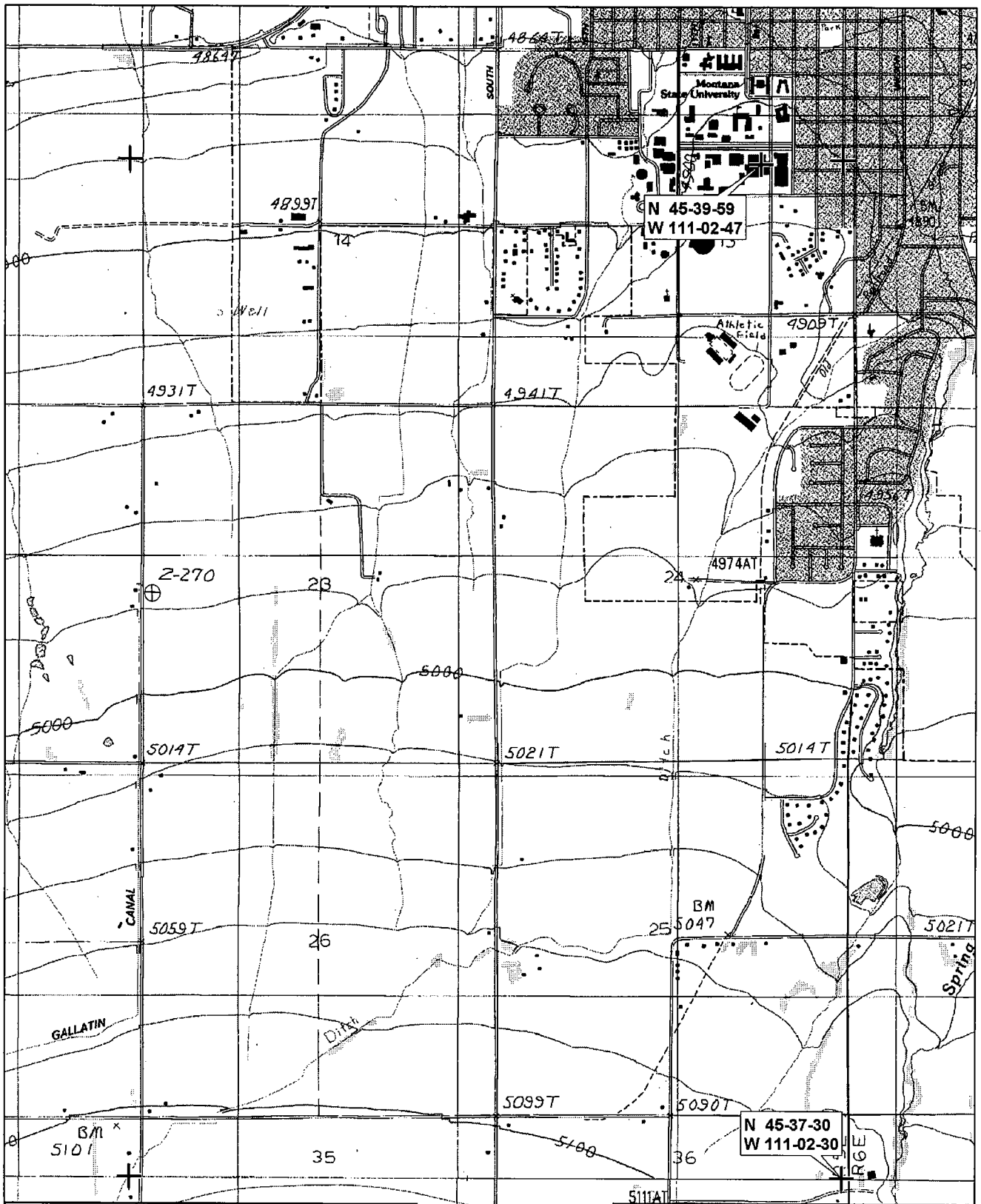
Any specified rotation has already been applied to the plotted pattern.

Field strength values shown on a rotated pattern may differ from the listed values because intermediate azimuths are interpolated between entered azimuths.





Bozeman 203A Contour Map
 0 7 14 21
 Kilometers
 Hatfield & Dawson 9/2007



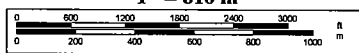
Transmitter Site Map
 New NCE FM Station
 Bozeman, MT 9/2007

Bozeman, MT Quadrangle
 7.5 Minute Series
 Contour Interval 20 Feet



© 2002 DeLorme. XMap® 3.5. Data copyright of content owner.
 Zoom Level: 13-1 Datum: NAD27

Scale 1 : 24,000
 1" = 610 m



**September 2007
New FM Channel 203A
Bozeman, MT
Allocation Study**

The attached spacing study shows the co-channel and adjacent channel spacing between stations and demonstrates that the proposed operation meets the IF channel spacing requirements as prescribed in §73.207 of the Commission's Rules.

There are no co-channel or adjacent channel stations close enough to necessitate detailed allocation study maps in this application.

TV Channel 6

Section 73.525 of the Commission's Rules specifies a threshold distance of 246 kilometers for FM stations operating on Channel 203. There are two TV Channel 6 stations located within this threshold distance: KSVI-TV Billings and KTVM-TV Butte.

KSVI-TV Billings: The attached FM/TV Channel 6 study reports that there is no overlap of the proposed 59.5 dBu F(50,10) contour to the KSVI-TV Grade B contour. Therefore, no interference will be caused to KSVI-TV.

KTVM-TV Butte: The attached FM/TV Channel 6 study reports that there is an interference area caused within the KTVM-TV Grade B contour. That interference area has been plotted on the attached map exhibit, along with the Grade A contour of K42BZ Bozeman. K42BZ duplicates the programming of KTVM-TV, retransmitting that

Hatfield & Dawson Consulting Engineers

programming in the Bozeman area. As illustrated by the attached page from the KTVM-TV website (www.ktvm.com), the station brands itself as "News Channel 6/42 KTVM Butte Bozeman". The entire interference area caused to KTVM-TV lies inside the K42BZ Grade A contour. Thus per §73.525(e)(3)(i) the entire interference can be subtracted, and the proposed facility is believed to be in compliance with §73.525 with respect to KTVM-TV.

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SEARCH PARAMETERS

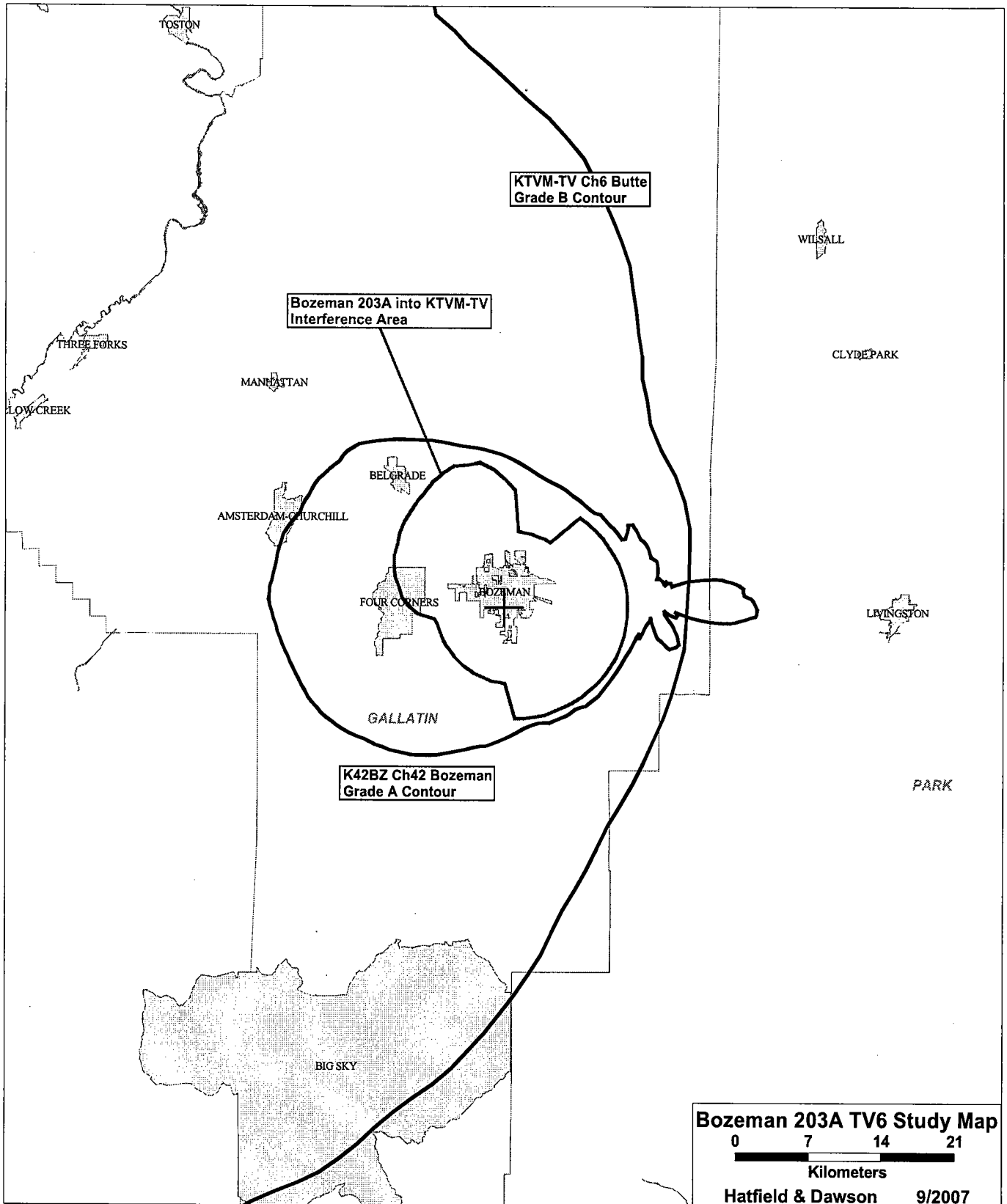
FM Database Date: 070917

Channel: 203A 88.5 MHz
 Latitude: 45 39 59
 Longitude: 111 2 47
 Safety Zone: 50 km
 Job Title: BOZEMAN 203A

Page 1

| Call Status | City St | FCC File No. | Channel Freq. | ERP(kW) HAAT(m) | Latitude Longitude | Bearing deg-True | Dist (km) | Req (km) |
|----------------|-----------------------|--------------|------------------|--------------------|-----------------------|---------------------|-----------------|-------------|
| NEW-T APP | BOZEMAN MT | | 201D 88.1 | 0.028 314.0 | 45-38-15 111-16-01 | 259.5 | 17.49 0.00 | 0 TRANS |
| K203AI LIC | COLUMBUS MT | | 203D 88.5 | 0.084 85.0 | 45-38-37 109-17-43 | 90.4 | 136.51 0.00 | 0 TRANS |
| K203AG LIC | LIVINGSTON MT | | 203D 88.5 | 0.250 689.0 | 45-41-49 110-46-03 | 81.0 | 21.99 0.00 | 0 TRANS |
| NEW APP | EAST HELENA MT | | 204A 88.7 | 0.150 -3.2 | 46-33-24 111-55-02 | 326.2 | 119.69 47.69 | 72 CLEAR |
| NEW-T APP | BOZEMAN MT | | 205D 88.9 | 0.019 361.0 | 45-38-10 111-16-21 | 259.2 | 17.94 0.00 | 0 TRANS |
| KFRD LIC | BUTTE MT | | 205C1 88.9 | 2.800 527.0 | 46-00-27 112-26-30 | 289.8 | 114.84 39.84 | 75 CLEAR |
| KCMM LIC | BELGRADE MT | | 256C3 99.1 | 25.000 62.0 | 45-46-15 111-13-26 | 310.2 | 18.05 6.05 | 12 CLOSE |
| K257AE LIC | WEST FORK, ETC. MT | | 257D 99.3 | 0.003 641.0 | 45-16-27 111-23-36 | 211.9 | 51.35 0.00 | 0 TRANS |

44444 END OF FM SPACING STUDY FOR CHANNEL 203 44444



**Hatfield & Dawson
Seattle, Wa**

Page 1
Friday, September 21, 2007

BIAfn/Dataworld FM/TV Channel 6 Study

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omissions in the information hereby provided, and shall not be liable
for any injuries or damages (including consequential) which might result
from use of the said information.

Job Title: BOZEMAN 203A

Channel: 203

FM site coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

FM c/r Height = 1528.0 m (5013.1 ft) AMSL

FM ERP = 0.5000 kW

* = 6 dB TV Receiving Antenna Directivity Applied.

Channel 6 Stations within 246.0 km will be examined

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: BOZEMAN 203A

Channel: 203
Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL
ERP = 0.5000 kW

| -----TV Station----- | | | | | | | -----Proposed FM Station----- | | | | | | |
|----------------------|------|------|------|------|------|-------|-------------------------------|-------|------|------|------|-------|--|
| Br | Dx | Bear | Dx | HAAT | ERP | F.S. | U/D | Bear | Dx | HAAT | ERP | F.S. | |
| (deg) | (km) | (br) | (km) | (m) | (kW) | (dBu) | (dB) | (deg) | (km) | (m) | (kW) | (dBu) | |

TV Station: KSVI Billings, MT
Distance from TV6 transmitter to FM transmitter: 211.2037 km
TV HAAT toward FM: 289.2 m; TV ERP toward FM: 100.000 kW; Distance to Grade B (47 dBuV/m) Contour: 102.6 km
FM Station on Channel 203; HAAT toward TV: -115.9 m; ERP toward TV: 0.500 kW; Distance to 59.5 dBuV/m [50,10] Contour = 8.8 km
No Grade B contour overlap - no Interference Study required

TV Station: KTVM Butte, MT
Distance from TV6 transmitter to FM transmitter: 114.8426 km
TV HAAT toward FM: 688.0 m; TV ERP toward FM: 100.000 kW; Distance to Grade B (47 dBuV/m) Contour: 133.2 km
FM Transmitter Site is inside TV Grade B Contour
*** Interference Study will be performed ***
Interference Site will be FM Transmitter Site: N 45° 39' 59.0" W 111° 02' 47.0"

| | | | | | | | | | | | |
|------|------|-------|-------|--------------|------|-------|------|------|--------|-------|------|
| 0.0 | 12.2 | 102.9 | 111.3 | 619.7100.000 | 53.0 | 9.9* | 0.0 | 12.2 | 89.1 | 0.500 | 62.9 |
| 1.0 | 12.1 | 103.0 | 111.6 | 619.7100.000 | 53.0 | 9.9* | 1.0 | 12.0 | 85.8 | 0.500 | 62.9 |
| 2.0 | 11.8 | 103.0 | 111.8 | 619.7100.000 | 52.9 | 10.0* | 2.0 | 11.8 | 82.2 | 0.500 | 62.8 |
| 3.0 | 11.6 | 103.1 | 112.0 | 619.7100.000 | 52.8 | 10.0* | 3.0 | 11.6 | 78.5 | 0.500 | 62.8 |
| 4.0 | 11.4 | 103.2 | 112.3 | 619.7100.000 | 52.7 | 10.0* | 4.0 | 11.4 | 75.4 | 0.500 | 62.7 |
| 5.0 | 11.2 | 103.3 | 112.5 | 619.7100.000 | 52.6 | 10.1* | 5.0 | 11.2 | 70.9 | 0.500 | 62.7 |
| 6.0 | 10.3 | 103.7 | 112.8 | 632.7100.000 | 52.8 | 10.0* | 6.0 | 10.3 | 59.4 | 0.500 | 62.7 |
| 7.0 | 8.8 | 104.5 | 113.2 | 632.7100.000 | 52.6 | 10.1* | 7.0 | 8.8 | 44.0 | 0.500 | 62.7 |
| 8.0 | 7.2 | 105.2 | 113.6 | 645.8100.000 | 52.7 | 10.0* | 8.0 | 7.2 | 25.2 | 0.500 | 62.7 |
| 9.0 | 7.3 | 105.2 | 113.7 | 645.8100.000 | 52.7 | 10.0* | 9.0 | 7.3 | 3.5 | 0.500 | 62.7 |
| 10.0 | 7.3 | 105.2 | 113.8 | 645.8100.000 | 52.6 | 10.0* | 10.0 | 7.3 | -19.5 | 0.500 | 62.7 |
| 11.0 | 7.3 | 105.2 | 114.0 | 645.8100.000 | 52.6 | 10.1* | 11.0 | 7.3 | -39.6 | 0.500 | 62.7 |
| 12.0 | 7.3 | 105.2 | 114.1 | 645.8100.000 | 52.6 | 10.1* | 12.0 | 7.3 | -44.6 | 0.500 | 62.6 |
| 13.0 | 7.3 | 105.2 | 114.2 | 645.8100.000 | 52.5 | 10.1* | 13.0 | 7.3 | -44.3 | 0.500 | 62.6 |
| 14.0 | 7.3 | 105.2 | 114.3 | 645.8100.000 | 52.5 | 10.1* | 14.0 | 7.3 | -56.2 | 0.500 | 62.6 |
| 15.0 | 7.3 | 105.2 | 114.5 | 645.8100.000 | 52.4 | 10.1* | 15.0 | 7.3 | -76.8 | 0.500 | 62.6 |
| 16.0 | 7.3 | 105.2 | 114.6 | 645.8100.000 | 52.4 | 10.2* | 16.0 | 7.3 | -95.5 | 0.500 | 62.6 |
| 17.0 | 7.3 | 105.2 | 114.7 | 645.8100.000 | 52.3 | 10.2* | 17.0 | 7.3 | -111.3 | 0.500 | 62.5 |
| 18.0 | 7.3 | 105.2 | 114.9 | 645.8100.000 | 52.3 | 10.2* | 18.0 | 7.3 | -124.8 | 0.500 | 62.5 |
| 19.0 | 7.4 | 105.2 | 115.0 | 645.8100.000 | 52.3 | 10.2* | 19.0 | 7.4 | -140.8 | 0.500 | 62.5 |
| 20.0 | 7.4 | 105.2 | 115.1 | 645.8100.000 | 52.2 | 10.2* | 20.0 | 7.4 | -158.8 | 0.500 | 62.4 |
| 21.0 | 7.4 | 105.2 | 115.2 | 645.8100.000 | 52.2 | 10.3* | 21.0 | 7.4 | -178.8 | 0.500 | 62.4 |
| 22.0 | 7.4 | 105.2 | 115.4 | 645.8100.000 | 52.1 | 10.3* | 22.0 | 7.4 | -201.1 | 0.500 | 62.4 |
| 23.0 | 7.4 | 105.2 | 115.5 | 645.8100.000 | 52.1 | 10.3* | 23.0 | 7.4 | -220.0 | 0.500 | 62.4 |
| 24.0 | 7.4 | 105.2 | 115.6 | 645.8100.000 | 52.0 | 10.3* | 24.0 | 7.4 | -236.7 | 0.500 | 62.4 |
| 25.0 | 7.4 | 105.2 | 115.8 | 645.8100.000 | 52.0 | 10.3* | 25.0 | 7.4 | -249.8 | 0.500 | 62.3 |
| 26.0 | 7.4 | 105.2 | 115.9 | 645.8100.000 | 52.0 | 10.4* | 26.0 | 7.4 | -257.5 | 0.500 | 62.3 |
| 27.0 | 7.4 | 105.2 | 116.0 | 645.8100.000 | 51.9 | 10.4* | 27.0 | 7.4 | -260.6 | 0.500 | 62.3 |
| 28.0 | 7.4 | 105.2 | 116.2 | 645.8100.000 | 51.9 | 10.4* | 28.0 | 7.4 | -263.3 | 0.500 | 62.3 |
| 29.0 | 7.5 | 105.2 | 116.3 | 645.8100.000 | 51.8 | 10.4* | 29.0 | 7.5 | -283.1 | 0.500 | 62.2 |
| 30.0 | 7.5 | 105.2 | 116.4 | 645.8100.000 | 51.8 | 10.4* | 30.0 | 7.5 | -308.1 | 0.500 | 62.2 |
| 31.0 | 7.5 | 105.2 | 116.5 | 645.8100.000 | 51.7 | 10.5* | 31.0 | 7.5 | -334.3 | 0.500 | 62.2 |

BIAfr/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL
ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station----- | | | | | -----Proposed FM Station----- | | | | | |
|---------------|------------|----------------------|------------|-------------|-------------|---------------|-------------------------------|---------------|------------|-------------|-------------|---------------|
| Br (deg) | Dx (km) | Bear (br) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) | U/D (dB) | Bear (deg) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) |
| 32.0 | 7.5 | 105.2 | 116.7 | 645.8 | 100.000 | 51.7 | 10.5* | 32.0 | 7.5 | -358.3 | 0.500 | 62.2 |
| 33.0 | 7.5 | 105.2 | 116.8 | 645.8 | 100.000 | 51.6 | 10.5* | 33.0 | 7.5 | -388.7 | 0.500 | 62.1 |
| 34.0 | 7.5 | 105.3 | 116.9 | 645.8 | 100.000 | 51.6 | 10.5* | 34.0 | 7.5 | -418.4 | 0.500 | 62.1 |
| 35.0 | 7.5 | 105.3 | 117.1 | 645.8 | 100.000 | 51.6 | 10.5* | 35.0 | 7.5 | -434.3 | 0.500 | 62.1 |
| 36.0 | 7.5 | 105.3 | 117.2 | 645.8 | 100.000 | 51.5 | 10.6* | 36.0 | 7.5 | -423.0 | 0.500 | 62.1 |
| 37.0 | 7.5 | 105.3 | 117.3 | 645.8 | 100.000 | 51.5 | 10.6* | 37.0 | 7.5 | -400.8 | 0.500 | 62.1 |
| 38.0 | 7.5 | 105.3 | 117.4 | 645.8 | 100.000 | 51.4 | 10.6* | 38.0 | 7.6 | -379.6 | 0.500 | 62.0 |
| 39.0 | 7.5 | 105.3 | 117.6 | 645.8 | 100.000 | 51.4 | 10.6* | 39.0 | 7.6 | -361.9 | 0.500 | 62.0 |
| 40.0 | 11.1 | 103.8 | 119.1 | 632.7 | 100.000 | 50.6 | 4.9 | 40.0 | 11.1 | -351.5 | 0.500 | 55.6 |
| 41.0 | 11.1 | 103.8 | 119.3 | 632.7 | 100.000 | 50.6 | 5.0 | 41.0 | 11.1 | -333.9 | 0.500 | 55.5 |
| 42.0 | 11.1 | 103.9 | 119.5 | 632.7 | 100.000 | 50.5 | 5.0 | 42.0 | 11.1 | -310.6 | 0.500 | 55.5 |
| 43.0 | 11.1 | 103.9 | 119.7 | 632.7 | 100.000 | 50.4 | 5.0 | 43.0 | 11.2 | -291.0 | 0.500 | 55.4 |
| 44.0 | 11.2 | 103.9 | 119.9 | 632.7 | 100.000 | 50.4 | 5.0 | 44.0 | 11.2 | -276.2 | 0.500 | 55.4 |
| 45.0 | 11.2 | 104.0 | 120.1 | 632.7 | 100.000 | 50.3 | 5.1 | 45.0 | 11.2 | -261.1 | 0.500 | 55.4 |
| 46.0 | 11.2 | 104.0 | 120.2 | 632.7 | 100.000 | 50.2 | 5.1 | 46.0 | 11.2 | -245.5 | 0.500 | 55.3 |
| 47.0 | 11.2 | 104.1 | 120.4 | 632.7 | 100.000 | 50.2 | 5.1 | 47.0 | 11.3 | -224.6 | 0.500 | 55.3 |
| 48.0 | 11.3 | 104.1 | 120.6 | 632.7 | 100.000 | 50.1 | 5.1 | 48.0 | 11.3 | -199.7 | 0.500 | 55.2 |
| 49.0 | 11.3 | 104.1 | 120.8 | 632.7 | 100.000 | 50.1 | 5.1 | 49.0 | 11.3 | -174.5 | 0.500 | 55.2 |
| 50.0 | 11.3 | 104.2 | 121.0 | 632.7 | 100.000 | 50.0 | 5.1 | 50.0 | 11.3 | -151.0 | 0.500 | 55.2 |
| 51.0 | 11.3 | 104.2 | 121.1 | 632.7 | 100.000 | 50.0 | 5.2 | 51.0 | 11.4 | -134.3 | 0.500 | 55.1 |
| 52.0 | 11.4 | 104.3 | 121.3 | 632.7 | 100.000 | 49.9 | 5.2 | 52.0 | 11.4 | -129.0 | 0.500 | 55.1 |
| 53.0 | 11.4 | 104.3 | 121.5 | 632.7 | 100.000 | 49.8 | 5.2 | 53.0 | 11.4 | -121.3 | 0.500 | 55.0 |
| 54.0 | 11.4 | 104.4 | 121.7 | 632.7 | 100.000 | 49.8 | 5.2 | 54.0 | 11.4 | -113.2 | 0.500 | 55.0 |
| 55.0 | 11.4 | 104.4 | 121.8 | 632.7 | 100.000 | 49.7 | 5.2 | 55.0 | 11.4 | -106.1 | 0.500 | 55.0 |
| 56.0 | 11.5 | 104.5 | 122.0 | 632.7 | 100.000 | 49.7 | 5.3 | 56.0 | 11.5 | -98.1 | 0.500 | 54.9 |
| 57.0 | 11.4 | 104.6 | 122.1 | 645.8 | 100.000 | 49.9 | 5.2 | 57.0 | 11.4 | -89.1 | 0.500 | 55.1 |
| 58.0 | 11.4 | 104.6 | 122.2 | 645.8 | 100.000 | 49.8 | 5.2 | 58.0 | 11.4 | -86.8 | 0.500 | 55.0 |
| 59.0 | 11.4 | 104.7 | 122.4 | 645.8 | 100.000 | 49.8 | 5.2 | 59.0 | 11.4 | -88.0 | 0.500 | 55.0 |
| 60.0 | 11.4 | 104.7 | 122.6 | 645.8 | 100.000 | 49.7 | 5.2 | 60.0 | 11.4 | -86.0 | 0.500 | 55.0 |
| 61.0 | 11.4 | 104.8 | 122.7 | 645.8 | 100.000 | 49.7 | 5.3 | 61.0 | 11.5 | -84.4 | 0.500 | 54.9 |
| 62.0 | 11.5 | 104.9 | 122.9 | 645.8 | 100.000 | 49.6 | 5.3 | 62.0 | 11.5 | -83.8 | 0.500 | 54.9 |
| 63.0 | 11.5 | 104.9 | 123.0 | 645.8 | 100.000 | 49.6 | 5.3 | 63.0 | 11.5 | -81.6 | 0.500 | 54.9 |
| 64.0 | 11.5 | 105.0 | 123.2 | 645.8 | 100.000 | 49.5 | 5.3 | 64.0 | 11.5 | -80.4 | 0.500 | 54.8 |
| 65.0 | 11.5 | 105.0 | 123.3 | 645.8 | 100.000 | 49.5 | 5.3 | 65.0 | 11.6 | -79.8 | 0.500 | 54.8 |
| 66.0 | 11.6 | 105.1 | 123.5 | 645.8 | 100.000 | 49.4 | 5.3 | 66.0 | 11.6 | -81.0 | 0.500 | 54.8 |
| 67.0 | 11.6 | 105.2 | 123.6 | 645.8 | 100.000 | 49.4 | 5.4 | 67.0 | 11.6 | -84.5 | 0.500 | 54.7 |
| 68.0 | 11.6 | 105.2 | 123.8 | 645.8 | 100.000 | 49.3 | 5.4 | 68.0 | 11.6 | -92.4 | 0.500 | 54.7 |
| 69.0 | 11.6 | 105.3 | 123.9 | 645.8 | 100.000 | 49.3 | 5.4 | 69.0 | 11.6 | -104.1 | 0.500 | 54.7 |
| 70.0 | 11.6 | 105.4 | 124.0 | 645.8 | 100.000 | 49.2 | 5.4 | 70.0 | 11.6 | -115.0 | 0.500 | 54.6 |
| 71.0 | 11.6 | 105.5 | 124.2 | 645.8 | 100.000 | 49.2 | 5.4 | 71.0 | 11.7 | -127.7 | 0.500 | 54.6 |
| 72.0 | 11.6 | 105.6 | 124.2 | 656.8 | 100.000 | 49.4 | 5.4 | 72.0 | 11.6 | -138.7 | 0.500 | 54.7 |
| 73.0 | 11.6 | 105.6 | 124.3 | 656.8 | 100.000 | 49.3 | 5.4 | 73.0 | 11.6 | -148.8 | 0.500 | 54.7 |
| 74.0 | 11.6 | 105.7 | 124.5 | 656.8 | 100.000 | 49.3 | 5.4 | 74.0 | 11.6 | -156.1 | 0.500 | 54.7 |
| 75.0 | 11.6 | 105.8 | 124.6 | 656.8 | 100.000 | 49.3 | 5.4 | 75.0 | 11.6 | -152.8 | 0.500 | 54.7 |
| 76.0 | 11.6 | 105.9 | 124.7 | 656.8 | 100.000 | 49.2 | 5.4 | 76.0 | 11.7 | -146.3 | 0.500 | 54.6 |
| 77.0 | 11.6 | 105.9 | 124.8 | 656.8 | 100.000 | 49.2 | 5.4 | 77.0 | 11.7 | -139.9 | 0.500 | 54.6 |
| 78.0 | 11.7 | 106.0 | 124.9 | 656.8 | 100.000 | 49.1 | 5.4 | 78.0 | 11.7 | -126.6 | 0.500 | 54.6 |
| 79.0 | 11.7 | 106.1 | 125.0 | 656.8 | 100.000 | 49.1 | 5.5 | 79.0 | 11.7 | -112.3 | 0.500 | 54.6 |

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL
ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station----- | | | | | -----Proposed FM Station----- | | | | | |
|---------------|------------|----------------------|------------|-------------|-------------|---------------|-------------------------------|---------------|------------|-------------|-------------|---------------|
| Br (deg) | Dx (km) | Bear (br) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) | U/D (dB) | Bear (deg) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) |
| 80.0 | 11.7 | 106.2 | 125.1 | 656.8 | 100.000 | 49.1 | 5.5 | 80.0 | 11.7 | -99.8 | 0.500 | 54.5 |
| 81.0 | 11.7 | 106.2 | 125.3 | 656.8 | 100.000 | 49.0 | 5.5 | 81.0 | 11.7 | -92.1 | 0.500 | 54.5 |
| 82.0 | 11.7 | 106.3 | 125.4 | 656.8 | 100.000 | 49.0 | 5.5 | 82.0 | 11.7 | -91.8 | 0.500 | 54.5 |
| 83.0 | 11.7 | 106.4 | 125.4 | 656.8 | 100.000 | 49.0 | 5.5 | 83.0 | 11.8 | -96.8 | 0.500 | 54.5 |
| 84.0 | 11.6 | 106.5 | 125.5 | 668.0 | 100.000 | 49.2 | 5.4 | 84.0 | 11.7 | -105.6 | 0.500 | 54.6 |
| 85.0 | 11.7 | 106.6 | 125.6 | 668.0 | 100.000 | 49.1 | 5.4 | 85.0 | 11.7 | -119.4 | 0.500 | 54.6 |
| 86.0 | 11.7 | 106.7 | 125.6 | 668.0 | 100.000 | 49.1 | 5.5 | 86.0 | 11.7 | -131.3 | 0.500 | 54.6 |
| 87.0 | 11.7 | 106.8 | 125.7 | 668.0 | 100.000 | 49.1 | 5.5 | 87.0 | 11.7 | -132.1 | 0.500 | 54.5 |
| 88.0 | 11.7 | 106.8 | 125.8 | 668.0 | 100.000 | 49.1 | 5.5 | 88.0 | 11.7 | -121.2 | 0.500 | 54.5 |
| 89.0 | 11.7 | 106.9 | 125.9 | 668.0 | 100.000 | 49.0 | 5.5 | 89.0 | 11.7 | -114.2 | 0.500 | 54.5 |
| 90.0 | 11.7 | 107.0 | 126.0 | 668.0 | 100.000 | 49.0 | 5.5 | 90.0 | 11.7 | -109.5 | 0.500 | 54.5 |
| 91.0 | 11.7 | 107.1 | 126.0 | 668.0 | 100.000 | 49.0 | 5.5 | 91.0 | 11.8 | -106.9 | 0.500 | 54.5 |
| 92.0 | 11.7 | 107.2 | 126.1 | 668.0 | 100.000 | 49.0 | 5.5 | 92.0 | 11.8 | -102.9 | 0.500 | 54.5 |
| 93.0 | 11.7 | 107.3 | 126.2 | 668.0 | 100.000 | 48.9 | 5.5 | 93.0 | 11.8 | -101.9 | 0.500 | 54.5 |
| 94.0 | 11.7 | 107.4 | 126.2 | 668.0 | 100.000 | 48.9 | 5.5 | 94.0 | 11.8 | -100.0 | 0.500 | 54.5 |
| 95.0 | 11.7 | 107.5 | 126.3 | 668.0 | 100.000 | 48.9 | 5.5 | 95.0 | 11.8 | -101.2 | 0.500 | 54.4 |
| 96.0 | 11.7 | 107.6 | 126.2 | 682.2 | 100.000 | 49.2 | 5.4 | 96.0 | 11.7 | -103.2 | 0.500 | 54.6 |
| 97.0 | 11.7 | 107.7 | 126.3 | 682.2 | 100.000 | 49.1 | 5.4 | 97.0 | 11.7 | -102.8 | 0.500 | 54.6 |
| 98.0 | 11.7 | 107.7 | 126.3 | 682.2 | 100.000 | 49.1 | 5.4 | 98.0 | 11.7 | -101.2 | 0.500 | 54.6 |
| 99.0 | 11.7 | 107.8 | 126.4 | 682.2 | 100.000 | 49.1 | 5.5 | 99.0 | 11.7 | -103.4 | 0.500 | 54.6 |
| 100.0 | 11.7 | 107.9 | 126.4 | 682.2 | 100.000 | 49.1 | 5.5 | 100.0 | 11.7 | -106.6 | 0.500 | 54.6 |
| 101.0 | 11.7 | 108.0 | 126.4 | 682.2 | 100.000 | 49.1 | 5.5 | 101.0 | 11.7 | -103.6 | 0.500 | 54.6 |
| 102.0 | 11.7 | 108.1 | 126.5 | 682.2 | 100.000 | 49.1 | 5.5 | 102.0 | 11.7 | -95.8 | 0.500 | 54.5 |
| 103.0 | 11.7 | 108.2 | 126.5 | 682.2 | 100.000 | 49.1 | 5.5 | 103.0 | 11.7 | -88.5 | 0.500 | 54.5 |
| 104.0 | 11.7 | 108.3 | 126.5 | 682.2 | 100.000 | 49.1 | 5.5 | 104.0 | 11.7 | -85.9 | 0.500 | 54.5 |
| 105.0 | 11.7 | 108.4 | 126.5 | 682.2 | 100.000 | 49.1 | 5.5 | 105.0 | 11.7 | -95.8 | 0.500 | 54.5 |
| 106.0 | 11.7 | 108.5 | 126.5 | 682.2 | 100.000 | 49.1 | 5.5 | 106.0 | 11.7 | -109.7 | 0.500 | 54.5 |
| 107.0 | 11.7 | 108.6 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 107.0 | 11.7 | -132.7 | 0.500 | 54.6 |
| 108.0 | 11.7 | 108.7 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 108.0 | 11.7 | -153.8 | 0.500 | 54.6 |
| 109.0 | 11.7 | 108.8 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 109.0 | 11.7 | -163.9 | 0.500 | 54.6 |
| 110.0 | 11.7 | 108.9 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 110.0 | 11.7 | -169.6 | 0.500 | 54.6 |
| 111.0 | 11.7 | 108.9 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 111.0 | 11.7 | -179.8 | 0.500 | 54.6 |
| 112.0 | 11.7 | 109.0 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 112.0 | 11.7 | -191.4 | 0.500 | 54.6 |
| 113.0 | 11.7 | 109.1 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 113.0 | 11.7 | -204.8 | 0.500 | 54.6 |
| 114.0 | 11.7 | 109.2 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 114.0 | 11.7 | -221.2 | 0.500 | 54.6 |
| 115.0 | 11.7 | 109.3 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 115.0 | 11.7 | -234.5 | 0.500 | 54.6 |
| 116.0 | 11.6 | 109.4 | 126.5 | 688.6 | 100.000 | 49.2 | 5.4 | 116.0 | 11.7 | -248.1 | 0.500 | 54.6 |
| 117.0 | 11.6 | 109.5 | 126.4 | 688.6 | 100.000 | 49.2 | 5.4 | 117.0 | 11.7 | -256.2 | 0.500 | 54.6 |
| 118.0 | 11.6 | 109.6 | 126.4 | 693.9 | 100.000 | 49.3 | 5.4 | 118.0 | 11.6 | -259.1 | 0.500 | 54.7 |
| 119.0 | 11.6 | 109.7 | 126.3 | 693.9 | 100.000 | 49.3 | 5.4 | 119.0 | 11.6 | -254.3 | 0.500 | 54.7 |
| 120.0 | 11.6 | 109.8 | 126.3 | 693.9 | 100.000 | 49.3 | 5.4 | 120.0 | 11.6 | -241.8 | 0.500 | 54.7 |
| 121.0 | 11.6 | 109.9 | 126.3 | 693.9 | 100.000 | 49.3 | 5.4 | 121.0 | 11.6 | -218.2 | 0.500 | 54.7 |
| 122.0 | 11.6 | 109.9 | 126.2 | 693.9 | 100.000 | 49.4 | 5.4 | 122.0 | 11.6 | -198.4 | 0.500 | 54.7 |
| 123.0 | 11.6 | 110.0 | 126.2 | 693.9 | 100.000 | 49.4 | 5.4 | 123.0 | 11.6 | -179.8 | 0.500 | 54.7 |
| 124.0 | 11.6 | 110.1 | 126.1 | 693.9 | 100.000 | 49.4 | 5.4 | 124.0 | 11.6 | -167.9 | 0.500 | 54.7 |
| 125.0 | 11.6 | 110.2 | 126.1 | 693.9 | 100.000 | 49.4 | 5.3 | 125.0 | 11.6 | -166.3 | 0.500 | 54.7 |
| 126.0 | 11.6 | 110.3 | 126.0 | 693.9 | 100.000 | 49.4 | 5.3 | 126.0 | 11.6 | -181.7 | 0.500 | 54.8 |
| 127.0 | 11.6 | 110.4 | 125.9 | 693.9 | 100.000 | 49.4 | 5.3 | 127.0 | 11.6 | -204.0 | 0.500 | 54.8 |

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL
ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station----- | | | | | | -----Proposed FM Station----- | | | | |
|---------------|------|----------------------|-------|-------|---------|-------|------|-------------------------------|------|--------|-------|-------|
| Br | Dx | Bear | Dx | HAAT | ERP | F.S. | U/D | Bear | Dx | HAAT | ERP | F.S. |
| (deg) | (km) | (br) | (km) | (m) | (kW) | (dBu) | (dB) | (deg) | (km) | (m) | (kW) | (dBu) |
| 128.0 | 11.5 | 110.5 | 125.9 | 693.9 | 100.000 | 49.5 | 5.3 | 128.0 | 11.6 | -226.0 | 0.500 | 54.8 |
| 129.0 | 11.5 | 110.6 | 125.8 | 697.4 | 100.000 | 49.5 | 5.3 | 129.0 | 11.5 | -246.6 | 0.500 | 54.8 |
| 130.0 | 11.5 | 110.6 | 125.7 | 697.4 | 100.000 | 49.6 | 5.3 | 130.0 | 11.5 | -265.3 | 0.500 | 54.9 |
| 131.0 | 11.5 | 110.7 | 125.6 | 697.4 | 100.000 | 49.6 | 5.3 | 131.0 | 11.5 | -283.4 | 0.500 | 54.9 |
| 132.0 | 11.5 | 110.8 | 125.6 | 697.4 | 100.000 | 49.6 | 5.3 | 132.0 | 11.5 | -308.2 | 0.500 | 54.9 |
| 133.0 | 11.5 | 110.9 | 125.5 | 697.4 | 100.000 | 49.7 | 5.3 | 133.0 | 11.5 | -333.3 | 0.500 | 54.9 |
| 134.0 | 11.5 | 111.0 | 125.4 | 697.4 | 100.000 | 49.7 | 5.3 | 134.0 | 11.5 | -357.0 | 0.500 | 54.9 |
| 135.0 | 11.4 | 111.1 | 125.3 | 697.4 | 100.000 | 49.7 | 5.2 | 135.0 | 11.5 | -374.5 | 0.500 | 54.9 |
| 136.0 | 11.4 | 111.1 | 125.2 | 697.4 | 100.000 | 49.7 | 5.2 | 136.0 | 11.4 | -377.0 | 0.500 | 55.0 |
| 137.0 | 11.4 | 111.2 | 125.1 | 697.4 | 100.000 | 49.8 | 5.2 | 137.0 | 11.4 | -373.6 | 0.500 | 55.0 |
| 138.0 | 11.4 | 111.3 | 125.0 | 697.4 | 100.000 | 49.8 | 5.2 | 138.0 | 11.4 | -364.3 | 0.500 | 55.0 |
| 139.0 | 11.4 | 111.4 | 124.9 | 697.4 | 100.000 | 49.8 | 5.2 | 139.0 | 11.4 | -355.7 | 0.500 | 55.0 |
| 140.0 | 11.4 | 111.5 | 124.8 | 697.4 | 100.000 | 49.9 | 5.2 | 140.0 | 11.4 | -354.0 | 0.500 | 55.1 |
| 141.0 | 11.4 | 111.5 | 124.7 | 696.2 | 100.000 | 49.9 | 5.2 | 141.0 | 11.4 | -362.5 | 0.500 | 55.1 |
| 142.0 | 11.4 | 111.6 | 124.6 | 696.2 | 100.000 | 49.9 | 5.2 | 142.0 | 11.4 | -371.1 | 0.500 | 55.1 |
| 143.0 | 11.3 | 111.7 | 124.5 | 696.2 | 100.000 | 50.0 | 5.2 | 143.0 | 11.4 | -379.7 | 0.500 | 55.1 |
| 144.0 | 11.3 | 111.8 | 124.4 | 696.2 | 100.000 | 50.0 | 5.2 | 144.0 | 11.3 | -379.4 | 0.500 | 55.1 |
| 145.0 | 11.3 | 111.8 | 124.3 | 696.2 | 100.000 | 50.0 | 5.1 | 145.0 | 11.3 | -379.3 | 0.500 | 55.2 |
| 146.0 | 11.3 | 111.9 | 124.1 | 696.2 | 100.000 | 50.1 | 5.1 | 146.0 | 11.3 | -373.2 | 0.500 | 55.2 |
| 147.0 | 11.3 | 112.0 | 124.0 | 696.2 | 100.000 | 50.1 | 5.1 | 147.0 | 11.3 | -359.8 | 0.500 | 55.2 |
| 148.0 | 11.3 | 112.1 | 123.9 | 696.2 | 100.000 | 50.2 | 5.1 | 148.0 | 11.3 | -346.3 | 0.500 | 55.3 |
| 149.0 | 11.2 | 112.1 | 123.8 | 696.2 | 100.000 | 50.2 | 5.1 | 149.0 | 11.2 | -330.2 | 0.500 | 55.3 |
| 150.0 | 11.2 | 112.2 | 123.6 | 696.2 | 100.000 | 50.2 | 5.1 | 150.0 | 11.2 | -316.0 | 0.500 | 55.3 |
| 151.0 | 11.2 | 112.3 | 123.5 | 696.2 | 100.000 | 50.3 | 5.1 | 151.0 | 11.2 | -299.3 | 0.500 | 55.3 |
| 152.0 | 11.2 | 112.3 | 123.4 | 696.2 | 100.000 | 50.3 | 5.0 | 152.0 | 11.2 | -293.1 | 0.500 | 55.4 |
| 153.0 | 11.2 | 112.4 | 123.2 | 696.2 | 100.000 | 50.4 | 5.0 | 153.0 | 11.2 | -293.6 | 0.500 | 55.4 |
| 154.0 | 11.2 | 112.5 | 123.1 | 696.2 | 100.000 | 50.4 | 5.0 | 154.0 | 11.2 | -288.2 | 0.500 | 55.4 |
| 155.0 | 11.1 | 112.5 | 123.0 | 694.5 | 100.000 | 50.4 | 5.0 | 155.0 | 11.1 | -283.6 | 0.500 | 55.4 |
| 156.0 | 11.1 | 112.6 | 122.8 | 694.5 | 100.000 | 50.5 | 5.0 | 156.0 | 11.1 | -280.5 | 0.500 | 55.5 |
| 157.0 | 11.1 | 112.7 | 122.7 | 694.5 | 100.000 | 50.5 | 5.0 | 157.0 | 11.1 | -278.7 | 0.500 | 55.5 |
| 158.0 | 11.1 | 112.7 | 122.5 | 694.5 | 100.000 | 50.6 | 5.0 | 158.0 | 11.1 | -271.0 | 0.500 | 55.5 |
| 159.0 | 11.1 | 112.8 | 122.4 | 694.5 | 100.000 | 50.6 | 4.9 | 159.0 | 11.1 | -265.9 | 0.500 | 55.6 |
| 160.0 | 11.1 | 112.8 | 122.2 | 694.5 | 100.000 | 50.7 | 4.9 | 160.0 | 11.1 | -268.0 | 0.500 | 55.6 |
| 161.0 | 11.0 | 112.9 | 122.1 | 694.5 | 100.000 | 50.7 | 4.9 | 161.0 | 11.0 | -266.3 | 0.500 | 55.6 |
| 162.0 | 11.0 | 112.9 | 121.9 | 694.5 | 100.000 | 50.8 | 4.9 | 162.0 | 11.0 | -263.7 | 0.500 | 55.7 |
| 163.0 | 11.0 | 113.0 | 121.8 | 694.5 | 100.000 | 50.8 | 4.9 | 163.0 | 11.0 | -255.3 | 0.500 | 55.7 |
| 164.0 | 11.0 | 113.0 | 121.6 | 694.5 | 100.000 | 50.9 | 4.8 | 164.0 | 11.0 | -247.6 | 0.500 | 55.7 |
| 165.0 | 11.0 | 113.1 | 121.4 | 694.5 | 100.000 | 50.9 | 4.8 | 165.0 | 11.0 | -238.0 | 0.500 | 55.8 |
| 166.0 | 10.9 | 113.1 | 121.3 | 694.5 | 100.000 | 51.0 | 4.8 | 166.0 | 10.9 | -228.3 | 0.500 | 55.8 |
| 167.0 | 10.9 | 113.2 | 121.1 | 694.5 | 100.000 | 51.1 | 4.8 | 167.0 | 10.9 | -217.7 | 0.500 | 55.8 |
| 168.0 | 10.9 | 113.2 | 120.9 | 694.5 | 100.000 | 51.1 | 4.8 | 168.0 | 10.9 | -215.1 | 0.500 | 55.9 |
| 169.0 | 10.9 | 113.3 | 120.8 | 694.5 | 100.000 | 51.2 | 4.7 | 169.0 | 10.9 | -220.5 | 0.500 | 55.9 |
| 170.0 | 10.9 | 113.3 | 120.6 | 694.5 | 100.000 | 51.2 | 4.7 | 170.0 | 10.9 | -226.8 | 0.500 | 55.9 |
| 171.0 | 10.8 | 113.4 | 120.4 | 694.5 | 100.000 | 51.3 | 4.7 | 171.0 | 10.8 | -240.0 | 0.500 | 56.0 |
| 172.0 | 10.8 | 113.4 | 120.3 | 694.5 | 100.000 | 51.3 | 4.7 | 172.0 | 10.8 | -259.3 | 0.500 | 56.0 |
| 173.0 | 10.8 | 113.5 | 120.1 | 694.5 | 100.000 | 51.4 | 4.6 | 173.0 | 10.8 | -278.6 | 0.500 | 56.0 |
| 174.0 | 10.8 | 113.5 | 119.9 | 694.5 | 100.000 | 51.4 | 4.6 | 174.0 | 10.8 | -299.1 | 0.500 | 56.0 |
| 175.0 | 10.8 | 113.5 | 119.8 | 694.0 | 100.000 | 51.5 | 4.6 | 175.0 | 10.8 | -305.9 | 0.500 | 56.1 |

BIAfr/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL

ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station ----- | | | | | | -----Proposed FM Station----- | | | | | |
|---------------|------------|-----------------------|------------|-------------|-------------|---------------|-------------|-------------------------------|------------|-------------|-------------|---------------|--|
| Br (deg) | Dx (km) | Bear (br) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) | U/D (dB) | Bear (deg) | Dx (km) | HAAT (m) | ERP (kW) | F.S. (dBu) | |
| 176.0 | 10.8 | 113.6 | 119.6 | 694.0 | 100.000 | 51.6 | 4.6 | 176.0 | 10.8 | -306.7 | 0.500 | 56.1 | |
| 177.0 | 10.7 | 113.6 | 119.4 | 694.0 | 100.000 | 51.6 | 4.5 | 177.0 | 10.7 | -301.1 | 0.500 | 56.1 | |
| 178.0 | 10.7 | 113.6 | 119.2 | 694.0 | 100.000 | 51.7 | 4.5 | 178.0 | 10.7 | -292.7 | 0.500 | 56.2 | |
| 179.0 | 10.7 | 113.7 | 119.1 | 694.0 | 100.000 | 51.7 | 4.5 | 179.0 | 10.7 | -288.9 | 0.500 | 56.2 | |
| 180.0 | 7.4 | 112.2 | 117.5 | 696.2 | 100.000 | 52.3 | 10.2* | 180.0 | 7.4 | -299.4 | 0.500 | 62.5 | |
| 181.0 | 7.3 | 112.2 | 117.4 | 696.2 | 100.000 | 52.3 | 10.2* | 181.0 | 7.3 | -304.1 | 0.500 | 62.5 | |
| 182.0 | 7.3 | 112.3 | 117.3 | 696.2 | 100.000 | 52.4 | 10.2* | 182.0 | 7.3 | -293.9 | 0.500 | 62.5 | |
| 183.0 | 7.3 | 112.3 | 117.2 | 696.2 | 100.000 | 52.4 | 10.2* | 183.0 | 7.3 | -275.8 | 0.500 | 62.6 | |
| 184.0 | 7.3 | 112.3 | 117.0 | 696.2 | 100.000 | 52.4 | 10.1* | 184.0 | 7.3 | -262.5 | 0.500 | 62.6 | |
| 185.0 | 7.3 | 112.3 | 116.9 | 696.2 | 100.000 | 52.5 | 10.1* | 185.0 | 7.3 | -258.6 | 0.500 | 62.6 | |
| 186.0 | 7.3 | 112.3 | 116.8 | 696.2 | 100.000 | 52.5 | 10.1* | 186.0 | 7.3 | -246.9 | 0.500 | 62.6 | |
| 187.0 | 7.3 | 112.3 | 116.7 | 696.2 | 100.000 | 52.6 | 10.1* | 187.0 | 7.3 | -235.9 | 0.500 | 62.6 | |
| 188.0 | 7.3 | 112.3 | 116.5 | 696.2 | 100.000 | 52.6 | 10.1* | 188.0 | 7.3 | -232.4 | 0.500 | 62.7 | |
| 189.0 | 7.3 | 112.4 | 116.4 | 696.2 | 100.000 | 52.7 | 10.0* | 189.0 | 7.3 | -214.4 | 0.500 | 62.7 | |
| 190.0 | 7.3 | 112.4 | 116.3 | 696.2 | 100.000 | 52.7 | 10.0* | 190.0 | 7.3 | -207.9 | 0.500 | 62.7 | |
| 191.0 | 7.2 | 112.4 | 116.2 | 696.2 | 100.000 | 52.7 | 10.0* | 191.0 | 7.2 | -209.1 | 0.500 | 62.7 | |
| 192.0 | 7.2 | 112.4 | 116.0 | 696.2 | 100.000 | 52.8 | 10.0* | 192.0 | 7.2 | -217.3 | 0.500 | 62.8 | |
| 193.0 | 7.2 | 112.4 | 115.9 | 696.2 | 100.000 | 52.8 | 10.0* | 193.0 | 7.2 | -213.4 | 0.500 | 62.8 | |
| 194.0 | 7.2 | 112.4 | 115.8 | 696.2 | 100.000 | 52.9 | 10.0* | 194.0 | 7.2 | -201.8 | 0.500 | 62.8 | |
| 195.0 | 7.2 | 112.4 | 115.7 | 696.2 | 100.000 | 52.9 | 9.9* | 195.0 | 7.2 | -187.7 | 0.500 | 62.8 | |
| 196.0 | 7.2 | 112.4 | 115.5 | 696.2 | 100.000 | 53.0 | 9.9* | 196.0 | 7.2 | -173.0 | 0.500 | 62.9 | |
| 197.0 | 7.2 | 112.4 | 115.4 | 696.2 | 100.000 | 53.0 | 9.9* | 197.0 | 7.2 | -175.6 | 0.500 | 62.9 | |
| 198.0 | 7.2 | 112.4 | 115.3 | 696.2 | 100.000 | 53.0 | 9.9* | 198.0 | 7.2 | -172.6 | 0.500 | 62.9 | |
| 199.0 | 7.2 | 112.4 | 115.2 | 696.2 | 100.000 | 53.1 | 9.9* | 199.0 | 7.2 | -165.7 | 0.500 | 62.9 | |
| 200.0 | 7.1 | 112.4 | 115.0 | 696.2 | 100.000 | 53.1 | 9.9* | 200.0 | 7.2 | -155.3 | 0.500 | 63.0 | |
| 201.0 | 7.1 | 112.4 | 114.9 | 696.2 | 100.000 | 53.2 | 9.8* | 201.0 | 7.1 | -142.9 | 0.500 | 63.0 | |
| 202.0 | 7.1 | 112.4 | 114.8 | 696.2 | 100.000 | 53.2 | 9.8* | 202.0 | 7.1 | -134.6 | 0.500 | 63.0 | |
| 203.0 | 7.1 | 112.4 | 114.7 | 696.2 | 100.000 | 53.3 | 9.8* | 203.0 | 7.1 | -128.5 | 0.500 | 63.0 | |
| 204.0 | 7.1 | 112.4 | 114.5 | 696.2 | 100.000 | 53.3 | 9.8* | 204.0 | 7.1 | -122.3 | 0.500 | 63.1 | |
| 205.0 | 7.1 | 112.4 | 114.4 | 696.2 | 100.000 | 53.3 | 9.8* | 205.0 | 7.1 | -115.4 | 0.500 | 63.1 | |
| 206.0 | 7.1 | 112.4 | 114.3 | 696.2 | 100.000 | 53.4 | 9.7* | 206.0 | 7.1 | -105.8 | 0.500 | 63.1 | |
| 207.0 | 7.1 | 112.4 | 114.2 | 696.2 | 100.000 | 53.4 | 9.7* | 207.0 | 7.1 | -100.2 | 0.500 | 63.1 | |
| 208.0 | 7.1 | 112.4 | 114.0 | 696.2 | 100.000 | 53.5 | 9.7* | 208.0 | 7.1 | -95.6 | 0.500 | 63.2 | |
| 209.0 | 7.1 | 112.4 | 113.9 | 696.2 | 100.000 | 53.5 | 9.7* | 209.0 | 7.1 | -93.0 | 0.500 | 63.2 | |
| 210.0 | 7.0 | 112.3 | 113.8 | 696.2 | 100.000 | 53.5 | 9.7* | 210.0 | 7.0 | -90.7 | 0.500 | 63.2 | |
| 211.0 | 7.0 | 112.3 | 113.7 | 696.2 | 100.000 | 53.6 | 9.7* | 211.0 | 7.0 | -88.1 | 0.500 | 63.2 | |
| 212.0 | 7.0 | 112.3 | 113.6 | 696.2 | 100.000 | 53.6 | 9.6* | 212.0 | 7.0 | -82.9 | 0.500 | 63.3 | |
| 213.0 | 7.0 | 112.3 | 113.4 | 696.2 | 100.000 | 53.7 | 9.6* | 213.0 | 7.0 | -77.4 | 0.500 | 63.3 | |
| 214.0 | 7.0 | 112.3 | 113.3 | 696.2 | 100.000 | 53.7 | 9.6* | 214.0 | 7.0 | -73.6 | 0.500 | 63.3 | |
| 215.0 | 7.0 | 112.3 | 113.2 | 696.2 | 100.000 | 53.8 | 9.6* | 215.0 | 7.0 | -71.0 | 0.500 | 63.3 | |
| 216.0 | 7.0 | 112.2 | 113.1 | 696.2 | 100.000 | 53.8 | 9.6* | 216.0 | 7.0 | -69.1 | 0.500 | 63.4 | |
| 217.0 | 7.0 | 112.2 | 113.0 | 696.2 | 100.000 | 53.8 | 9.6* | 217.0 | 7.0 | -67.0 | 0.500 | 63.4 | |
| 218.0 | 7.0 | 112.2 | 112.8 | 696.2 | 100.000 | 53.9 | 9.6* | 218.0 | 7.0 | -64.4 | 0.500 | 63.4 | |
| 219.0 | 7.0 | 112.2 | 112.7 | 696.2 | 100.000 | 53.9 | 9.5* | 219.0 | 7.0 | -59.8 | 0.500 | 63.4 | |
| 220.0 | 6.9 | 112.2 | 112.6 | 696.2 | 100.000 | 54.0 | 9.5* | 220.0 | 7.0 | -55.3 | 0.500 | 63.5 | |
| 221.0 | 6.9 | 112.1 | 112.5 | 696.2 | 100.000 | 54.0 | 9.5* | 221.0 | 6.9 | -51.2 | 0.500 | 63.5 | |
| 222.0 | 6.9 | 112.1 | 112.4 | 696.2 | 100.000 | 54.0 | 9.5* | 222.0 | 6.9 | -48.2 | 0.500 | 63.5 | |
| 223.0 | 6.9 | 112.1 | 112.3 | 696.2 | 100.000 | 54.1 | 9.5* | 223.0 | 6.9 | -46.1 | 0.500 | 63.5 | |

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL

ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station----- | | | | | -----Proposed FM Station----- | | | | | |
|---------------|------|----------------------|-------|-------|---------|-------|-------------------------------|-------|------|-------|-------|-------|
| Br | Dx | Bear | Dx | HAAT | ERP | F.S. | U/D | Bear | Dx | HAAT | ERP | F.S. |
| (deg) | (km) | (br) | (km) | (m) | (kW) | (dBu) | (dB) | (deg) | (km) | (m) | (kW) | (dBu) |
| 224.0 | 6.9 | 112.1 | 112.2 | 696.2 | 100.000 | 54.1 | 9.5* | 224.0 | 6.9 | -43.0 | 0.500 | 63.6 |
| 225.0 | 6.9 | 112.0 | 112.1 | 696.2 | 100.000 | 54.1 | 9.4* | 225.0 | 6.9 | -37.9 | 0.500 | 63.6 |
| 226.0 | 6.9 | 112.0 | 112.0 | 696.2 | 100.000 | 54.2 | 9.4* | 226.0 | 6.9 | -34.0 | 0.500 | 63.6 |
| 227.0 | 6.9 | 112.0 | 111.8 | 696.2 | 100.000 | 54.2 | 9.4* | 227.0 | 6.9 | -29.9 | 0.500 | 63.6 |
| 228.0 | 6.9 | 111.9 | 111.7 | 696.2 | 100.000 | 54.3 | 9.4* | 228.0 | 6.9 | -25.5 | 0.500 | 63.6 |
| 229.0 | 6.9 | 111.9 | 111.6 | 696.2 | 100.000 | 54.3 | 9.4* | 229.0 | 6.9 | -21.2 | 0.500 | 63.7 |
| 230.0 | 6.8 | 111.9 | 111.5 | 696.2 | 100.000 | 54.3 | 9.4* | 230.0 | 6.9 | -17.6 | 0.500 | 63.7 |
| 231.0 | 6.8 | 111.9 | 111.4 | 696.2 | 100.000 | 54.4 | 9.4* | 231.0 | 6.9 | -14.2 | 0.500 | 63.7 |
| 232.0 | 6.8 | 111.8 | 111.3 | 696.2 | 100.000 | 54.4 | 9.3* | 232.0 | 6.8 | -10.8 | 0.500 | 63.7 |
| 233.0 | 6.8 | 111.8 | 111.2 | 696.2 | 100.000 | 54.4 | 9.3* | 233.0 | 6.8 | -7.6 | 0.500 | 63.8 |
| 234.0 | 6.8 | 111.8 | 111.1 | 696.2 | 100.000 | 54.5 | 9.3* | 234.0 | 6.8 | -4.4 | 0.500 | 63.8 |
| 235.0 | 6.8 | 111.7 | 111.0 | 696.2 | 100.000 | 54.5 | 9.3* | 235.0 | 6.8 | -1.4 | 0.500 | 63.8 |
| 236.0 | 6.8 | 111.7 | 110.9 | 696.2 | 100.000 | 54.5 | 9.3* | 236.0 | 6.8 | 1.6 | 0.500 | 63.8 |
| 237.0 | 6.8 | 111.6 | 110.8 | 696.2 | 100.000 | 54.6 | 9.3* | 237.0 | 6.8 | 4.5 | 0.500 | 63.8 |
| 238.0 | 6.8 | 111.6 | 110.8 | 696.2 | 100.000 | 54.6 | 9.3* | 238.0 | 6.8 | 7.2 | 0.500 | 63.8 |
| 239.0 | 6.8 | 111.6 | 110.7 | 696.2 | 100.000 | 54.6 | 9.3* | 239.0 | 6.8 | 9.4 | 0.500 | 63.9 |
| 240.0 | 6.8 | 111.5 | 110.6 | 696.2 | 100.000 | 54.6 | 9.2* | 240.0 | 6.8 | 11.3 | 0.500 | 63.9 |
| 241.0 | 6.8 | 111.5 | 110.5 | 697.4 | 100.000 | 54.7 | 9.2* | 241.0 | 6.8 | 13.1 | 0.500 | 63.9 |
| 242.0 | 6.7 | 111.4 | 110.4 | 697.4 | 100.000 | 54.7 | 9.2* | 242.0 | 6.8 | 14.5 | 0.500 | 63.9 |
| 243.0 | 6.7 | 111.4 | 110.3 | 697.4 | 100.000 | 54.8 | 9.2* | 243.0 | 6.8 | 16.1 | 0.500 | 64.0 |
| 244.0 | 6.7 | 111.4 | 110.2 | 697.4 | 100.000 | 54.8 | 9.2* | 244.0 | 6.8 | 17.7 | 0.500 | 64.0 |
| 245.0 | 6.7 | 111.3 | 110.1 | 697.4 | 100.000 | 54.8 | 9.2* | 245.0 | 6.7 | 19.2 | 0.500 | 64.0 |
| 246.0 | 6.7 | 111.3 | 110.1 | 697.4 | 100.000 | 54.8 | 9.2* | 246.0 | 6.7 | 21.0 | 0.500 | 64.0 |
| 247.0 | 6.7 | 111.2 | 110.0 | 697.4 | 100.000 | 54.9 | 9.2* | 247.0 | 6.7 | 22.7 | 0.500 | 64.0 |
| 248.0 | 6.7 | 111.2 | 109.9 | 697.4 | 100.000 | 54.9 | 9.1* | 248.0 | 6.7 | 24.4 | 0.500 | 64.0 |
| 249.0 | 6.7 | 111.1 | 109.8 | 697.4 | 100.000 | 54.9 | 9.1* | 249.0 | 6.7 | 25.9 | 0.500 | 64.0 |
| 250.0 | 6.7 | 111.1 | 109.8 | 697.4 | 100.000 | 54.9 | 9.1* | 250.0 | 6.7 | 27.3 | 0.500 | 64.1 |
| 251.0 | 6.7 | 111.0 | 109.7 | 697.4 | 100.000 | 55.0 | 9.1* | 251.0 | 6.7 | 29.1 | 0.500 | 64.1 |
| 252.0 | 6.7 | 111.0 | 109.6 | 697.4 | 100.000 | 55.0 | 9.1* | 252.0 | 6.8 | 31.2 | 0.500 | 64.1 |
| 253.0 | 6.9 | 111.0 | 109.4 | 697.4 | 100.000 | 55.1 | 9.1* | 253.0 | 6.9 | 32.8 | 0.500 | 64.1 |
| 254.0 | 6.9 | 110.9 | 109.3 | 697.4 | 100.000 | 55.1 | 9.1* | 254.0 | 6.9 | 32.7 | 0.500 | 64.2 |
| 255.0 | 6.7 | 110.8 | 109.4 | 697.4 | 100.000 | 55.1 | 9.1* | 255.0 | 6.7 | 30.4 | 0.500 | 64.1 |
| 256.0 | 6.7 | 110.8 | 109.3 | 697.4 | 100.000 | 55.1 | 9.1* | 256.0 | 6.7 | 29.0 | 0.500 | 64.1 |
| 257.0 | 6.7 | 110.7 | 109.3 | 697.4 | 100.000 | 55.1 | 9.1* | 257.0 | 6.7 | 28.6 | 0.500 | 64.2 |
| 258.0 | 6.7 | 110.7 | 109.2 | 697.4 | 100.000 | 55.1 | 9.0* | 258.0 | 6.7 | 29.7 | 0.500 | 64.2 |
| 259.0 | 6.8 | 110.7 | 109.1 | 697.4 | 100.000 | 55.2 | 9.0* | 259.0 | 6.8 | 31.6 | 0.500 | 64.2 |
| 260.0 | 6.9 | 110.7 | 108.9 | 697.4 | 100.000 | 55.2 | 9.0* | 260.0 | 6.9 | 33.5 | 0.500 | 64.2 |
| 261.0 | 7.1 | 110.6 | 108.7 | 697.4 | 100.000 | 55.3 | 9.0* | 261.0 | 7.1 | 35.3 | 0.500 | 64.3 |
| 262.0 | 7.4 | 110.7 | 108.3 | 697.4 | 100.000 | 55.4 | 8.9* | 262.0 | 7.5 | 39.6 | 0.500 | 64.4 |
| 263.0 | 7.8 | 110.7 | 107.9 | 697.4 | 100.000 | 55.6 | 8.9* | 263.0 | 7.8 | 43.6 | 0.500 | 64.4 |
| 264.0 | 8.1 | 110.7 | 107.6 | 697.4 | 100.000 | 55.7 | 8.8* | 264.0 | 8.1 | 46.9 | 0.500 | 64.5 |
| 265.0 | 8.4 | 110.7 | 107.3 | 697.4 | 100.000 | 55.8 | 8.8* | 265.0 | 8.4 | 49.8 | 0.500 | 64.6 |
| 266.0 | 8.6 | 110.7 | 107.0 | 697.4 | 100.000 | 55.9 | 8.8* | 266.0 | 8.6 | 52.3 | 0.500 | 64.6 |
| 267.0 | 8.8 | 110.7 | 106.8 | 697.4 | 100.000 | 55.9 | 8.7* | 267.0 | 8.8 | 54.4 | 0.500 | 64.7 |
| 268.0 | 8.9 | 110.6 | 106.6 | 697.4 | 100.000 | 56.0 | 8.7* | 268.0 | 8.9 | 56.5 | 0.500 | 64.7 |
| 269.0 | 9.1 | 110.6 | 106.4 | 697.4 | 100.000 | 56.1 | 8.7* | 269.0 | 9.1 | 58.6 | 0.500 | 64.7 |
| 270.0 | 9.2 | 110.5 | 106.2 | 697.4 | 100.000 | 56.2 | 8.6* | 270.0 | 9.3 | 61.1 | 0.500 | 64.8 |
| 271.0 | 9.4 | 110.5 | 106.0 | 693.9 | 100.000 | 56.2 | 8.6* | 271.0 | 9.4 | 63.6 | 0.500 | 64.8 |

Hatfield & Dawson
Seattle, Wa

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL

ERP = 0.5000 kW

| -- Ix Area -- | | -----TV Station----- | | | | | -----Proposed FM Station----- | | | | | |
|---------------|------|----------------------|-------|--------------|------|-------|-------------------------------|-------|------|-------|-------|-------|
| Br | Dx | Bear | Dx | HAAT | ERP | F.S. | U/D | Bear | Dx | HAAT | ERP | F.S. |
| (deg) | (km) | (br) | (km) | (m) | (kW) | (dBu) | (dB) | (deg) | (km) | (m) | (kW) | (dBu) |
| 272.0 | 9.5 | 110.4 | 105.8 | 693.9100.000 | 56.2 | 56.2 | 8.6* | 272.0 | 9.5 | 65.8 | 0.500 | 64.8 |
| 273.0 | 9.6 | 110.4 | 105.6 | 693.9100.000 | 56.3 | 56.3 | 8.6* | 273.0 | 9.7 | 68.0 | 0.500 | 64.9 |
| 274.0 | 9.8 | 110.3 | 105.4 | 693.9100.000 | 56.3 | 56.3 | 8.6* | 274.0 | 9.8 | 70.1 | 0.500 | 64.9 |
| 275.0 | 9.9 | 110.2 | 105.3 | 693.9100.000 | 56.4 | 56.4 | 8.5* | 275.0 | 9.9 | 72.2 | 0.500 | 64.9 |
| 276.0 | 10.0 | 110.1 | 105.2 | 693.9100.000 | 56.4 | 56.4 | 8.5* | 276.0 | 10.0 | 73.9 | 0.500 | 65.0 |
| 277.0 | 10.1 | 110.1 | 105.0 | 693.9100.000 | 56.5 | 56.5 | 8.5* | 277.0 | 10.1 | 75.4 | 0.500 | 65.0 |
| 278.0 | 10.1 | 110.0 | 104.9 | 693.9100.000 | 56.5 | 56.5 | 8.5* | 278.0 | 10.2 | 77.0 | 0.500 | 65.0 |
| 279.0 | 10.2 | 109.9 | 104.8 | 693.9100.000 | 56.6 | 56.6 | 8.5* | 279.0 | 10.2 | 78.5 | 0.500 | 65.0 |
| 280.0 | 10.3 | 109.8 | 104.7 | 693.9100.000 | 56.6 | 56.6 | 8.5* | 280.0 | 10.3 | 80.0 | 0.500 | 65.1 |
| 281.0 | 10.4 | 109.7 | 104.5 | 693.9100.000 | 56.7 | 56.7 | 8.4* | 281.0 | 10.4 | 82.0 | 0.500 | 65.1 |
| 282.0 | 10.5 | 109.6 | 104.4 | 693.9100.000 | 56.7 | 56.7 | 8.4* | 282.0 | 10.6 | 84.3 | 0.500 | 65.1 |
| 283.0 | 10.6 | 109.5 | 104.3 | 693.9100.000 | 56.8 | 56.8 | 8.4* | 283.0 | 10.7 | 86.6 | 0.500 | 65.1 |
| 284.0 | 10.8 | 109.4 | 104.1 | 688.6100.000 | 56.7 | 56.7 | 8.4* | 284.0 | 10.8 | 88.8 | 0.500 | 65.1 |
| 285.0 | 10.9 | 109.3 | 104.0 | 688.6100.000 | 56.8 | 56.8 | 8.4* | 285.0 | 10.9 | 90.8 | 0.500 | 65.2 |
| 286.0 | 11.0 | 109.2 | 103.9 | 688.6100.000 | 56.8 | 56.8 | 8.4* | 286.0 | 11.0 | 92.8 | 0.500 | 65.2 |
| 287.0 | 11.1 | 109.1 | 103.8 | 688.6100.000 | 56.8 | 56.8 | 8.4* | 287.0 | 11.1 | 94.8 | 0.500 | 65.2 |
| 288.0 | 11.2 | 109.0 | 103.6 | 688.6100.000 | 56.9 | 56.9 | 8.4* | 288.0 | 11.2 | 96.7 | 0.500 | 65.2 |
| 289.0 | 11.3 | 108.9 | 103.6 | 688.6100.000 | 56.9 | 56.9 | 8.3* | 289.0 | 11.3 | 98.3 | 0.500 | 65.2 |
| 290.0 | 11.3 | 108.8 | 103.5 | 688.6100.000 | 56.9 | 56.9 | 8.3* | 290.0 | 11.3 | 99.5 | 0.500 | 65.2 |
| 291.0 | 11.4 | 108.7 | 103.5 | 688.6100.000 | 56.9 | 56.9 | 8.3* | 291.0 | 11.4 | 100.7 | 0.500 | 65.3 |
| 292.0 | 11.4 | 108.6 | 103.4 | 688.6100.000 | 57.0 | 57.0 | 8.3* | 292.0 | 11.5 | 102.1 | 0.500 | 65.3 |
| 293.0 | 11.5 | 108.5 | 103.3 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 293.0 | 11.6 | 103.4 | 0.500 | 65.2 |
| 294.0 | 11.6 | 108.4 | 103.3 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 294.0 | 11.6 | 104.6 | 0.500 | 65.2 |
| 295.0 | 11.7 | 108.3 | 103.2 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 295.0 | 11.7 | 105.9 | 0.500 | 65.2 |
| 296.0 | 11.7 | 108.1 | 103.2 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 296.0 | 11.7 | 107.3 | 0.500 | 65.3 |
| 297.0 | 11.8 | 108.0 | 103.1 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 297.0 | 11.8 | 108.5 | 0.500 | 65.3 |
| 298.0 | 11.8 | 107.9 | 103.1 | 682.2100.000 | 56.9 | 56.9 | 8.3* | 298.0 | 11.9 | 109.6 | 0.500 | 65.3 |
| 299.0 | 11.9 | 107.8 | 103.1 | 682.2100.000 | 57.0 | 57.0 | 8.3* | 299.0 | 11.9 | 110.7 | 0.500 | 65.3 |
| 300.0 | 11.9 | 107.7 | 103.1 | 682.2100.000 | 57.0 | 57.0 | 8.3* | 300.0 | 12.0 | 111.8 | 0.500 | 65.3 |
| 301.0 | 12.0 | 107.5 | 103.1 | 682.2100.000 | 57.0 | 57.0 | 8.3* | 301.0 | 12.0 | 112.9 | 0.500 | 65.3 |
| 302.0 | 12.1 | 107.4 | 103.0 | 668.0100.000 | 56.8 | 56.8 | 8.4* | 302.0 | 12.1 | 113.9 | 0.500 | 65.1 |
| 303.0 | 12.2 | 107.3 | 103.0 | 668.0100.000 | 56.8 | 56.8 | 8.4* | 303.0 | 12.2 | 114.8 | 0.500 | 65.2 |
| 304.0 | 12.2 | 107.2 | 103.0 | 668.0100.000 | 56.8 | 56.8 | 8.4* | 304.0 | 12.2 | 115.7 | 0.500 | 65.1 |
| 305.0 | 12.3 | 107.0 | 103.0 | 668.0100.000 | 56.7 | 56.7 | 8.4* | 305.0 | 12.3 | 116.6 | 0.500 | 65.1 |
| 306.0 | 12.3 | 106.9 | 103.0 | 668.0100.000 | 56.7 | 56.7 | 8.4* | 306.0 | 12.3 | 117.6 | 0.500 | 65.1 |
| 307.0 | 12.4 | 106.8 | 103.1 | 668.0100.000 | 56.7 | 56.7 | 8.4* | 307.0 | 12.4 | 118.5 | 0.500 | 65.1 |
| 308.0 | 12.4 | 106.7 | 103.1 | 668.0100.000 | 56.7 | 56.7 | 8.4* | 308.0 | 12.4 | 119.4 | 0.500 | 65.1 |
| 309.0 | 12.5 | 106.6 | 103.1 | 668.0100.000 | 56.7 | 56.7 | 8.4* | 309.0 | 12.5 | 120.4 | 0.500 | 65.1 |
| 310.0 | 12.6 | 106.4 | 103.1 | 656.8100.000 | 56.5 | 56.5 | 8.5* | 310.0 | 12.6 | 121.2 | 0.500 | 65.0 |
| 311.0 | 12.6 | 106.3 | 103.1 | 656.8100.000 | 56.5 | 56.5 | 8.5* | 311.0 | 12.6 | 122.1 | 0.500 | 65.0 |
| 312.0 | 12.7 | 106.2 | 103.2 | 656.8100.000 | 56.5 | 56.5 | 8.5* | 312.0 | 12.7 | 122.9 | 0.500 | 65.0 |
| 313.0 | 12.7 | 106.1 | 103.2 | 656.8100.000 | 56.5 | 56.5 | 8.5* | 313.0 | 12.7 | 123.6 | 0.500 | 65.0 |
| 314.0 | 12.8 | 105.9 | 103.3 | 656.8100.000 | 56.5 | 56.5 | 8.5* | 314.0 | 12.8 | 124.4 | 0.500 | 65.0 |
| 315.0 | 12.8 | 105.8 | 103.4 | 656.8100.000 | 56.4 | 56.4 | 8.5* | 315.0 | 12.8 | 125.2 | 0.500 | 65.0 |
| 316.0 | 12.9 | 105.7 | 103.4 | 656.8100.000 | 56.4 | 56.4 | 8.5* | 316.0 | 12.9 | 126.0 | 0.500 | 64.9 |
| 317.0 | 12.9 | 105.6 | 103.5 | 656.8100.000 | 56.4 | 56.4 | 8.5* | 317.0 | 12.9 | 126.8 | 0.500 | 64.9 |
| 318.0 | 13.0 | 105.4 | 103.5 | 645.8100.000 | 56.2 | 56.2 | 8.6* | 318.0 | 13.1 | 127.6 | 0.500 | 64.8 |
| 319.0 | 13.1 | 105.3 | 103.6 | 645.8100.000 | 56.2 | 56.2 | 8.6* | 319.0 | 13.1 | 128.3 | 0.500 | 64.8 |

BIAfn/Dataworld Educational FM/TV Channel 6 Interference Study

Title: **BOZEMAN 203A**

Channel: 203

Coordinates: N 45° 39' 59.0" W 111° 02' 47.0"

c/r Height = 1528.0 m AMSL

ERP = 0.5000 kW

| -- lx Area -- | | -----TV Station ----- | | | | | -----Proposed FM Station----- | | | | | | |
|---------------|------|-----------------------|-------|-------|---------|-------|-------------------------------|-------|------|-------|-------|-------|--|
| Br | Dx | Bear | Dx | HAAT | ERP | F.S. | U/D | Bear | Dx | HAAT | ERP | F.S. | |
| (deg) | (km) | (br) | (km) | (m) | (kW) | (dBu) | (dB) | (deg) | (km) | (m) | (kW) | (dBu) | |
| 320.0 | 13.1 | 105.2 | 103.7 | 645.8 | 100.000 | 56.1 | 8.6* | 320.0 | 13.2 | 129.0 | 0.500 | 64.8 | |
| 321.0 | 13.2 | 105.1 | 103.8 | 645.8 | 100.000 | 56.1 | 8.7* | 321.0 | 13.2 | 129.8 | 0.500 | 64.8 | |
| 322.0 | 13.2 | 104.9 | 103.9 | 645.8 | 100.000 | 56.1 | 8.7* | 322.0 | 13.3 | 130.4 | 0.500 | 64.7 | |
| 323.0 | 13.3 | 104.8 | 104.0 | 645.8 | 100.000 | 56.0 | 8.7* | 323.0 | 13.3 | 131.1 | 0.500 | 64.7 | |
| 324.0 | 13.3 | 104.7 | 104.1 | 645.8 | 100.000 | 56.0 | 8.7* | 324.0 | 13.4 | 131.9 | 0.500 | 64.7 | |
| 325.0 | 13.4 | 104.6 | 104.2 | 645.8 | 100.000 | 56.0 | 8.7* | 325.0 | 13.4 | 132.6 | 0.500 | 64.7 | |
| 326.0 | 13.6 | 104.4 | 104.2 | 632.7 | 100.000 | 55.7 | 8.8* | 326.0 | 13.6 | 133.4 | 0.500 | 64.5 | |
| 327.0 | 13.6 | 104.3 | 104.3 | 632.7 | 100.000 | 55.7 | 8.8* | 327.0 | 13.6 | 134.1 | 0.500 | 64.5 | |
| 328.0 | 13.7 | 104.2 | 104.4 | 632.7 | 100.000 | 55.7 | 8.8* | 328.0 | 13.7 | 134.7 | 0.500 | 64.5 | |
| 329.0 | 13.7 | 104.1 | 104.6 | 632.7 | 100.000 | 55.6 | 8.9* | 329.0 | 13.7 | 135.3 | 0.500 | 64.5 | |
| 330.0 | 13.8 | 104.0 | 104.7 | 632.7 | 100.000 | 55.6 | 8.9* | 330.0 | 13.8 | 135.8 | 0.500 | 64.4 | |
| 331.0 | 13.8 | 103.8 | 104.8 | 632.7 | 100.000 | 55.5 | 8.9* | 331.0 | 13.8 | 136.2 | 0.500 | 64.4 | |
| 332.0 | 13.9 | 103.7 | 105.0 | 632.7 | 100.000 | 55.5 | 8.9* | 332.0 | 13.9 | 136.7 | 0.500 | 64.4 | |
| 333.0 | 13.9 | 103.6 | 105.1 | 632.7 | 100.000 | 55.4 | 8.9* | 333.0 | 13.9 | 137.0 | 0.500 | 64.3 | |
| 334.0 | 14.0 | 103.5 | 105.3 | 632.7 | 100.000 | 55.4 | 9.0* | 334.0 | 14.0 | 137.3 | 0.500 | 64.3 | |
| 335.0 | 14.1 | 103.4 | 105.4 | 619.7 | 100.000 | 55.1 | 9.1* | 335.0 | 14.1 | 137.7 | 0.500 | 64.2 | |
| 336.0 | 14.1 | 103.3 | 105.5 | 619.7 | 100.000 | 55.0 | 9.1* | 336.0 | 14.1 | 138.0 | 0.500 | 64.1 | |
| 337.0 | 14.2 | 103.2 | 105.7 | 619.7 | 100.000 | 55.0 | 9.1* | 337.0 | 14.2 | 138.4 | 0.500 | 64.1 | |
| 338.0 | 14.2 | 103.1 | 105.9 | 619.7 | 100.000 | 54.9 | 9.1* | 338.0 | 14.2 | 138.7 | 0.500 | 64.0 | |
| 339.0 | 14.3 | 103.0 | 106.1 | 619.7 | 100.000 | 54.9 | 9.2* | 339.0 | 14.3 | 138.7 | 0.500 | 64.0 | |
| 340.0 | 14.3 | 102.9 | 106.3 | 619.7 | 100.000 | 54.8 | 9.2* | 340.0 | 14.3 | 137.8 | 0.500 | 64.0 | |
| 341.0 | 14.2 | 102.8 | 106.5 | 619.7 | 100.000 | 54.7 | 9.2* | 341.0 | 14.2 | 136.3 | 0.500 | 63.9 | |
| 342.0 | 14.1 | 102.8 | 106.8 | 619.7 | 100.000 | 54.6 | 9.3* | 342.0 | 14.1 | 134.1 | 0.500 | 63.9 | |
| 343.0 | 14.1 | 102.8 | 107.0 | 619.7 | 100.000 | 54.5 | 9.3* | 343.0 | 14.1 | 132.0 | 0.500 | 63.8 | |
| 344.0 | 14.0 | 102.7 | 107.2 | 619.7 | 100.000 | 54.4 | 9.3* | 344.0 | 14.0 | 130.4 | 0.500 | 63.8 | |
| 345.0 | 14.0 | 102.7 | 107.5 | 619.7 | 100.000 | 54.4 | 9.4* | 345.0 | 14.0 | 129.2 | 0.500 | 63.7 | |
| 346.0 | 14.0 | 102.6 | 107.7 | 619.7 | 100.000 | 54.3 | 9.4* | 346.0 | 14.0 | 128.1 | 0.500 | 63.7 | |
| 347.0 | 13.9 | 102.6 | 107.9 | 619.7 | 100.000 | 54.2 | 9.4* | 347.0 | 13.9 | 126.7 | 0.500 | 63.6 | |
| 348.0 | 13.9 | 102.6 | 108.2 | 619.7 | 100.000 | 54.1 | 9.5* | 348.0 | 13.9 | 125.0 | 0.500 | 63.6 | |
| 349.0 | 14.0 | 102.5 | 108.3 | 601.8 | 100.000 | 53.7 | 9.6* | 349.0 | 14.0 | 123.5 | 0.500 | 63.3 | |
| 350.0 | 14.0 | 102.4 | 108.6 | 601.8 | 100.000 | 53.7 | 9.6* | 350.0 | 14.0 | 122.3 | 0.500 | 63.3 | |
| 351.0 | 13.9 | 102.4 | 108.8 | 601.8 | 100.000 | 53.6 | 9.7* | 351.0 | 13.9 | 121.3 | 0.500 | 63.2 | |
| 352.0 | 13.9 | 102.4 | 109.1 | 601.8 | 100.000 | 53.5 | 9.7* | 352.0 | 13.9 | 119.4 | 0.500 | 63.2 | |
| 353.0 | 13.7 | 102.4 | 109.3 | 601.8 | 100.000 | 53.4 | 9.7* | 353.0 | 13.7 | 115.9 | 0.500 | 63.1 | |
| 354.0 | 13.6 | 102.4 | 109.6 | 601.8 | 100.000 | 53.3 | 9.8* | 354.0 | 13.6 | 112.1 | 0.500 | 63.1 | |
| 355.0 | 13.2 | 102.5 | 110.0 | 619.7 | 100.000 | 53.5 | 9.7* | 355.0 | 13.2 | 108.2 | 0.500 | 63.2 | |
| 356.0 | 13.0 | 102.6 | 110.2 | 619.7 | 100.000 | 53.4 | 9.7* | 356.0 | 13.0 | 104.4 | 0.500 | 63.1 | |
| 357.0 | 12.8 | 102.7 | 110.5 | 619.7 | 100.000 | 53.3 | 9.8* | 357.0 | 12.8 | 100.5 | 0.500 | 63.1 | |
| 358.0 | 12.6 | 102.7 | 110.8 | 619.7 | 100.000 | 53.2 | 9.8* | 358.0 | 12.6 | 96.3 | 0.500 | 63.0 | |
| 359.0 | 12.4 | 102.8 | 111.0 | 619.7 | 100.000 | 53.1 | 9.8* | 359.0 | 12.4 | 92.5 | 0.500 | 63.0 | |

346.0 square km in interference area

**September 2007
New FM Channel 203A
Bozeman, MT
NIER Analysis**

Facilities Proposed

The proposed operation will be on Channel 203A (88.5 MHz) with an effective radiated power of 0.5 kilowatts. Operation is proposed with a 3-element circularly-polarized omni-directional half-wave-spaced antenna. The antenna will be side-mounted on a uniform cross-section guyed tower to be located atop the Strand Union Building on the campus of Montana State University at Bozeman.

The proposed antenna support structure will not exceed 60.96 meters (200 feet) above ground and does not require notification to the Federal Aviation Administration. Therefore, this structure does not require an Antenna Structure Registration Number.

NIER Calculations

Study of the area within 1000 meters of the proposed site reveals no likely sources of non-ionizing radiation apart from this proposal and the KGLT 220C2 auxiliary antenna (BXLED-20040902ABE). Thus, the ground level NIER values near the base of the proposed structure are believed to be negligible. Precise calculations are made only with regard to the levels from this proposal and the KGLT auxiliary.

The power density calculations shown below were made using the techniques outlined in OET Bulletin No. 65. "Ground level" calculations in this report have been made at a reference height of 2 meters above ground to provide a worst-case estimate of exposure for persons standing on

the ground in the vicinity of the tower. The equation shown below was used to calculate the ground level power density figures from each antenna.

$$S(\mu W / cm^2) = \frac{33.40981 \times AdjERP(Watts)}{D^2}$$

Where: *AdjERP(Watts)* is the maximum lobe effective radiated power times the element pattern factor times the array pattern factor.

D is the distance in meters from the center of radiation to the calculation point.

Ground level power densities have been calculated for locations extending from the base of the tower to a distance of 1000 meters. Values past this point are increasingly negligible.

Calculations of the power density produced by the proposed Bozeman 203A antenna system assume a Type 6 element pattern, which is the element pattern for the Shively 6812 antenna proposed for use. The highest calculated ground level power density occurs at a distance of 97 meters from the base of the antenna support structure. At this point the power density is calculated to be 1.3 $\mu W/cm^2$.

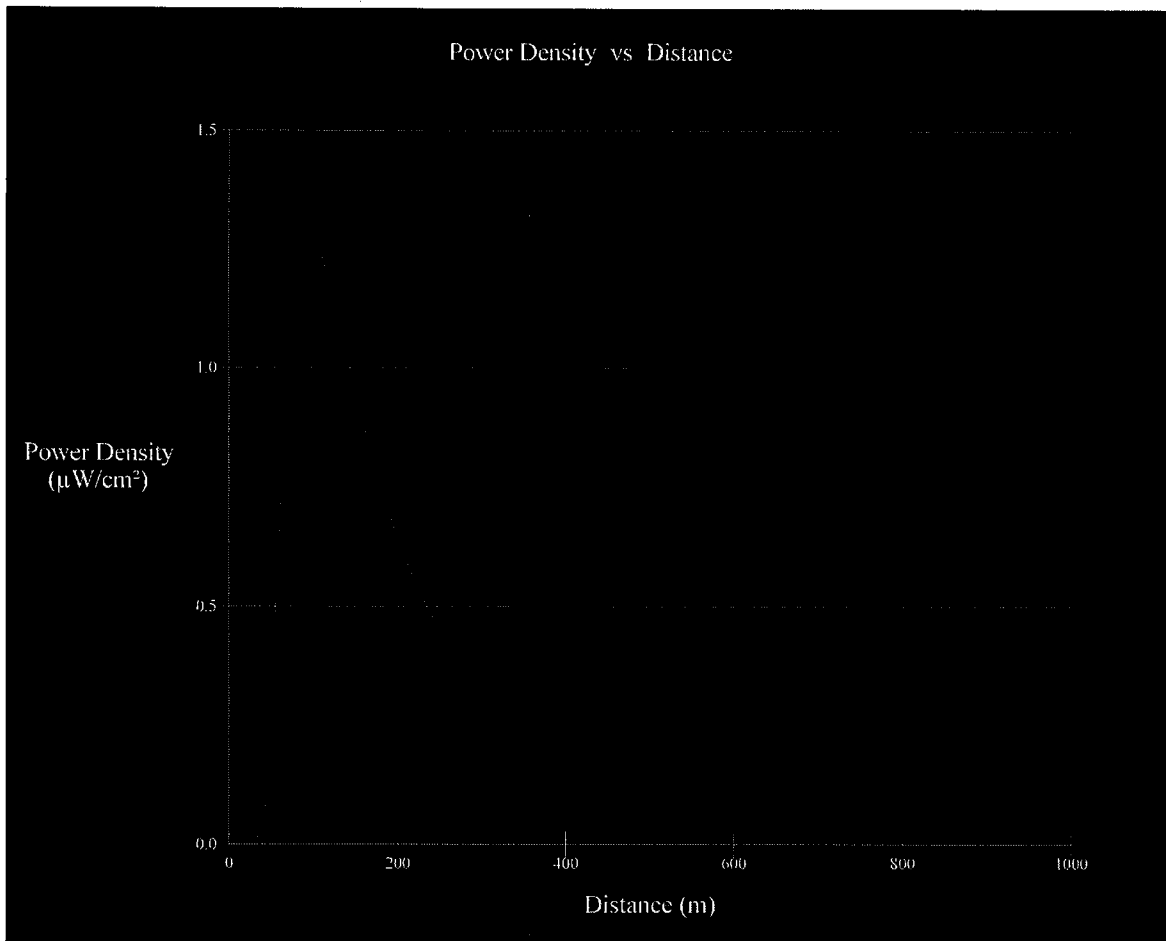
Calculations of the power density produced by the KGLT auxiliary antenna system assume a Type 6 element pattern, which is the element pattern for the Shively 6812 antenna used by that station. The highest calculated ground level power density occurs at a distance of 97 meters from the base of the antenna support structure. At this point the power density is calculated to be 3.8 $\mu W/cm^2$.

These calculations show that the maximum calculated power density produced at two meters above ground level by the proposed operation of Bozeman 203A and the present operation of the KGLT auxiliary is $5.1 \mu\text{W}/\text{cm}^2$, which is 0.5% of $1000 \mu\text{W}/\text{cm}^2$ (the FCC standard for controlled environments) and 2.6% of $200 \mu\text{W}/\text{cm}^2$ (the FCC standard for uncontrolled environments).

The Bozeman 203A antenna will be and the KGLT auxiliary antenna is located 13 meters above the building rooftop. The highest calculated combined rooftop power density occurs at a distance of 32 meters from the base of the antenna support structure. At this point the power density is calculated to be $45.7 \mu\text{W}/\text{cm}^2$, which is 4.6% of $1000 \mu\text{W}/\text{cm}^2$ (the FCC standard for controlled environments) and 22.9% of $200 \mu\text{W}/\text{cm}^2$ (the FCC standard for uncontrolled environments).

Public access to the rooftop is restricted and the antenna tower will be posted with warning signs. Pursuant to OST Bulletin No. 65, all station personnel and contractors are required to follow appropriate safety procedures before any work is commenced on the antenna tower, including reduction in power or discontinuance of operation before any maintenance work is undertaken.

The permittee/licensee in coordination with other users of the site must reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency radiation in excess of FCC guidelines.



Ground-Level NIER

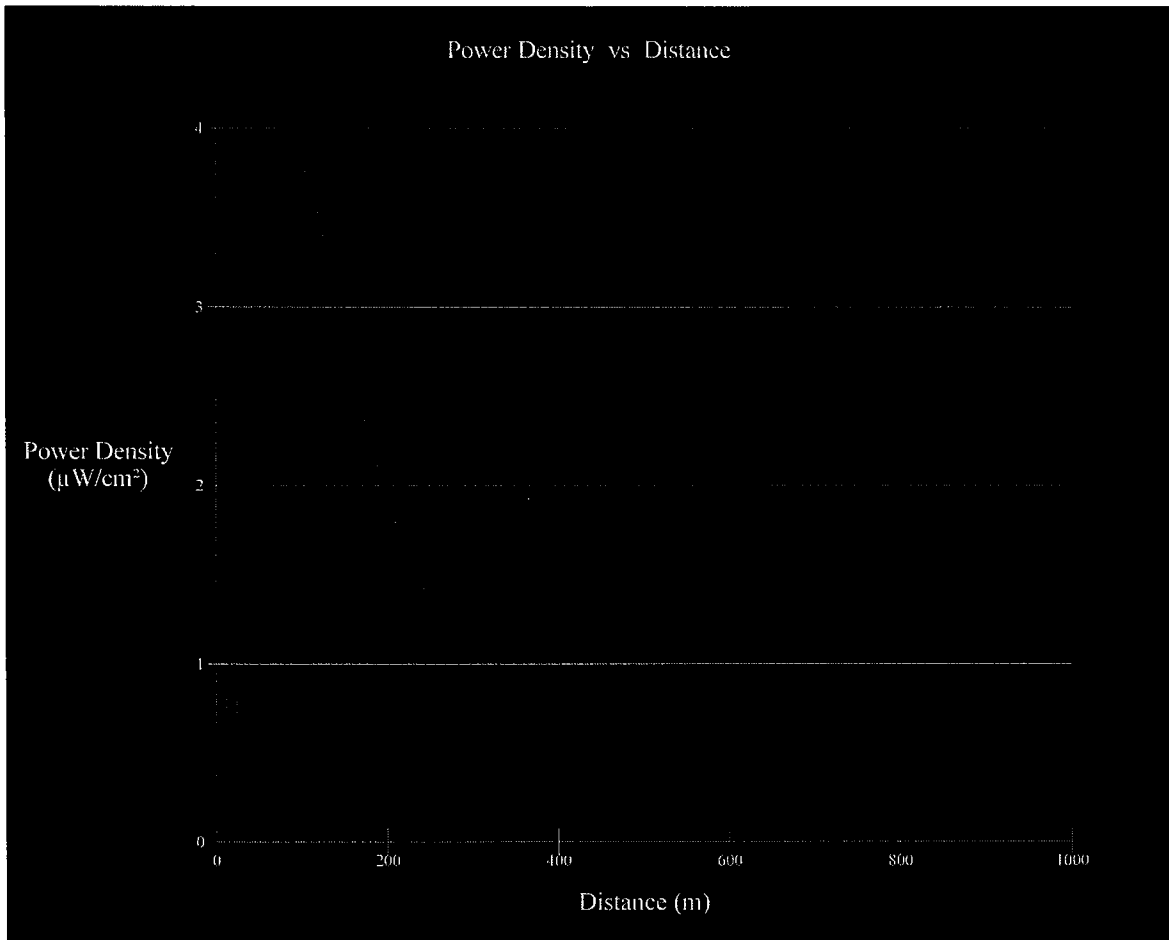
OET FMModel

Bozeman 203A
 Antenna Type: Shively 6810 Series
 No. of Elements: 3
 Element Spacing: 0.5 wavelength

Distance: 1000 meters
 Horizontal ERP: 0.5 kW
 Vertical ERP: 0.5 kW

Antenna Height: 35 meters AGL

Maximum Power Density is 1.3 • W/cm² at 97 meters from the antenna structure.



Ground-Level NIER

OET FMModel

KGLT 220C2 Auxiliary

Antenna Type: Shively 6810 Series

No. of Elements: 3

Element Spacing: 0.5 wavelength

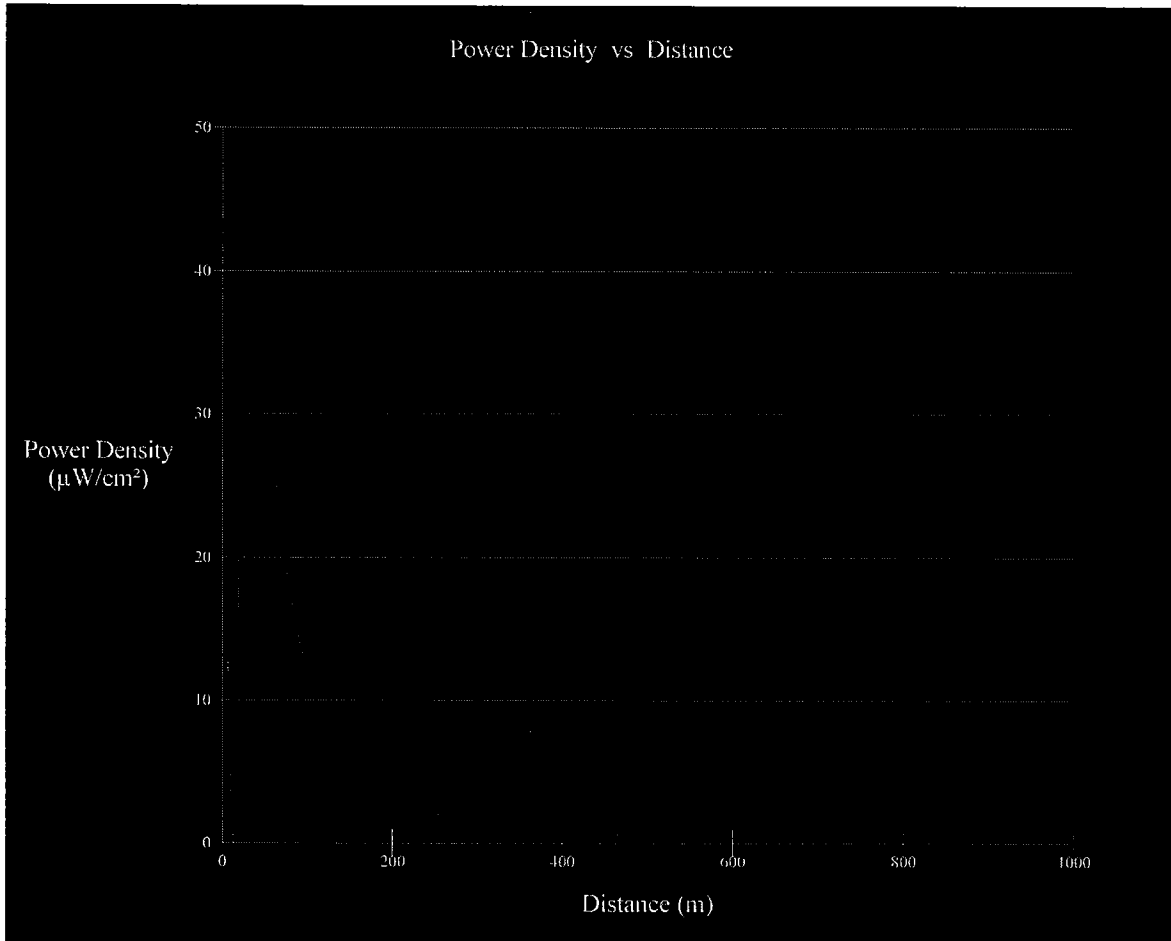
Distance: 1000 meters

Horizontal ERP: 1.5 kW

Vertical ERP: 1.5 kW

Antenna Height: 35 meters AGL

Maximum Power Density is 3.8 • W/cm² at 97 meters from the antenna structure.



Rooftop-Level NIER

OET FMModel

Bozeman 203A

Antenna Type: Shively 6810 Series (used by both stations)

No. of Elements: 3

Element Spacing: 0.5 wavelength

Distance: 1000 meters

Horizontal ERP: 2.0 kW (combined power)

Vertical ERP: 2.0 kW (combined power)

Antenna Height: 13 meters above rooftop

Maximum Power Density is $45.7 \cdot \text{W}/\text{cm}^2$ at 32 meters from the antenna structure.

Hatfield & Dawson Consulting Engineers