Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC

In the Matter of	)	
	)	
Petition for Rulemaking of	)	RM - _____
Geo Broadcast Solutions, LLC	)	
To Permit Origination of	)	MB Docket No. _____
Programming on FM Booster Stations	)	

To: Office of the Secretary
Attention: The Commission

PETITION FOR RULEMAKING OF GEO BROADCAST SOLUTIONS, LLC

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202-293-0011

April 4, 2012

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SUMMARY

In the instant Petition for Rulemaking, Geo Broadcast Solutions, LLC (GBS) seeks modification of 47 C.F.R § 74.1231(i) to allow FM booster stations to originate programming. As demonstrated in the Petition, allowing program origination would promote localism and significantly benefit a financially challenged radio industry.

GBS, in cooperation with licensees who received experimental authorizations and implemented the GBS technology, have demonstrated that FM stations could successfully transmit different, targeted programming over several FM boosters simultaneously.

Modification of the rule would enhance the ability of FM stations to remain economically viable and would augment their relevance and service to their communities. Modification of the rule would be technically feasible, would promote competition and advance the public interest.

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PETITION FOR RULEMAKING OF GEO BROADCAST SOLUTIONS, LLC

Geo Broadcast Solutions, LLC ("GBS"), pursuant to Section 1.401(a) of the Commission's rules, 47 C.F.R § 1.401(a), hereby petitions the Commission to initiate a rulemaking proceeding to amend its rules to allow FM booster stations to originate programming. GBS requests that the Commission modify 47 C.F.R. § 74.1231(i), as appropriate, to effectuate grant of this Petition. This relief would be consistent with and further effectuate the Commission's longstanding goal of promoting localism. It would also improve the viability of a financially challenged radio industry and would benefit the U.S. economy as a whole. Thus, grant of the Petition offers significant public interest benefits.

A. STATEMENT OF INTEREST

GBS has expertise in booster technology. Through deployment of special, proprietary engineering designs developed by GBS, as implemented by stations in two markets with differing terrain pursuant to the issuance of FCC experimental authorizations, multiple FM boosters have successfully targeted specific geographic locales with disparate announcements and advertising messages. This has been accomplished with minimal interference between these

boosters as well as the main facility and other boosters, while also orienting minimal interference to lesser populated areas.[1]

B. Background

Section 74.1231(i) of the Commission's rules provides, *inter alia*:

> An FM broadcast booster station is authorized to retransmit only the signals of its primary station which have been received directly through space and suitably amplified, or received by alternative signal delivery means including, but not limited to, satellite and terrestrial microwave facilities. The FM booster station shall not retransmit the signals of any other station nor make independent transmission...

As demonstrated herein, several compelling public interest reasons justify modifying Rule 74.123(i) so as to permit independent transmissions of announcements targeted to specific hyper-local geographic areas on booster facilities. In order to place the instant proposal in its proper context, a brief discussion of FM boosters and how they are currently utilized is discussed below.

FM translators and FM boosters comprise a low power service on the FM broadcast band (88-108 MHz) that complements primary FM service. The service was first created in 1970 to allow FM stations to provide supplementary service to areas in which direct reception of radio service was unsatisfactory due to distance or intervening terrain barriers (*e.g.*, mountainous locations).

Translator stations simultaneously rebroadcast the signal of a primary AM or FM station on a **different frequency**. **Booster stations** are essentially "fill-in" facilities operating on the **same frequency as the main station**. *See* Section 74.1201(f) of the rules. FM booster stations are licensed to the licensee of the primary FM station whose signal they retransmit. On the other hand, FM translators may be owned either by the primary station licensee or by an independent entity. The rules governing the licensing and operation of FM translator and booster

[1] GBS has a patent application pending for the master control device and associated software that will control the boosters by automated means.

stations are set forth in Part 74 of the FCC's rules (47 CFR Sections 74.1 through 74.34 and 74.1201 through 74.1290).

This Petition for Rulemaking deals with only the utilization of FM boosters, not FM translators.

C. The Technology

GBS has developed a proprietary FM booster system design, influenced by techniques utilized in the RF, cellular and paging industries, that allows an FM radio station to periodically broadcast different announcements simultaneously to different segments of its listening area. The proprietary booster system design includes audio and control switching, routing, hardware, software and implementation techniques. This technology allows a station to simultaneously broadcast different audio messages, such as public service announcements (PSAs) or commercial announcements on multiple FM booster stations. GBS has pending patent applications entitled "Equipment System and Methodologies for Segmentation of Listening Area into Sub-Areas Enabling Delivery of Localized Auxiliary Information" and "Equipment, System and Methodologies for Time Synchronization Between Multiple RF Frequencies, RF Power, and Antenna Selection of Boosters in a Segmented Listening Area Delivering Localized Auxiliary Information." The system allows a radio station to simultaneously reach different listeners in different geographic locales and provide them with targeted commercial and non-commercial programming. The GBS "Control Unit" will direct different radio fields from automation equipment to different booster zones, while simultaneously turning the boosters on and off (if they are not on continuously already) in synchronization with the split audio field. Alternately, the audio can be stored at the "Control Box" and routed and transmitted to the booster zone at the appropriate time when directed. The "Control Unit" software has a timed event system built into

the server, which can program events to occur at specified times. Specific items can be triggered at a particular time and date or on a rotating schedule at prescribed times.

As demonstrated through testing, the technology enables the GBS System to allow FM stations to simultaneously divide their signals into separate zones at targeted times . *See* Test Reports, Attachments C and G.

D. Randolph, Utah (Salt Lake City Area) Experimental Authorization

On March 9, 2010, Bustos Media of Utah Licenses, LCC ("Bustos"), using GBS technology, requested an experimental authorization, pursuant to Section 73.1510 of the Commission's rules.[2] Specifically, Bustos sought authorization to utilize certain of the existing boosters associated with its station, KDUT(FM), Randolph, Utah, to originate limited non-commercial announcements and programming. Bustos requested the authorization in order to permit it to broadcast simultaneously, via its FM boosters, different non-commercial announcements targeted to discrete audiences. The broadcasts were intended to appeal to intensely local, specific and diverse audiences, in each booster station's limited service area. Each of the FM boosters would concurrently broadcast a different non-commercial message (different from each other and different from the primary station). The testing, under the supervision and control of Bustos, was conducted by Geo Spots, LLC, a predecessor entity to GBS .

The Media Bureau granted the request for experimental authorization pursuant to a March 29, 2010 letter (Attachment B). In granting the request, the Bureau acknowledged the following:

> We find that the public interest would be served though the collection of data on the feasibility of transmitting independent targeted announcements on FM boosters, which could be used in support of a

[2] A copy of the request for the experimental authorization is attached (Attachment A).

Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions.

In its grant, the Media Bureau also requested, pursuant to Section 73.1510(d) of the Commission's rules, that, following completion of testing, Bustos file a report detailing its research, experimentation and results. On July 29, 2010, the requested report was submitted to the Commission (Attachment C).[3]

E. Avon Park, Florida Experimental Authorization

On July 19, 2011, Cohan Radio Group, Inc. ("Cohan"), licensee of Station WWOJ(FM), Avon Park, Florida, predicated on designs and technology developed by GBS, requested an experimental authorization, pursuant to Section 73.1510 of the Commission's rules (Attachment D). That request was supplemented by a September 22, 2011 submission (Attachment E). The request, as supplemented, sought an experimental authorization to conduct testing similar to the testing conducted relative to KDUT, Randolph, Utah. The Avon Park station was selected so that the proposed booster service could be tested in a more challenging terrain. While the KDUT testing was accomplished in mountainous terrain, the WWOJ testing was conducted in a flat environment. Furthermore, WWOJ historically had no boosters associated with the primary station. Thus, it presented an opportunity for Lazer Spots, LLC,[4] under the supervision and control of Cohan, to apply its technical expertise so as to maximize the effectiveness of its targeted message concept. Lazer Spots implemented the engineering models it had developed by situating the boosters so as to obtain results which would address concerns that the technology could be utilized successfully in the most challenging types of environment.

[3] The report was submitted by Lazer Spots, LLC, a successor entity to Geo Spots, LLC.
[4] Lazer Spots is a predecessor-in-interest to GBS.

Pursuant to a September 28, 2011 letter (Attachment F), the Media Bureau granted the experimental authorization. Similar to its prior grant, the Bureau acknowledged that the data collected "could be used to support a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions."

In addition, the Bureau requested that, within sixty (60) days following completion of the experimental operation, a full report of the research, experimentation and results be submitted pursuant to Section 73.1510(d). On January 18, 2012, Cohan submitted the report to the Commission. A copy of that report is attached (Attachment G).

Both of the tests that were conducted pursuant to the experimental authorizations issued by the Bureau successfully demonstrated the viability of the engineering approach. Specifically, the tests evidenced minimal interference between the FM boosters themselves, or either the primary station signal or boosters associated with other stations.

F. Localism

Localism is a core value of the Communications Act of 1934, as amended. In this regard, the Commission requires licensees to serve their designated communities of license by, *inter alia*, (1) providing city grade service to the designated community; (2) locating main studios in compliance with § 73.1125 of the Commission's rules and (3) offering programming that will serve the designated community. *See Application of WBBK Broadcasting, Inc. to Modify Facilities Including Channel Classification and Transmitting Location, Memorandum Opinion and Order*, 15 FCC Rcd 5906, par 4 (2000).

Many years ago, the Commission mandated that non-network stations originate a majority of their non-network programs from the main studio, and that network stations originate at least two-thirds of non-network programs or a majority of all programs, whichever was less,

from their main studios. The 1950 Report and Order, and the main studio rule, as amended pursuant to that Report and Order, made clear that airing local programming was the key to promoting localism and to determining whether stations appropriately served particular communities. The rule defined radio transmission as:

> The opportunity which a [broadcast] station provides for the development and expression of local interests, ideas and talents and for the production of [broadcast] programs of special interest to a particular community...A station often provides service to areas at a considerable distance from its transmitter...[5]

The Commission appears to have reasoned that locally originated programming would result in locally oriented programming, thereby serving the public interest. In 1987, the local origination rule was deleted. *See* Amendment of Sections 73.1125 and 73.1130 of the Commission's Rules, the Main Studio and Program Origination Rules for Radio and Television Stations, 62 RR 2d 1582 (1987).

The *1952 Television Main Studio Location Memorandum Opinion and Order*, 43 FCC 888, 890 (1952), appeared to provide additional goals for television studios that the Commission would later apply to radio as well. The *Order* clarified that the requirement of a local main studio facility was to encourage station interaction with the community.

> The accessibility of the broadcast station's main studio may well determine in large part the extent to which the station (1) can participate and be an integral part of community activities and (2) can enable members of the public to participate in live programs and present complaints or suggestions to the station. [*See* 1952 Television Memorandum Opinion and Order, at 890].

Together, the 1950 radio and 1952 television Orders identified five core objectives: 1) assurance that stations provide service to everyone, not just to persons living in

[5] 43 FCC 570 (1950).

major metropolitan areas; 2) generation of locally-oriented programming; 3) participation of local residents in the production of programming; 4) encouragement of station participation in community activities; and 5) facilitation of community residents' complaints or suggestions to station personnel. Grant of the instant rulemaking would be consistent with these objectives.

In January 2008, the Commission released its *Report in Broadcast Localism and Notice of Proposed Rulemaking*, 23 FCC Rcd 1324 (2008). This report was a result of *Broadcast Localism*, Notice of Inquiry, 19 FCC Rcd 12425 (2004). The Commission emphasized the importance of the dissemination of emergency information to the public as follows:

> One [commenter] described the important role local radio played in providing news updates and information on escape routes, survival tips, and recovery strategies in New Orleans in the aftermath of Hurricane Katrina. Another stated that, with the help of local broadcasters, the State of Texas was able to turn a local tragedy into a triumph of technology and cooperation by creating the nation's first Amber Alert using EAS, and that local broadcasters' cooperation and leadership on public safety matters were much appreciated. Another commenter stated that, without local broadcasters in North Carolina, there would be no Amber Alert system. Witnesses at the Rapid City hearing discussed the arrangement there between broadcasters and the local government that provides local officials expedited access to local stations in times of emergency. The commenter noted that local broadcasters have made their studios available to emergency management for the purpose of recording public service announcements ("PSAs"), and have helped with the distribution of the PSAs to other outlets in the area.[6]

The Commission over the years has promulgated many rules that emphasize the importance of localism, specifically: (1) frequencies are allocated to specific communities (§ 73.202 and 73.1120); (2) a station's public inspection file is maintained and accessed within the general community of license (§ 73.3526); (3) the licensee must maintain a quarterly needs/program list consisting of a list of programs that have provided the station's most significant treatment of community issues during the preceding three month period (§

[6] 23 FCC Rcd at 13.

73.3526(b)(12); (4) applicants must give local public notice of the filing of certain applications (§ 73.3580); (5) the main studio must be located within the community of license or close-in (§ 73.1125).

The GBS proposal would directly support the Commission's goal of promoting local service. It would enable a station to target disparate information to listeners simultaneously in various parts of a station's service area. For example, a station could target an emergency warning (i.e., a road closure, flood, fire, tornado or other important information) where it would have the most immediate and direct impact – to listeners in the directly affected locale. The ability of stations to utilize this technology in times of natural disasters (*e.g.*, Hurricane Katrina) would have significant public interest benefits. The ability to provide this type of targeted information would be consistent with the objectives articulated in the localism rulemaking.

In June 2011, the Commission released a report entitled *The Information Needs of Communities*, authored by Steven Waldman and the Working Group on Information Needs of Communities. At page 14, the following was stated:

> Though commercial radio offers a dazzling range of programming options, in most cities, local journalism is not one of them.

The instant proposal would not only give stations the ability to target announcements to specific geographic locales, but it would also allow stations to tailor their news and public affairs programming to specific geographic areas. For example, stations would be able to broadcast emergency warnings targeted to specific areas. Weather alerts, road closures, downed electric lines, and AMBER alerts could be geographically targeted. Religious programming could be tailored to be received by different denominations. Moreover, it would allow stations to target programs to geographic areas in a foreign language. Stations could tailor information to specific listeners and not be forced to use a "cookie cutter" approach to the dissemination of news and

public affairs programming. Radio can be truly responsive to the needs of its listeners and able to address a more diverse listener base. Radio would be able to more effectively acknowledge and address in a meaningful manner the different and diverse individuals and groups located within its service area.

As previously discussed, widespread use of the technology developed by GBS would permit FM stations to better serve all parts of their communities. In this regard, public service announcements (PSAs) could be tailored to sub-communities within a particular locale. A station could simultaneously broadcast one PSA tailored to the northern part of its service area and concurrently broadcast another tailored to the southern part of its service area. A station could announce city council meetings to those residents of a particular city in question and a different meeting to residents of a different city. A station could disseminate information to a particular defined area in its service area and maximize the immediacy and impact of such information (i.e., road closures, emergency information, etc.). It would take the concept of localism to an entirely new and higher level.

Announcements could also be tailored to address the particular language needs of a given area. For example, a station could provide concurrent broadcast of PSAs in several languages to meet the needs of different ethnic groups in its community.

GBS, in the instant rulemaking, is not seeking the establishment of a new hybrid FM service. That is not GBS's intent. Accordingly, GBS suggests, should the Commission deem it appropriate or necessary, that any independent programming distinct from the primary station, except for commercials and public service announcements (PSA's), be limited to three (3) hours a day except in cases of emergencies.

On July 14, 2006, the National Association of Broadcasters ("NAB") filed a Petition for Rulemaking to initiate a rulemaking proceeding to amend its rules to allow AM broadcast stations to operate FM translator stations. In its petition, the NAB emphasized the following:

> AM radio formats often focus on local community-responsive issues to distinguish themselves in an increasingly competitive market. All-news, all-sports, 24-hour talk radio and religious programming formats are common on this band, as are discussions of local public affairs and politics, traffic announcements, and broadcasts of local high school ballgames.

The NAB Petition suggested that the relief requested would help AM stations remain "viable" and continue to be relevant to their communities. The NAB argued that allowing FM translators to broadcast AM signals would be "technically feasible, pro-competitive and pro-public interest." The same logic applies to the instant proposal as it relates to FM radio and the utilization of FM boosters. It should be noted that the Commission on June 29, 2009, in a *Report and Order*, 24 FCC Rcd 9642, permitted AM stations to use FM translators to rebroadcast their signals. By taking such action, the Commission permitted AM broadcasters to better serve their local communities and, thus, promote the Commission's bedrock goals of localism, competition and diversity in the broadcast media. The rule revision proposed in the instant Petition would achieve a similar goal.

FM stations can and do help local organizations present themselves directly to local citizens, raise their public profile in a unique way and cement their connections within local communities.

FM stations are also involved in their local communities' efforts relating to abducted children and emergency preparedness. Granting the instant Petition would enable FM broadcasters to continue, enhance and expand this kind of public service to their local communities.

G. The Economic Effect

In the Commission's Radio Multiple Ownership Rules, 7 FCC Rcd 2755, 2760 (1992), the Commission prophetically observed: "The radio industry's ability to function in the 'public interest, convenience and necessity' is fundamentally premised on its economic viability." The Commission recognized over thirty (30) years ago that radio stations present programming that serves "the wants and needs of the public" including news and other informational programming in "response to market forces".[7] It is submitted that the GBS technology will have demonstrable public interest benefits, provide an economic boost to a financially challenged radio industry and provide efficiencies and increased profits to small businesses desiring to purchase locally targeted advertising time. The ability of radio to accomplish these vastly improved public interest goals is directly dependent on achieving improved financial health. The GBS technology will accomplish both of these goals.

On February 17, 2012, The Radio Advertising Bureau released a report showing industry revenue for 2011.[8] The report details an overall 1% year-over-year growth in radio revenue in FY2011. Spot advertisements, which account for over 80% of radio revenue, decreased by 1% as compared to 2010 (including a 4% decrease in Q4 2011).

As noted in a description of the RAB report by Radio World,[9] the slight increase in overall revenue for 2011 and 2010 follows "a six-year period of mostly flat-to-down years (including a grim 18% drop in 2009). U.S. commercial radio however is still well off the peak number of $21.7 billion that RAB reported in 2006." Indeed, between 2007 and 2009, annual

[7] *Deregulation of Radio, Report and Order*, BC Docket No. 79-219, 84 FCC 2d 968, 978 (1981).
[8] Available at http://www.rab.com/public/pr/revenue_detail.cfm?id=124.
[9] Available at http://radioworld.com/article/radio-revenue-holds-its-own/211906.

radio revenue fell by 2%, 9% and a staggering 18%, respectively.[10] Put into perspective, 2011's modest 1% increase is but a hint of good news.

While increasing modestly, national radio revenue is still well below what it was just a few years ago. Technological advancements, such as GBS's targeting methods, have the potential to improve local advertising revenue for radio stations.

Specifically, local businesses would no longer need to pay for coverage that is neither needed nor desired, but instead could target their advertising messages to specific geographic audiences. The Commission should also allow the utilization of Radio Broadcast Data System (RBDS) technology by FM boosters which transmit in the manner contemplated by this Petition.

A station would be able to broadcast different spots concurrently for different advertisers wishing to target different geographical areas within the market. Assuming the cost of a 30-second spot in a major market for total coverage is X, a local business could purchase a "targeted" ad for a fraction of that amount. In the same time slot, a licensee could sell other ads targeted to other specific locales. Radio stations will thereby have the opportunity to significantly increase local revenues by selling multiple spots in the same time period to different zones and local businesses will be able to benefit through cost savings and the ability to target their advertising messages to the geographic areas most beneficial to them. Local radio advertising will be available to local businesses at lower rates, potentially allowing radio stations to attract advertisers that previously may have been priced out of the market. Those new advertisers will also benefit by having the ability to attract new customers with lower cost, hyper-targeted ads. Consumers will likewise benefit because of cost savings passed on because of the lower cost of the goods and services sold. It is a win/win/win scenario – radio stations, advertisers and consumer/listeners will all benefit.

[10] Available at http://www.rab.com/public/pr/yearly.cfm.

Today, many advertisers cannot afford to advertise on radio. Through the use of targeted advertising and attendant cost savings, both radio and local businesses can benefit. Increase radio advertising purchases by local businesses will advance the public interest by contributing to the revival of the U.S. economy.

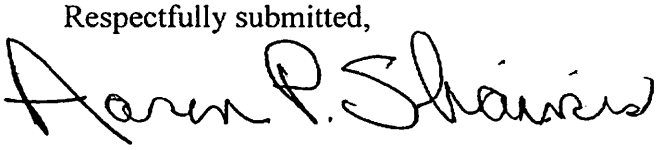
H. Political Advertising

The deployment of the GBS technology would also have a significant impact on political advertising. For example, a Congressional candidate for political office in Northern Virginia would not have to pay for a political ad that would reach listeners residing in Washington, DC or Maryland. The political candidate's message would be targeted to those locales that contain constituents who are eligible to vote for the particular candidate. The cost savings attendant to pinpointing their message would permit candidates to more effectively promote their candidacies.

I. Conclusion

Modification of 47 C.F.R. § 74.1231(i) of the rules as requested herein would clearly be in the public interest. Allowing stations to originate programming on FM booster stations would advance the Commission's oft-stated objective of promoting localism and increasing the diversity of voices on the airwaves. It would also assist in the economic recovery of radio and promote the overall economic recovery of the country as a whole.

Respectfully submitted,



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April 4, 2012

ATTACHMENT A

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KEVIN M. GOLDBERG
FRANK R. JAZZO
M. SCOTT JOHNSON
DANIEL A. KIRKPATRICK
MITCHELL LAZARUS
STEPHEN T. LOVELADY*
SUSAN A. MARSHALL
HARRY C. MARTIN
MICHELLE A. McCLURE
MATTHEW H. McCORMICK
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LEE G. PETRO*
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JAMES P. RILEY
DAVINA SASHKIN
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KATHLEEN VICTORY
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March 9, 2010

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AND RETURN
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VIA HAND DELIVERY
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Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW – A325
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Washington, DC 20554

FILED/ACCEPTED

MAR – 9 2010

Federal Communications Commission
Office of the Secretary

Dear Ms. Dortsch:

Bustos Media of Utah License, LLC ("Bustos"), the licensee of KDUT(FM), Facility ID. No. 88272, Randolph, Utah; KDUT-FM1, Facility ID No. 122076, Bountiful, Utah; KDUT-FM2, Facility ID No. 122078, Salt Lake City, Utah; KDUT-FM3, Facility ID No. 123370, Ogden, Utah; and KDUT-FM5, Facility ID No. 131424, Provo, Utah, by its attorneys, and pursuant to Section 73.1510 of the Commission's rules, requests an experimental authorization. In support, Bustos submits the following:

Bustos seeks an experimental authorization to allow it to utilize certain of the boosters associated with KDUT to originate limited programming. In this regard, Bustos intends to utilize KDUT-FM2, KDUT-FM3 and KDUT-FM5. Specifically, Bustos intends to simultaneously broadcast on each of the aforementioned boosters different non-commercial announcements targeted to discreet audiences. Bustos intends to target the broadcasts to appeal to specific diverse audiences which are encompassed within the boosters' service areas. Each of the boosters in question will concurrently broadcast a different non-commercial message.

Methodology

The broadcasts shall be conducted over a thirty (30) day period. Broadcasts will be done between the hours of 9:00 a.m. and 3:00 p.m. and 7:00 p.m. and 11:00 p.m. It is anticipated that no more than four (4) non-commercial announcements shall be broadcast on each of the boosters in a given hour. The announcements will be directed to the specific needs and interests of the communities served by the respective booster in question.

The broadcasts shall be done at the direction and under the control of Bustos. Bustos is utilizing the services of GEO Spots, LLC ("GEO") to assist it in this endeavor. In this regard, the placement of the announcements shall be done using a master control device.[1] GEO will be employing proprietary technology (patent pending) which will allow different announcements to be placed on each of the boosters in a synchronized time sequence.

Technical Operations/Interference

During the broadcasts, no changes to the authorized facilities are contemplated. Thus, the stations (the boosters and the primary station) will broadcast consistent with their authorizations.

Reynolds Technical Associated ("Reynolds") was retained to determine the interference by the boosters to any other facilities (i.e. either co-channel, 1st, 2nd or 3rd adjacent). The maps which were prepared by Reynolds are attached in Exhibit A. These maps demonstrate that the interference is identical to that allowed by the Commission in granting the various booster licenses.

Public Interest Considerations

Each of the boosters serve a variety of communities. Exhibit B lists the communities and their respective populations which are encompassed within the service contour of KDUT-FM3 (the Ogden booster); Exhibit C provides the same information with respect to KDUT-FM2 (the Salt Lake City booster); and Exhibit D provides the same information with respect to KDUT-FM5 (the Provo booster).

Exhibit E, utilizing 2000 Census data, provides the demographic breakdown for the area encompassed by each of the boosters. While there are certain similarities between the service areas of the boosters, there are also some significant differences. For example, the Salt Lake City booster serves a significantly larger Hispanic population than either Ogden or Provo. Similarly, the Asian population is greatest in the area served by the Salt Lake City booster but there are few Asians in the area served by the Provo booster. It is submitted that an announcement concerning an event affecting the Asian community (e.g. in the form of a PSA) would have little interest to those residents encompassed within the Provo booster. Bustos intends to broadcast some of the announcements in several foreign languages.

It is also submitted that, independent of ethnicity, the needs of these communities are also different. For example, information relevant to the Salt Lake City schools would not necessarily be relevant to those residents of Provo or Ogden. Separate announcements to each of the communities would clearly be in the public interest.

The instant request is consistent with the Commission's recent focus on the future of information needs of communities. See FCC Launches Examination of the Future of Media and Information Needs of Communities in the Digital Age, DA 10-100, released January 21, 2010.

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[1]GEO has an application pending for a patent for the master control device and associated software that will control the boosters by automated means.

Bustos shall, within thirty (30) days of termination of the experimental authorization, submit a report of the results of the experimental operation. See 73.1510(d). That report shall specifically address the extent any interference presented by the simultaneous operation of the boosters when different broadcasts are being concurrently done.

It is submitted that good cause exists for issuance of the experimental authorization as the instant request satisfies all of the criteria enumerated in Section 73.1510 of the Commission's rules.

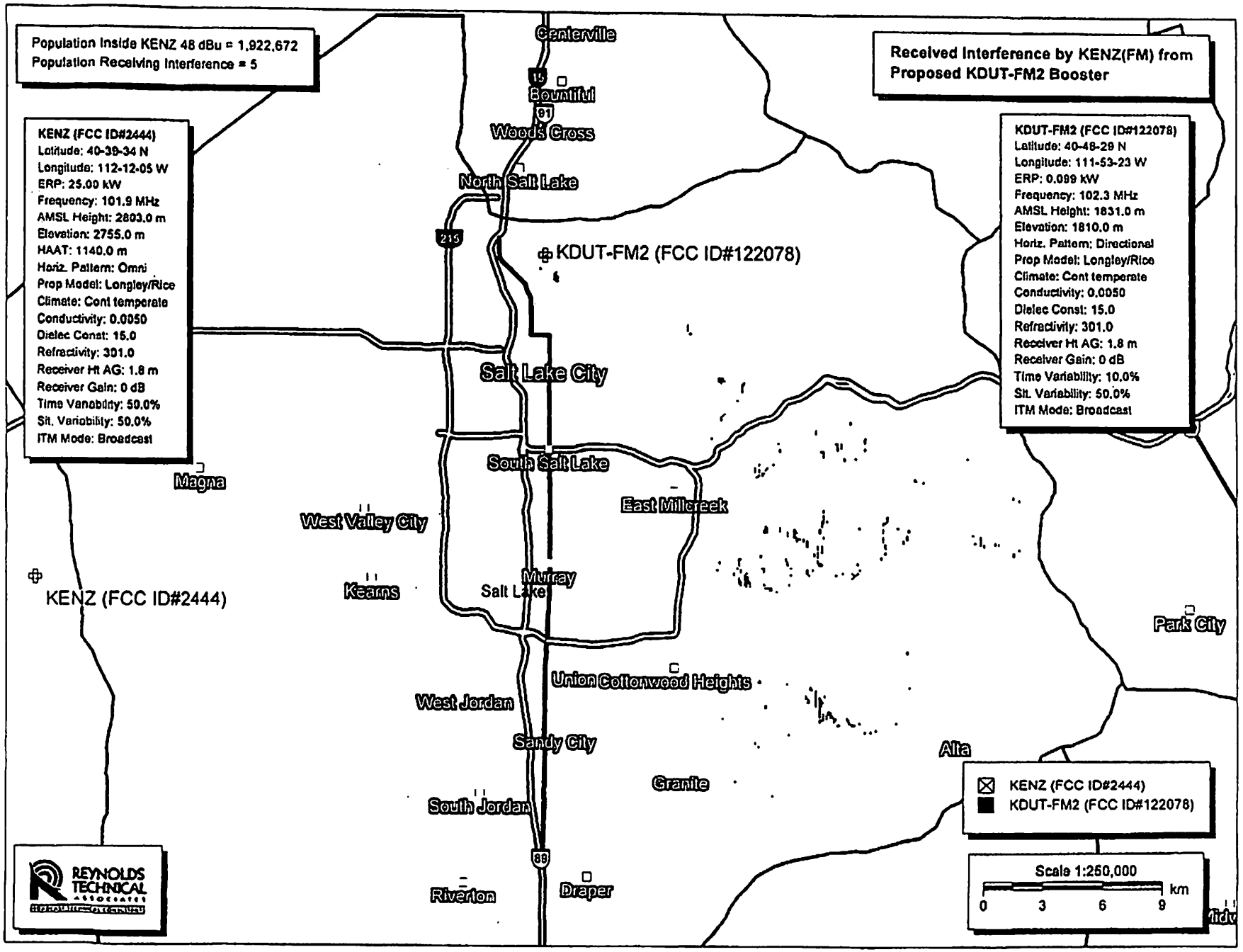
Bustos certifies that neither it nor any party to the application is subject to denial of federal benefits pusuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

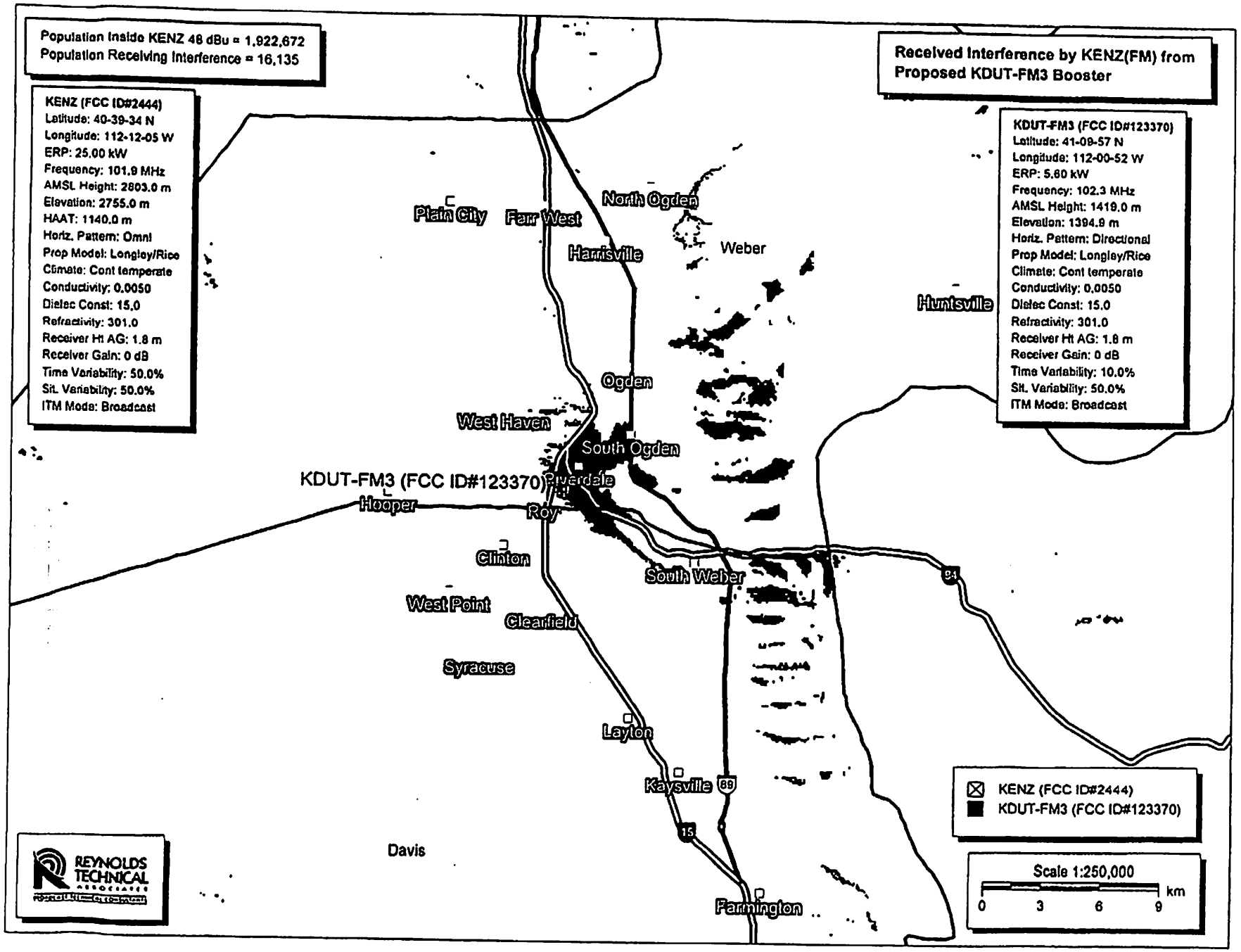
Respectfully submitted,

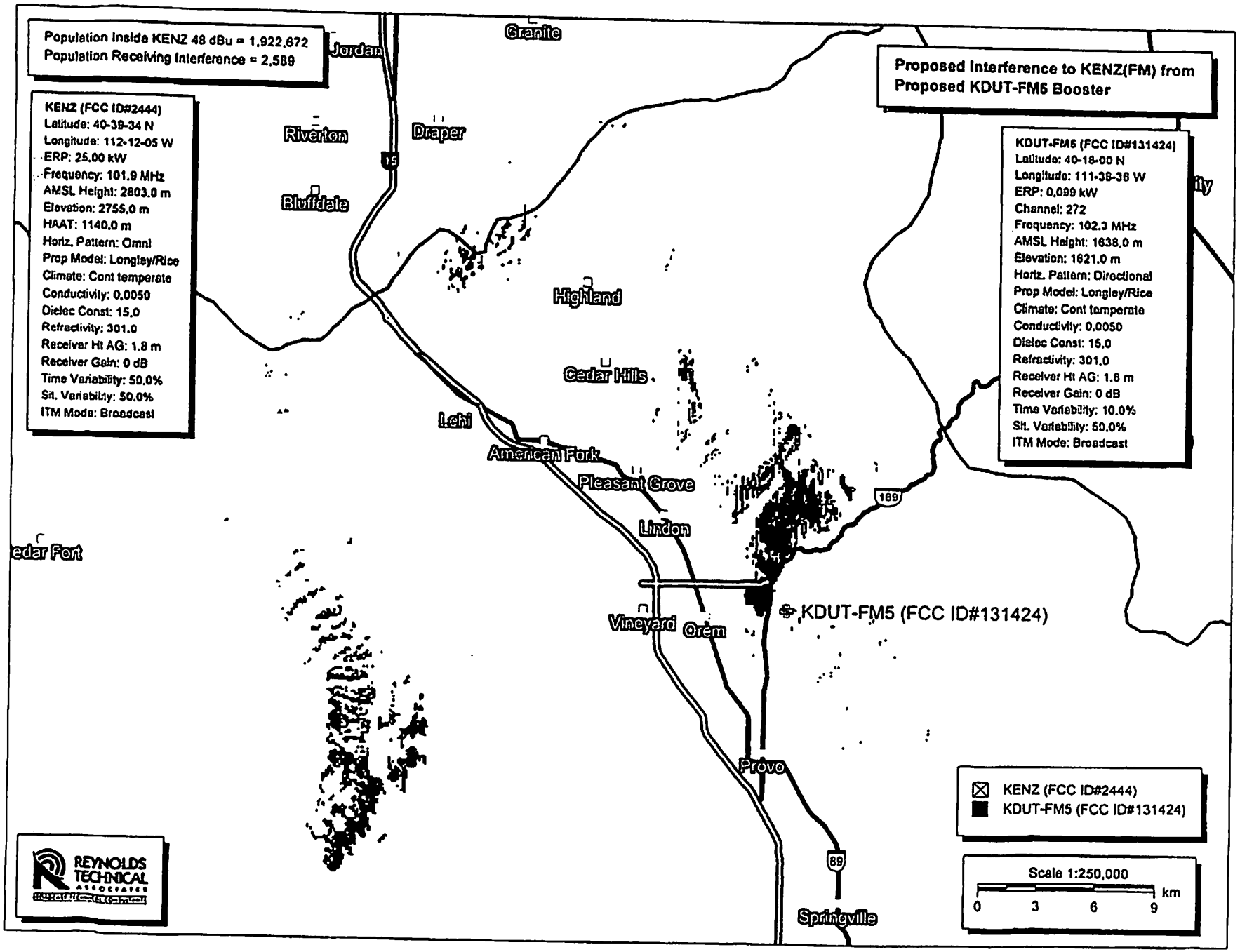
BUSTOS MEDIA OF UTAH LICENSE, LLC

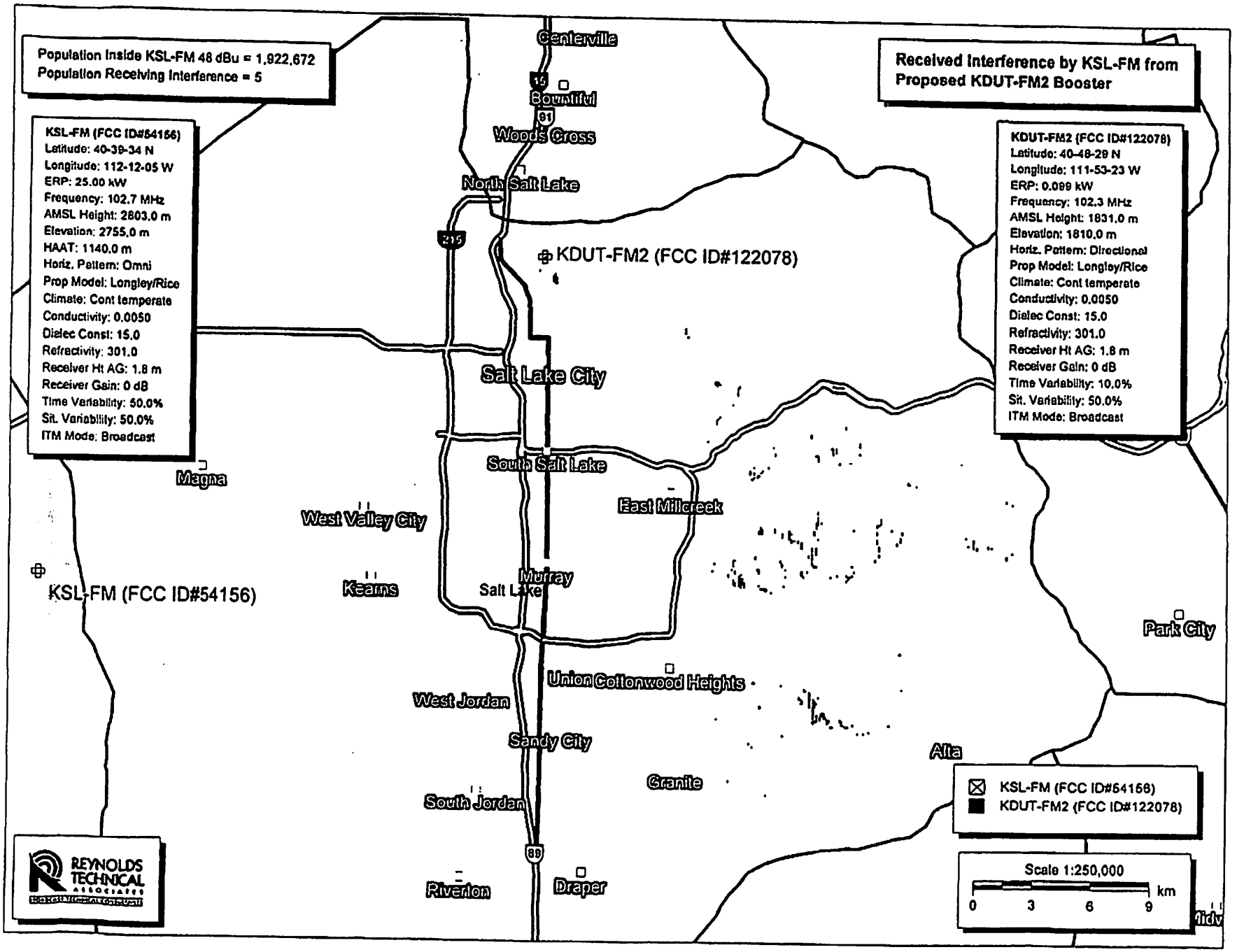
By: _____
Francisco R. Montero
Fletcher Heald & Hildreth, PLC
Its Counsel

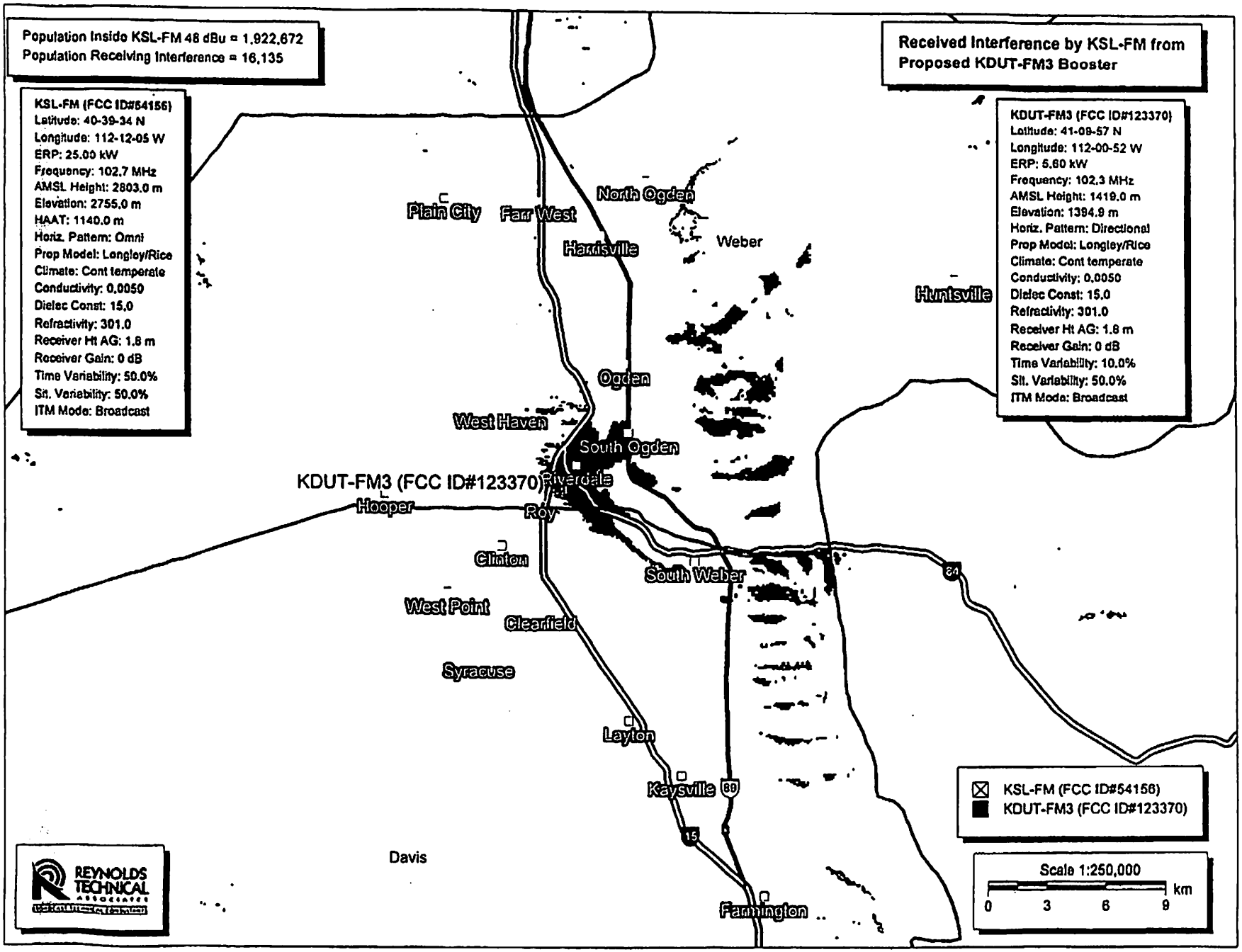
EXHIBIT A

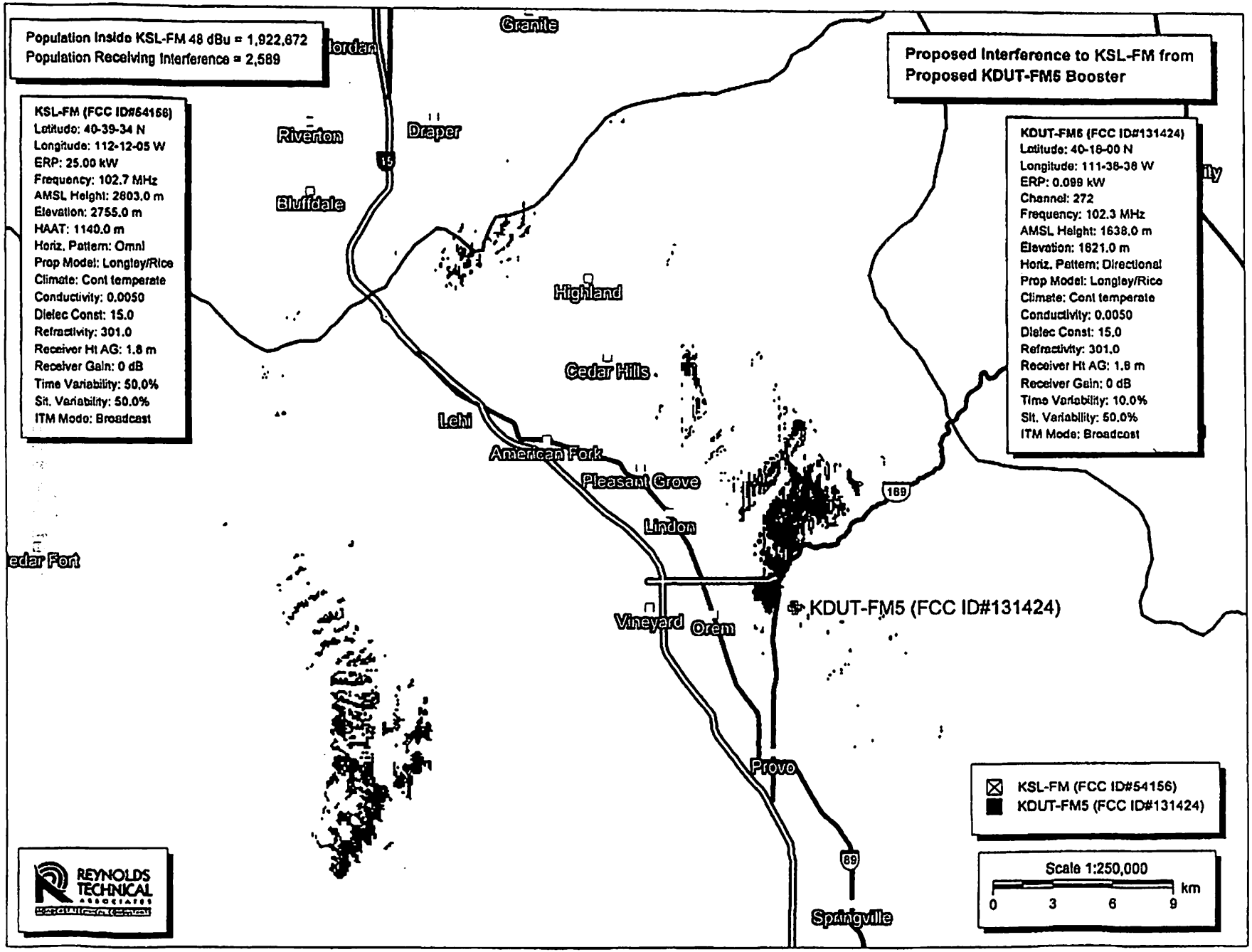

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 5
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KENZ(FM) from Proposed KDUT-FM2 Booster
KDUT-FM2 (FCC ID#122078)
Latitude: 40-46-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
East Millcreek
West Valley City
KENZ (FCC ID#2444)
Kearns
Murray
Salt Lake
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KENZ (FCC ID#2444)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0 3 6 9
REYNOLDS TECHNICAL ASSOCIATES

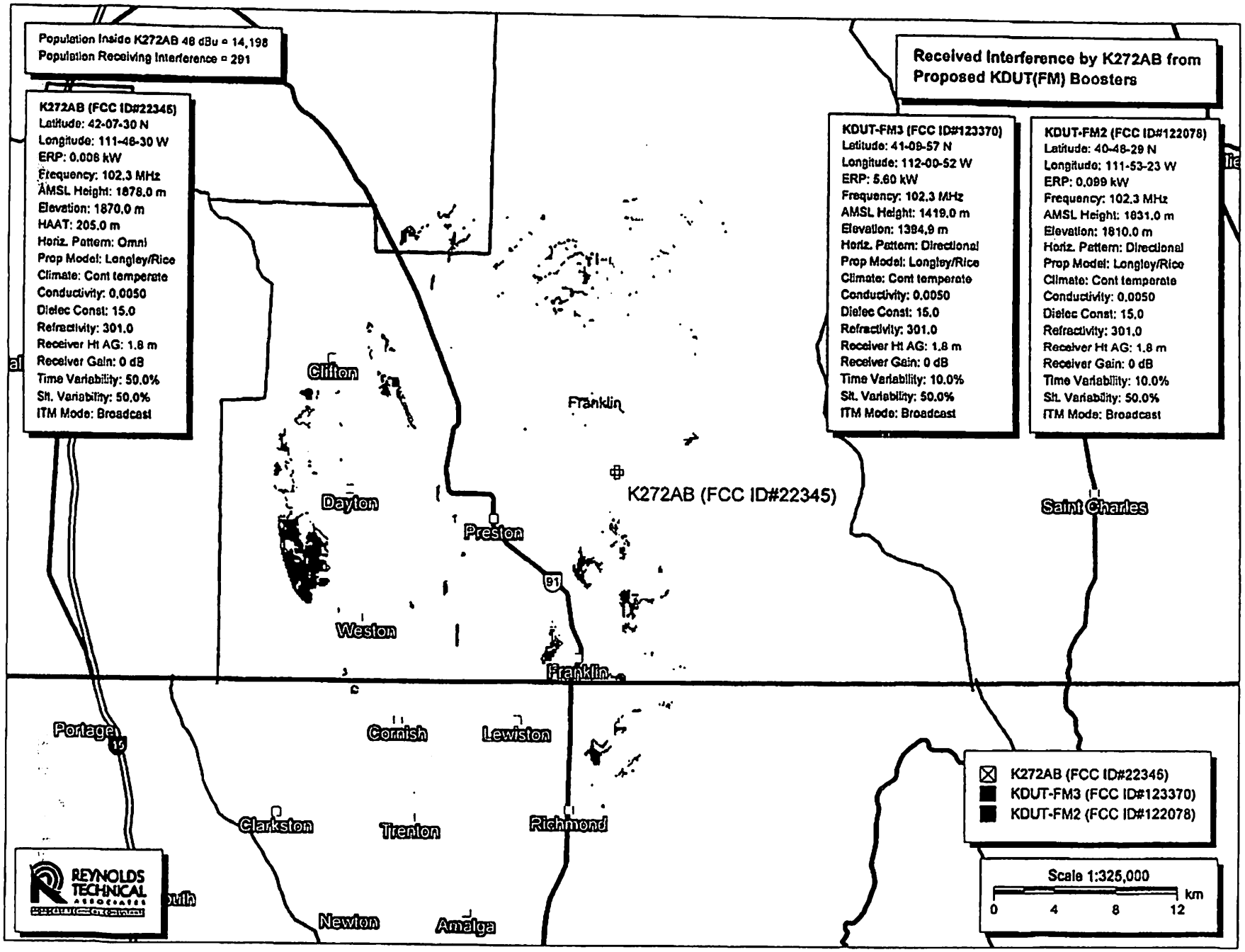

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 16,135
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KENZ(FM) from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
KDUT-FM3 (FCC ID#123370)
Riverdale
Hooper
Roy
Clinton
South Weber
84
West Point
Clearfield
Syracuse
Layton
Kaysville
89
15
Davis
Farmington
KENZ (FCC ID#2444)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES

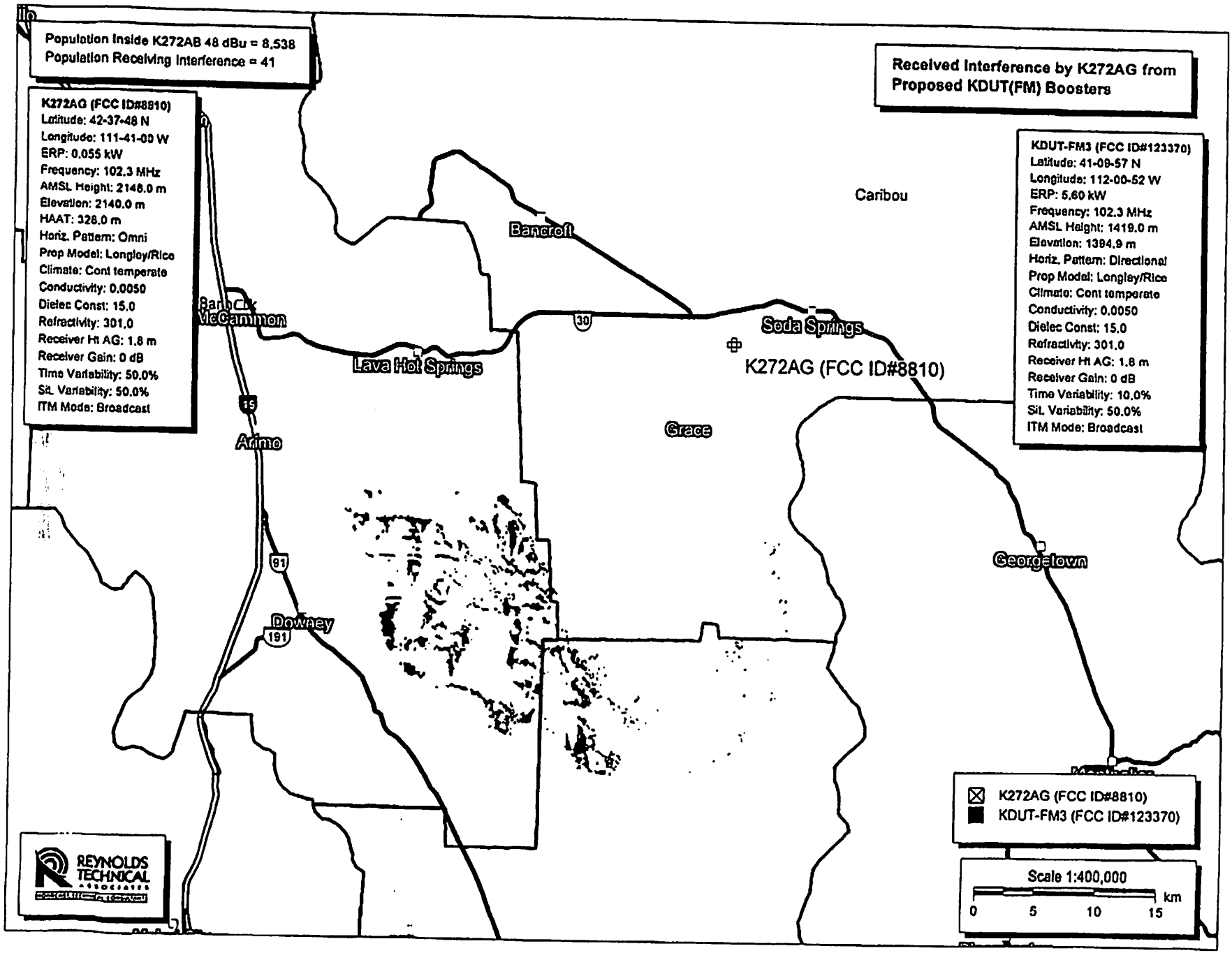

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KENZ(FM) from
Proposed KDUT-FM5 Booster
KDUT-FM5 (FCC ID#131424)
Latitude: 40-16-00 N
Longitude: 111-38-36 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
Vineyard
Orem
Provo
Springville
edar Fort
KDUT-FM5 (FCC ID#131424)
15
189
89
KENZ (FCC ID#2444)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
0 3 6 9 km
REYNOLDS TECHNICAL ASSOCIATES

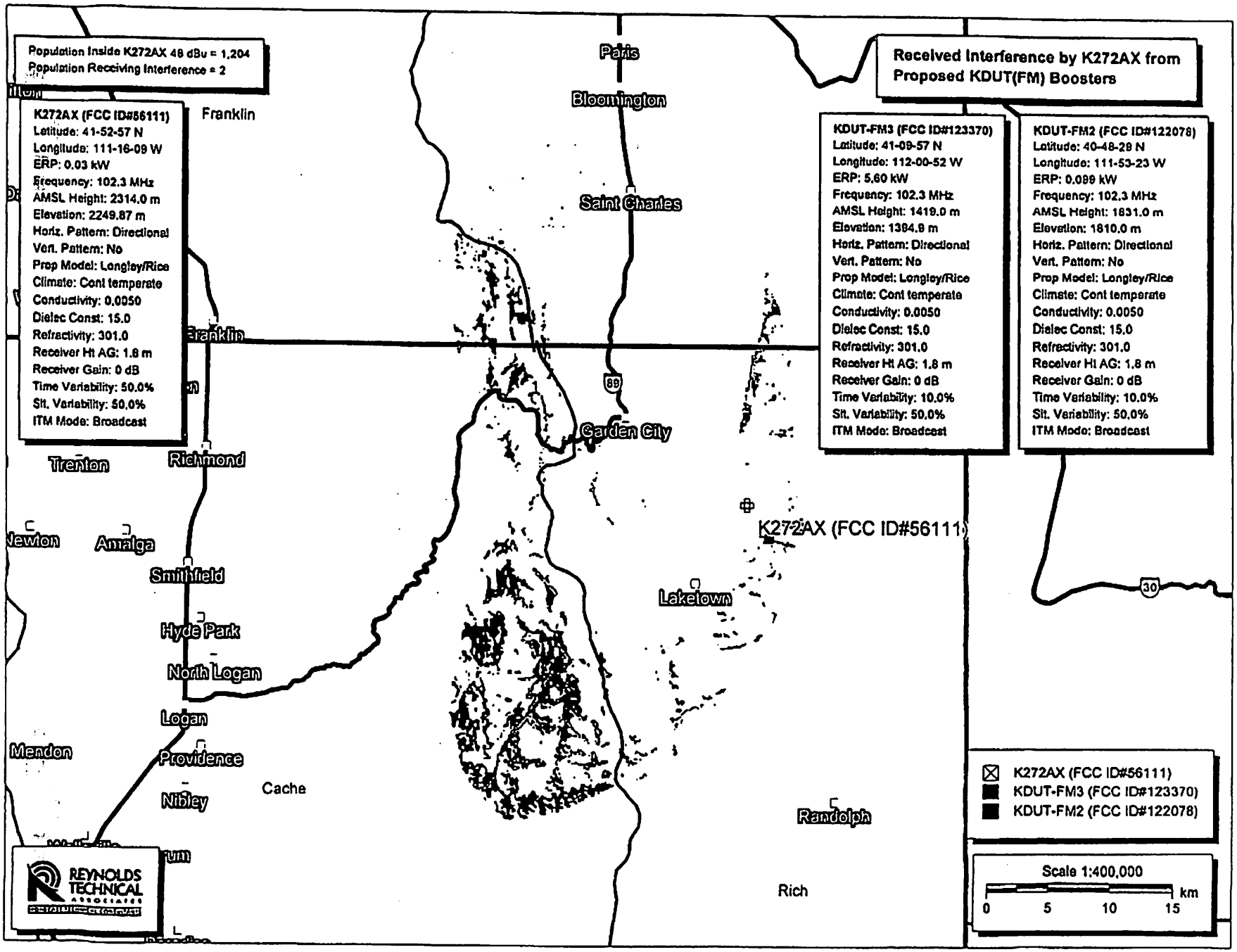

Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 5
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM2 Booster
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
West Valley City
East Millcreek
KSL-FM (FCC ID#54156)
Kearns
Murray
Salt Lake
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KSL-FM (FCC ID#54156)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 16,135
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1384.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
KDUT-FM3 (FCC ID#123370)
Riverdale
Hooper
Roy
Clinton
South Weber
West Point
Clearfield
Syracuse
Layton
Kaysville
Davis
Farmington
84
89
15
KSL-FM (FCC ID#54156)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KSL-FM from
Proposed KDUT-FM5 Booster
KDUT-FM5 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
Vineyard
Orem
Provo
Springville
Cedar Fort
15
89
189
KDUT-FM5 (FCC ID#131424)
KSL-FM (FCC ID#54156)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
0 3 6 9 km
REYNOLDS TECHNICAL ASSOCIATES


Population Inside K272AB 48 dBu = 14,198
Population Receiving Interference = 291
Received Interference by K272AB from Proposed KDUT(FM) Boosters
K272AB (FCC ID#22345)
Latitude: 42-07-30 N
Longitude: 111-48-30 W
ERP: 0.008 kW
Frequency: 102.3 MHz
AMSL Height: 1878.0 m
Elevation: 1870.0 m
HAAT: 205.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Clifton
Franklin
Dayton
Preston
Weston
Franklin
Saint Charles
Portage
Cornish
Lewiston
Clarkston
Trenton
Richmond
Newton
Amalga
K272AB (FCC ID#22345)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:325,000
km
0
4
8
12
REYNOLDS TECHNICAL ASSOCIATES


Population Inside K272AB 48 dBu = 8,538
Population Receiving Interference = 41
K272AG (FCC ID#8810)
Latitude: 42-37-48 N
Longitude: 111-41-00 W
ERP: 0.055 kW
Frequency: 102.3 MHz
AMSL Height: 2148.0 m
Elevation: 2140.0 m
HAAT: 328.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by K272AG from Proposed KDUT(FM) Boosters
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Caribou
Bancroft
Soda Springs
K272AG (FCC ID#8810)
Lava Hot Springs
Grace
Arimo
Downey
Georgetown
30
15
91
191
REYNOLDS TECHNICAL ASSOCIATES
K272AG (FCC ID#8810)
KDUT-FM3 (FCC ID#123370)
Scale 1:400,000
0 5 10 15 km


Population Inside K272AX 48 dBu = 1,204
Population Receiving Interference = 2
Received Interference by K272AX from Proposed KDUT(FM) Boosters
K272AX (FCC ID#56111)
Latitude: 41-52-57 N
Longitude: 111-16-09 W
ERP: 0.03 kW
Frequency: 102.3 MHz
AMSL Height: 2314.0 m
Elevation: 2249.87 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1384.9 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-28 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Paris
Bloomington
Saint Charles
Franklin
Garden City
Trenton
Richmond
Newton
Amalga
Smithfield
Hyde Park
North Logan
Logan
Mendon
Providence
Nibley
Cache
Lakeltown
Randolph
Rich
K272AX (FCC ID#56111)
89
30
K272AX (FCC ID#56111)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:400,000
km
0
5
10
15
REYNOLDS TECHNICAL ASSOCIATES

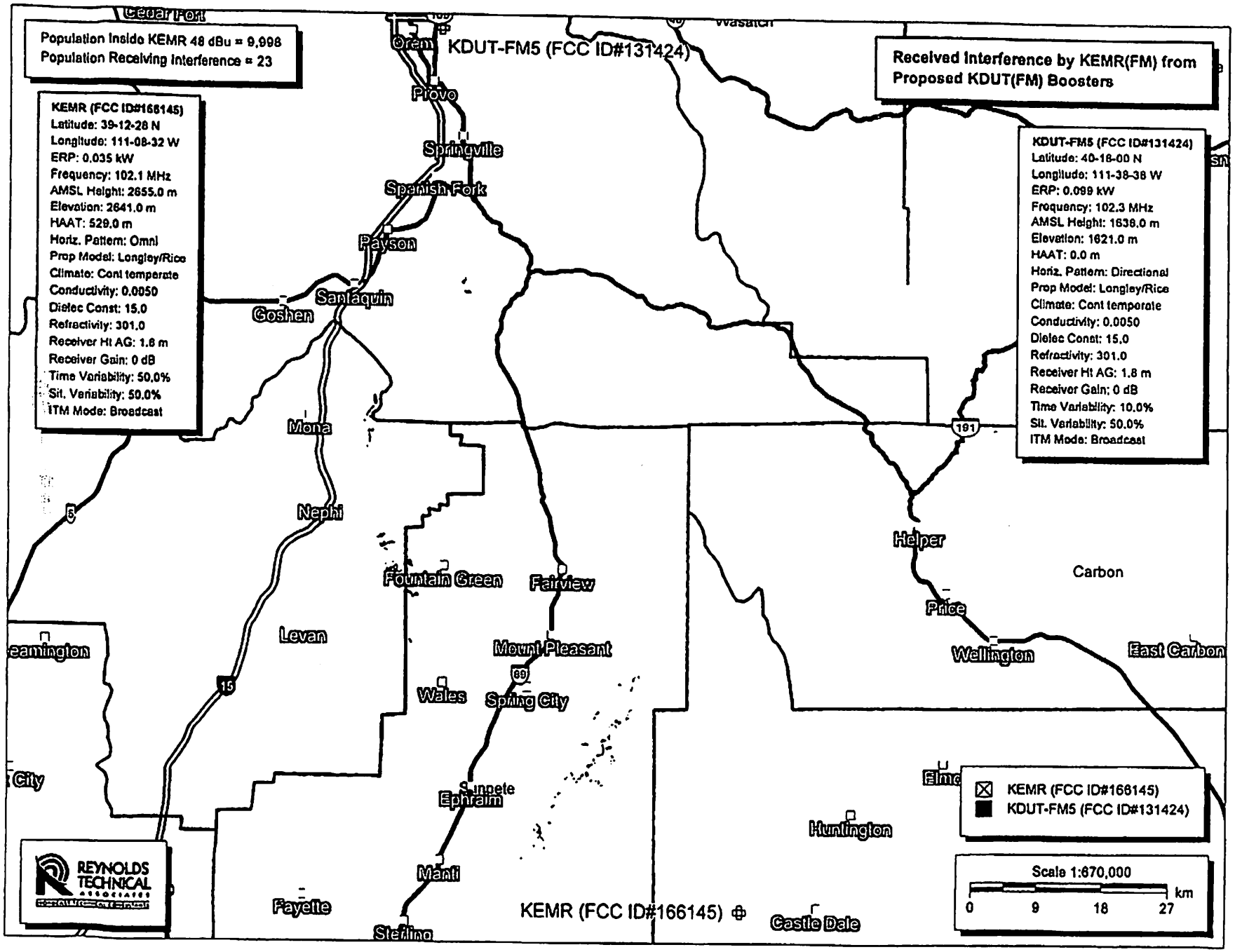

Population Inside KEMR 48 dBu = 9,998
Population Receiving Interference = 23
KEMR (FCC ID#166145)
Latitude: 39-12-28 N
Longitude: 111-08-32 W
ERP: 0.035 kW
Frequency: 102.1 MHz
AMSL Height: 2655.0 m
Elevation: 2641.0 m
HAAT: 529.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM5 (FCC ID#131424)
Received Interference by KEMR(FM) from Proposed KDUT(FM) Boosters
KDUT-FM5 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
HAAT: 0.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Cedar Fort
Orem
Provo
Springville
Spanish Fork
Payson
Santaquin
Goshen
Mona
Nephi
Levan
Fountain Green
Fairview
Mount Pleasant
Wales
Spring City
Ephraim
Manti
Fayette
Sterling
Helper
Carbon
Price
Wellington
East Carbon
Huntington
Castle Dale
191
15
69
KEMR (FCC ID#166145)
KDUT-FM5 (FCC ID#131424)
Scale 1:670,000
0 9 18 27 km
REYNOLDS TECHNICAL ASSOCIATES

EXHIBIT B

Population within KDUT-FM3 Contour (Ogden)

Brigham City (18,709)
Mantua (756)
Perry (3,889)
Willard (1,747)
South Willard* (586)
North Ogden (17,682)
Pleasant View (7,052)
Plain City (5,288)
Farr West (5,335)
Marriott-Slaterville (1,537)
Ogden (82,865)
Huntsville (653)
West Haven (8,357)
Riverdale (8,126)
Roy (35,672)
Hooper* (5,665)
South Ogden (15,891)
South Weber (6,167)
Sunset (4,945)
Clinton (19,855)
Clearfield (27,851)
West Point (9,001)
Syracuse (22,195)
Layton (65,514)

(* Denotes CDP)

EXHIBIT C

Population within KDUT-FM2 Contour (Salt Lake City)

Farmington (17,217)
Centerville (15,270)
West Bountiful (5,337)
Bountiful (44,473)
Woods Cross (8,705)
North Salt Lake (13,446)
Salt Lake City (181,698)
Magna* (22,770)
West Valley City (123,447)
Canyon Rim* (10,428)
South Salt Lake (21,607)
Millcreek* (30,377)
East Millcreek* (21,385)
Mount Olympus* (7,103)
Taylorsville (58,785)
Kearns* (33,659)
Murray (46,201)
Oquirrh* (10,390)
Cottonwood West* (18,727)
Holladay (25,676)
Midvale (28,129)
Cottonwood Heights* (35,418)
Little Cottonwood Creek Valley* (7,221)
Sandy (96,660)
West Jordan (104,447)
South Jordan (51,131)
Herriman (17,689)
Riverton (39,751)
Bluffdale (8,016)
Draper (42,317)
Alpine (9,885)
Highland (16,189)
Lehi (46,802)

(* Denotes CDP)

EXHIBIT D

Population within KDUT-FM52 Contour (Provo)

American Fork (27,064)
Pleasant Grove (33,798)
Lindon (10,466)
Vineyard (148)
Orem (93,250)
Provo (118,581)
Palmyra* (485)
Lake Shore* (755)
Springville (28,520)
Spanish Fork (31,538)

(* Denotes CDP)

EXHIBIT E

Ogden booster

Total Population: 257,686

White:	214,675
Black:	3,673
Hispanic:	29,965
Native American:	1,602
Asian:	3,578
Pacific Islander:	407
Mixed Race:	3,579
Other:	207

Salt Lake City booster

Total Population: 983,981

White:	807,523
Black:	8,730
Hispanic:	109,569
Native American:	6,780
Asian:	23,510
Pacific Islander:	11,145
Mixed Race:	15,751
Other:	973

Provo booster

Total Population: 308,005

White:	272,198
Black:	943
Hispanic:	22,989
Native American:	1,695
Asian:	3,669
Pacific Islander:	1,965
Mixed Race:	4,253
Other:	293

ATTACHMENT B

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

March 29, 2010

Francisco R. Montero, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209-3801

In re: Bustos Media of Utah License, LLC
KDUT (FM), Randolph, Utah
Facility Identification Number: 88272
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed March 9, 2010, on behalf of Bustos Media of Utah License, LLC ("BMU"), licensee of Station KDUT(FM), Randolph, Utah[1], and several associated FM Booster Stations[2]. BMU proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on the FM Booster stations. BMU proposes to simultaneously broadcast different noncommercial announcements, targeted to specific, diverse audiences, on each of the booster stations. BMU proposes to use proprietary technology provided by GEO Spots, LLC, which will allow different announcements to be placed on each of the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. BMU states that the experimental broadcasts will be conducted over a 30-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that BMU will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing in addition to the proposed 30-day experimentation, a term of 60 days is appropriate.

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[1] KDUT is licensed for operation on Channel 272C (102.3 MHz), with effective radiated power of 89 kilowatts (H only) and antenna height above average terrain of 647 meters.

[2] KDUT-FM1, Bountiful, UT; KDUT-FM2, Salt Lake City, UT; KDUT-FM3, Ogden, UT; KDUT-FM5, Provo, UT.

Accordingly, the request for Experimental Authorization IS GRANTED. Station KDUT may transmit independent, noncommercial announcements on its associated FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted, only to the extent necessary for the proposed experimentation. BMU shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, BMU shall file a full report of the research, experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Any construction undertaken pursuant to this authority is entirely at BMU's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **May 29, 2010**.

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Bustos Media of Utah License, LLC
Aaron P. Shainis, Esq. (Counsel for GEO Spots, LLC)

ATTACHMENT C

Shainis & Peltzman, Chartered

Counselors at Law

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July 29, 2010

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VIA HAND DELIVERY

Marlene H. Dortch, Esq.
Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW-A325
445 12th Street, SW
Washington, D.C. 20554

Re: KDUT(FM), Randolph, Utah
Experimental Test Result

Dear Ms. Dortch:

Lazer Spots, LLC (formerly GEO Spots, LLC) submits the following report that was done pursuant to the Commission's March 29, 2010 issuance of an experimental authorization to be used with the above-referenced station. If there are any questions with respect to this matter, please communicate with the undersigned.

Sincerely yours,

Aaron P. Shainis

Aaron P. Shainis
Counsel for
Lazer Spots, LLC

STAMP & RETURN

Report to the FCC on the Lazer Spots, LLC Bustos Media of Utah License, LLC KDUT(FM) Experimental Test Report

Lazer Spots, LLC
737 North Michigan Avenue
Suite 2350
Chicago, IL 60611

July 15, 2010

Table of Contents

I. EXECUTIVE SUMMARY

BACKGROUND FOR TEST AUTHORITY

On March 9, 2010, Bustos Media of Utah License, LLC ("BMU"), the licensee of KDUT(FM), Randolph, Utah; KDUT-FM1, Bountiful, Utah; KDUT-FM2, Salt Lake City, Utah; KDUT-FM3, Ogden, Utah; and KDUT-FM5, Provo, Utah submitted a request for an experimental authorization (Attachment A). In that request, BMU, in conjunction with the assistance of Lazer Spots, LLC (formerly GEO Spots, LLC), sought Commission approval to allow it to utilize boosters associated with KDUT to originate limited programming. Specifically, the intent was to simultaneously broadcast of each of the aforementioned boosters different non-commercial announcements targeted to discreet audiences. The broadcasts were to be targeted to appeal to specific audiences encompassed within the booster's service areas. The proposal was for each of the boosters in question to concurrently broadcast a different non-commercial message.

On March 29, 2010, the Commission granted the experimental authorization (Attachment B). The authorization specified that "within 60 days following completion of the experimental operation authorized herein, BMU shall file a report of the research, experimentation and results with the Commission pursuant to Section 73.1510(d)."

On May 26, 2010, an additional 60 days was requested to complete the experimental broadcasts (Attachment C). On June 3, 2010 the Commission granted the request and extended the testing through August 3, 2010 (Attachment D).

GENERAL DESCRIPTION OF TEST

Conventionally planned FM broadcasting networks consist of transmitters with independent program signals on individual FM radio frequencies as allocated and regulated by the FCC. The allocation of the radio frequency for each transmitter and protected service and interference contours are defined by the FCC in Part 73 of Title 47 and FM Translator and Booster Rules in Part 74. Boosters are defined as transmitters which broadcast within Main station's coverage area (a "fill-in") on the same channel and frequency, and were created to allow FM stations to provide supplementary service to areas in which direct reception of radio service is unsatisfactory due to distance or intervening terrain barriers. Lazer Spots, LLC has developed a system that will allow an FM radio station to divide its signal into segments with the use of proprietary booster system design, audio and control switching, routing, hardware, software and implementation techniques. This new idea would allow the station to run different audio messages, such as Public Service Announcements (PSAs) on different booster transmitters simultaneously, thereby creating additional time capacity for such announcements. Lazer Spots™ holds a patent pending application for "Equipment, System and Methodologies for Segmentation of Listening Area into Sub-Areas Enabling Delivery of Localized Auxiliary Information". The concept of adding FM boosters to an existing FM broadcast station within the protected service area of the main station and specifically designed for targeted messaging is an expertise of Lazer Spots, LLC. It allows the ability to target listeners with more local relevant information as well as free up valuable broadcast messaging time.

The KDUT broadcast system has four boosters covering four distinct areas: Ogden, Bountiful, Salt Lake City, and Provo, UT.

MAIN	KDUT	41° 15' 55.00" N	110° 33' 20.00" W	89.00 kW ERP
BOUNTIFUL BOOSTER	KDUT-FM1	40° 50' 5.00 " N	111° 52' 3.00 " W	0.099 kW ERP
SALT LAKE CITY BOOSTER	KDUT-FM2	40° 48' 29.00" N	111° 53' 23.00" W	0.099 kW ERP
OGDEN BOOSTER	KDUT-FM3	41° 09' 57.00" N	112° 00' 52.00" W	5.600 kW ERP
PROVO BOOSTER	KDUT-FM5	40° 18' 0.00 " N	111° 38' 38.00" W	0.099 kW ERP

Table One: Booster Locations

In the KDUT(FM) FCC defined service contour (60 dBμV/m), the four boosters create four distinct coverage areas, in terms of RF isolation and segregated markets. Distinct Public Service Announcements (PSAs) were tested as each market area was broadcasting a distinct PSA spot at the same time.

The tests as presented in this report were performed in June 23-26 of 2010, after modifications to the broadcast audio distribution (within the studio and in the studio-to-transmitter (STL) links) system were made to implement the targeted messaging concept.

In terms of market test locations, it is well known that the Salt Lake City market is favorable with regards to implementation of boosters, to increase signal level due to terrain blockage and mitigate multipath interference due to reflections from the surrounding terrain. It is important to note that in the test of KDUT(FM), no modifications to the main KDUT(FM) broadcast transmitter nor to any of the four KDUT(FM) boosters were implemented to the effective radiated RF power, broadcast antennas or geographical locations. Given the favorable results obtained and presented in this report we believe this is a very significant actuality.

CONCLUSION

The results of the testing, which occurred on June 23-26 of 2010, demonstrate that not only is the concept technically feasible but it is also of great value to the future of terrestrial FM radio broadcasting. Specifically, different announcements were broadcast to separate and discreet listeners concurrently. The quality of the announcements was not impaired to any significant degree. The attached audio clips for each of the measurement locations are provided for subjective verification of these results.

II. SUMMARY OF TEST RESULTS

Conventionally planned broadcasting networks consist of transmitters with independent program signals and with individual radio frequencies. The allocation of the radio frequency for each transmitter and protected service and interference contours are defined by the FCC in Part 73 of Title 47 and FM Translator and Booster Rules in Part 74. Lazer Spots, LLC has developed a proprietary (Lazer Spots™) system and technology that will allow a broadcast FM radio station

to divide its signal into segments with the use of carefully engineered booster transmission points. This new concept would allow the broadcaster to run different audio messages, such as Public Service Announcements (PSAs) on different booster transmitters simultaneously, thereby creating additional time capacity for such announcements. It allows the ability to target their listeners with more specific (i.e. hyper-local) relevant information, as it increases valuable broadcast messaging time.

The Lazer Spot™ approach is considerably different from the conventional broadcast coverage enhancement-only approach in that the purpose is to broadcast specific Public Service Announcements (PSAs) to a specific geographical area and potentially demographical listening audience, for a limited amount of broadcast time. For example, in this test two or three 30 second Targeted spots were broadcast, three to four times per hour.

It is common for FM analog booster implementations to create some amount of interference. The Lazer Spots™ proprietary system is designed to i) minimize interference in general using its patent pending design technology and software and routing capabilities, and ii) placing the simulcast interference areas that occur where there exists diminutive population counts and demographically determined non-listeners of the specific broadcast station. It is also important to point out that the overall benefit of the targeted messaging approach far outweighs the relatively small interference that occurs with booster implementations, especially when the design is such that it is engineered to minimize this occurrence to the listening public.

In the KDUT(FM) test, the submitted audio clips were recorded in the field from 6/23/2010 to 6/25/2010. Audio information was collected at 20 geographical locations and described in detail later in this report. At each of the 20 test locations, a measurement of the 'Non-Targeted', normal simulcast audio were made for a single PSA spot. This is referred to as the reference PSA spot and used as a comparative reference to the 'Targeted' spot. For the targeted-test mode, distinct spots were broadcast on each adjacent booster. These spots were not in simulcast synchronization mode, as normally would be the case. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the Non-Targeted PSA spot.

The results in this report indicate an objective 'before and after' analysis of the Non-Targeted and Targeted Audio spots. The audio clips for each of the measurement locations is also provided with this report for subjective analysis, which correlate very well based on listener feedback. In fact, under no case could the Non-Targeted audio be considered imperceptible, as defined in this report under ITU-R definitions. In fact, for the measured tests the average statistical difference between the objective audio quality measurements for the Non-Targeted and Targeted Audio spots are a mere 1%. If the guidelines for quality measurements of rounding to the nearest tenth of a decimal were made as suggested by the ITU-R[1], then NO objective perceptible difference is found on average for the KDUT-FM test. This is exciting, ground breaking news as Lazer Spots, LLC did not modify the commercially operating RF broadcast transmission parameters of KDUT-FM as previously mentioned.

[1] RECOMMENDATION ITU-R BS.1284-1*General methods for the subjective assessment of sound quality

III. FIELD TEST PROCEDURE

BOOSTER LOCATIONS

The KDUT broadcast system has four boosters covering four distinct areas: Ogden, Bountiful, Salt Lake City, and Provo, UT. The tests presented in this report were performed from June 23-26 of 2010, after modifications to the broadcast audio distribution (within the studio and in the studio-to-transmitter (STL) links) system were made to implement the targeted messaging concept.

MAIN	KDUT	41° 15' 55.00" N	110° 33' 20.00" W	89.00 kW ERP
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OGDEN BOOSTER	KDUT-FM3	41° 09' 57.00" N	112° 00' 52.00" W	5.600 kW ERP
PROVO BOOSTER	KDUT-FM5	40° 18' 0.00 " N	111° 38' 38.00" W	0.099 kW ERP

Table Two: Booster Locations

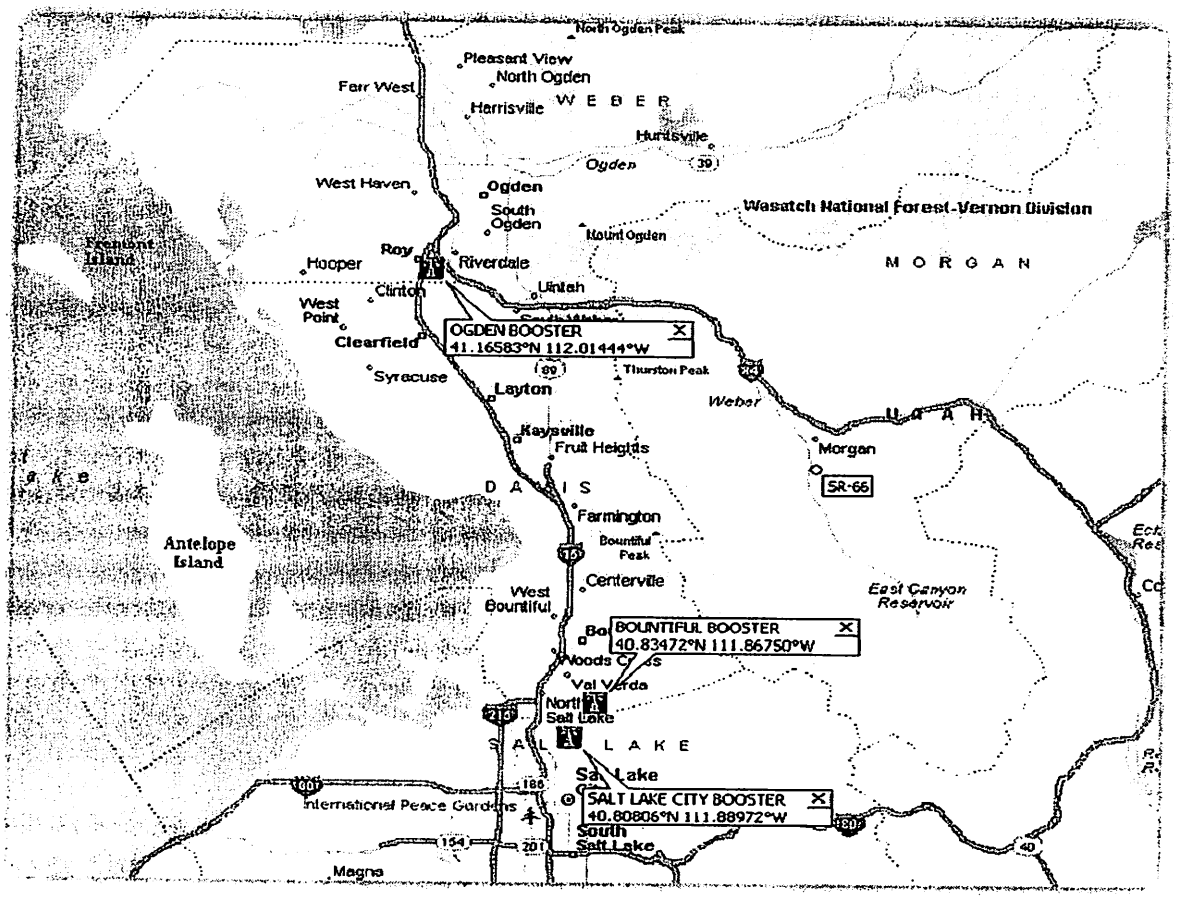

Figure One: North Booster Locations

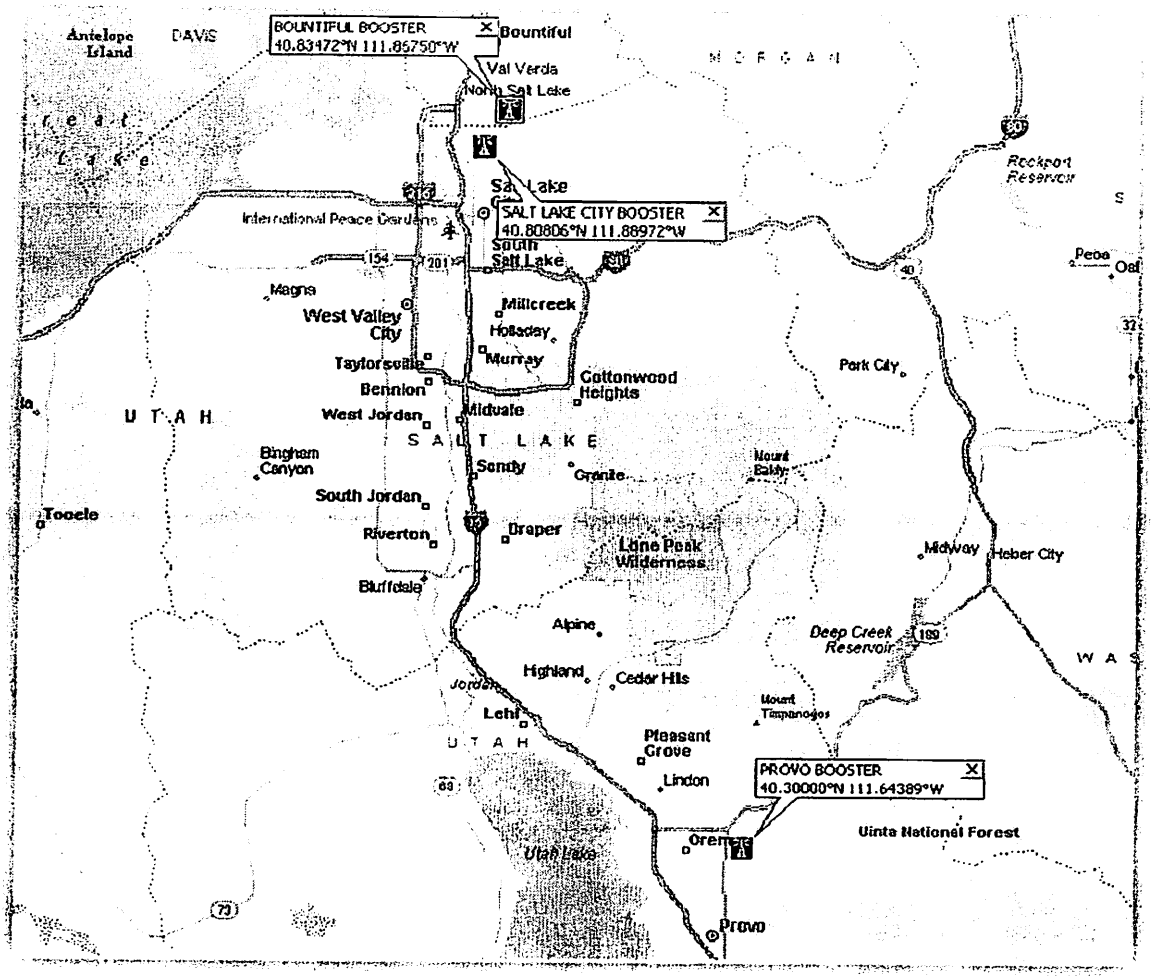

Figure Two: South Booster Locations

DRIVE TEST LOCATIONS

Preliminary testing occurred on 6/1/2010 to 6/7/2010 to determine appropriate test locations and drive distances between test locations. It is important to point out that 15 minutes or 30 minutes elapsed between the PSA spots, so drive distances had to be determined- typically 5-10 miles apart, and compensated by roads, construction delays, and alternate routes for high traffic or accidents. A typical test location was in an empty large parking lot with no close obstructions.

The 20 test locations were made in a stationary vehicle with sophisticated RF receiver and measurement software. Extreme care was taken to measure the Non-Targeted PSA spot and Targeted PSA spot (before and after) while the vehicle was within 1-1.5 meters each time, with the same vehicle orientation. With a few exceptions as discussed in the RF analysis section, the results were shown to be very close from a RF signal level measurement for each location. The coverage areas are divided into four maps shown below. This is based on the dominant coverage area for each of the four boosters under study.

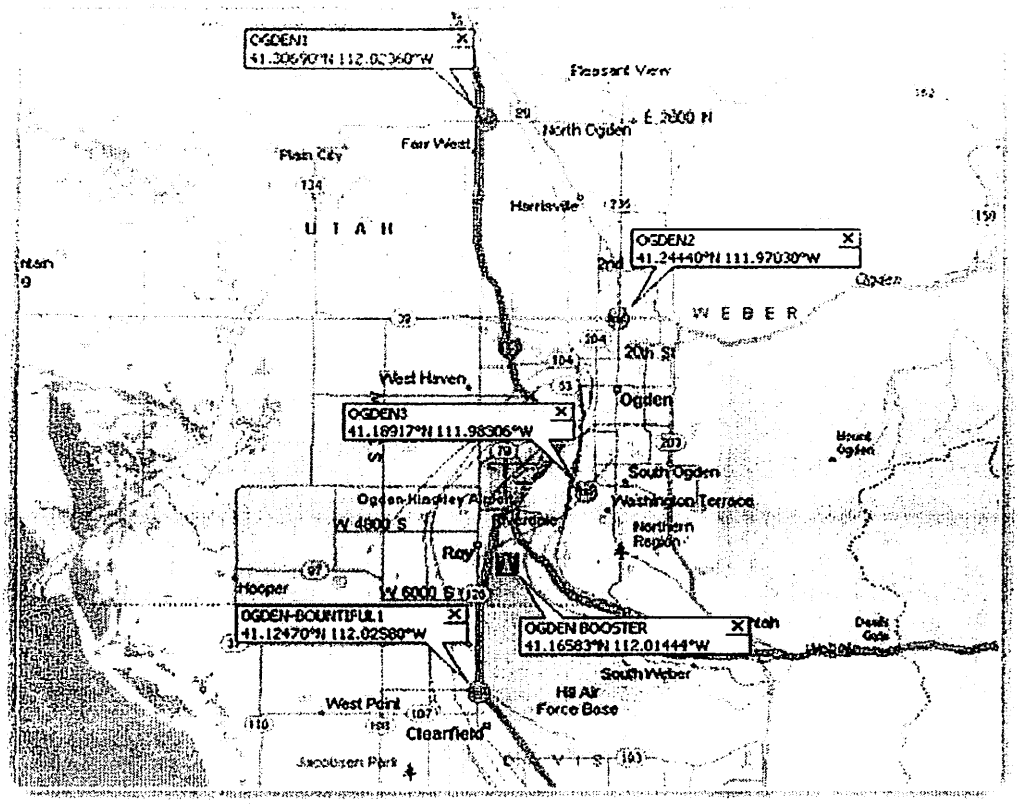

Figure Three: Ogden Test Locations

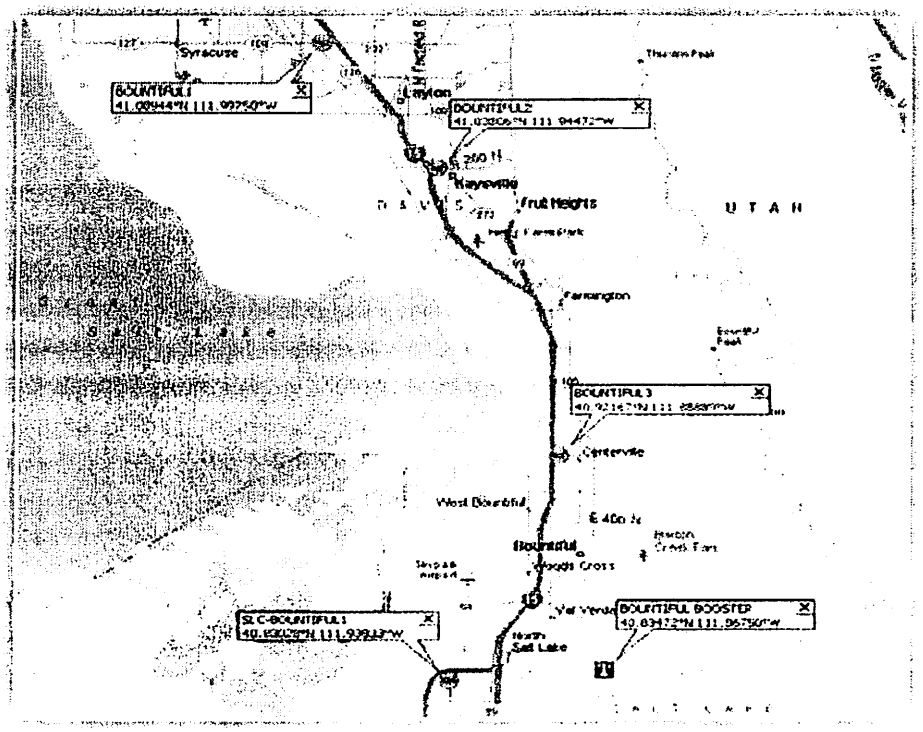

Figure Four: Bountiful Test Locations

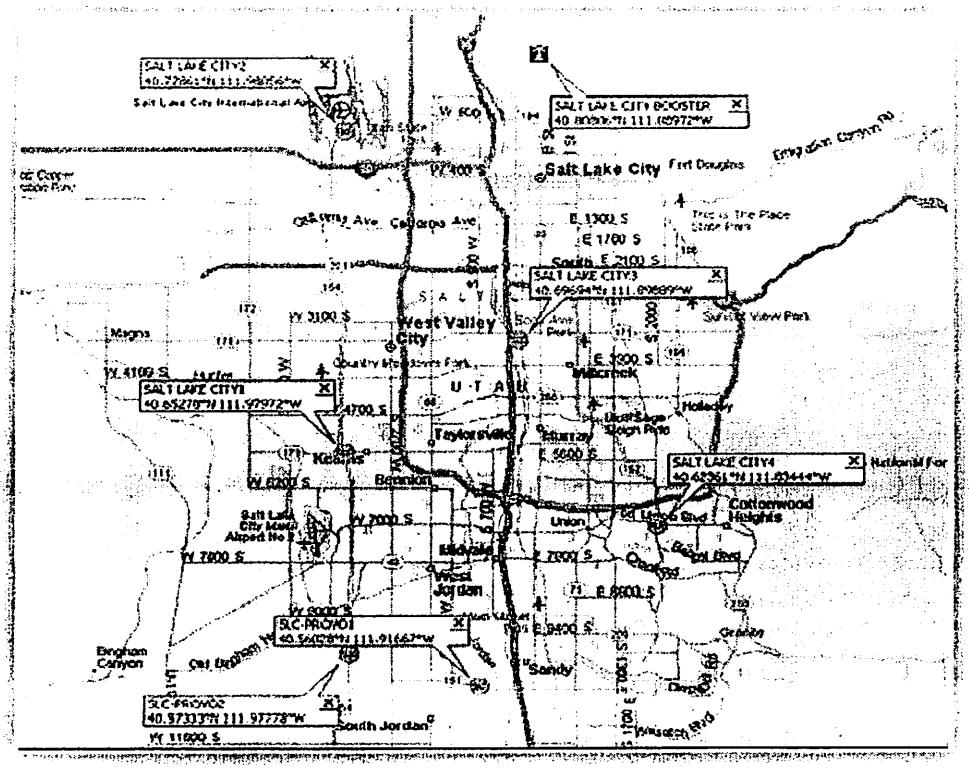

Figure Five: Salt Lake City Test Locations

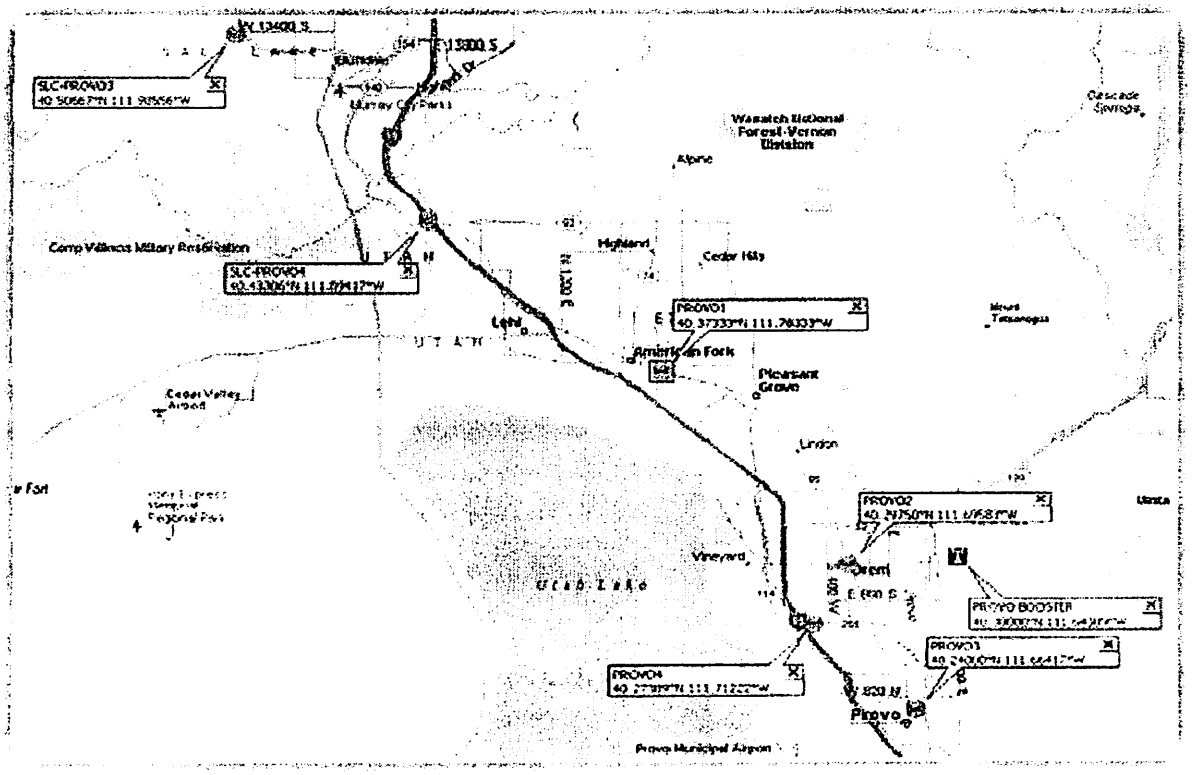

Figure Six: Provo Test Locations

NAMING CONVENTION OF MEASUREMENT LOCATIONS

Each of the 20 test locations was given a name based on both the proximity to the closest booster and the estimated booster coverage zone that it existed. The following table indicates the distances from a test location to relevant booster(s).

COORDINATES		LOCATION	BOOSTER DISTANCE (MILES)			
North	West		Ogden	Bountiful	SLC	Provo
41-18-24.8	112-1-25.0	OGDEN1	9.75	33.59		
41-14-39.8	111-58-13.1	OGDEN2	5.89	28.78		
41-11-21.0	111-58-59.0	OGDEN3	2.30	25.19		
41-7-28.9	112-1-32.9	OGDEN-BOUNTIFUL1	8.17	26.31		
41-5-22.0	111-59-51.0	BOUNTIFUL1	5.35	18.85	19.63	
41-2-17.0	111-56-41.0	BOUNTIFUL2	9.54	14.60	8.35	
40-55-18.0	111-53-20.0	BOUNTIFUL3	18.08	6.10	7.84	
40-49-49.0	111-56-18.0	SLC-BOUNTIFUL1		3.73	2.97	
40-39-10.0	111-58-47.0	SALT LAKE CITY1		13.87	11.71	
40-46-43.0	111-58-50.0	SALT LAKE CITY2		7.08	5.18	
40-41-49.0	111-53-56.0	SALT LAKE CITY3		9.65	7.68	
40-37-25.0	111-50-4.0	SALT LAKE CITY4		14.67	13.05	
40-33-37.0	111-55-0.0	SLC-PROVO1			17.16	23.01
40-34-24.0	111-58-40.0	SLC-PROVO2			16.84	25.80
40-30-24.0	111-59-8.0	SLC-PROVO3			21.40	22.98
40-25-59.0	111-53-39.0	SLC-PROVO4			25.88	16.09
40-22-24.0	111-47-0.0	PROVO1				8.93
40-17-51.0	111-41-45.0	PROVO2				2.75
40-14-24.0	111-39-51.0	PROVO3				4.28
40-16-26.0	111-42-44.0	PROVO4				4.04
41-9-57.0	112-0-52.0	OGDEN BOOSTER				
40-50-5.0	111-52-3.0	BOUNTIFUL BOOSTER				
40-48-29.0	111-53-23.0	SALT LAKE CITY BOOSTER				
40-18-0.0	111-38-38.0	PROVO BOOSTER				

Table Three: Booster Naming Convention

TEST MEASUREMENT EQUIPMENT AND RESULTS

The Audemat-Aztec FM-MC4™ was used to collect the audio samples in the field. The FM-MC4™ is a professionally calibrated FM receiver with a GPS receiver, and all the measurements are automatically logged. It is an FCC approved calibrated receiver supplied with a calibrated antenna.

GoldenEar™ is a software product which was used with the FM-MC4™ Measurement Receiver. It is intended to evaluate the overall quality of an FM station reception through signal measurements and audio recording.

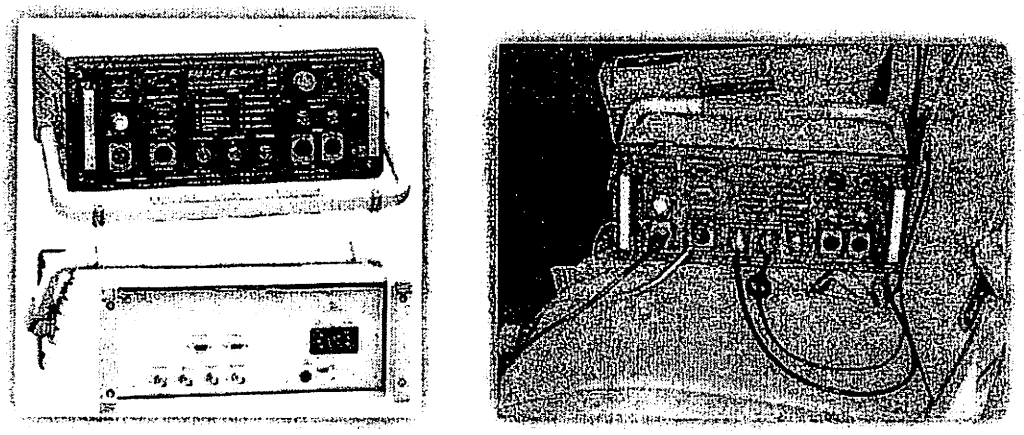

Figure Seven: Audemat FM-MC4™

An example of a GoldenEar™ multipath plot is shown for the Salt Lake City test locations:

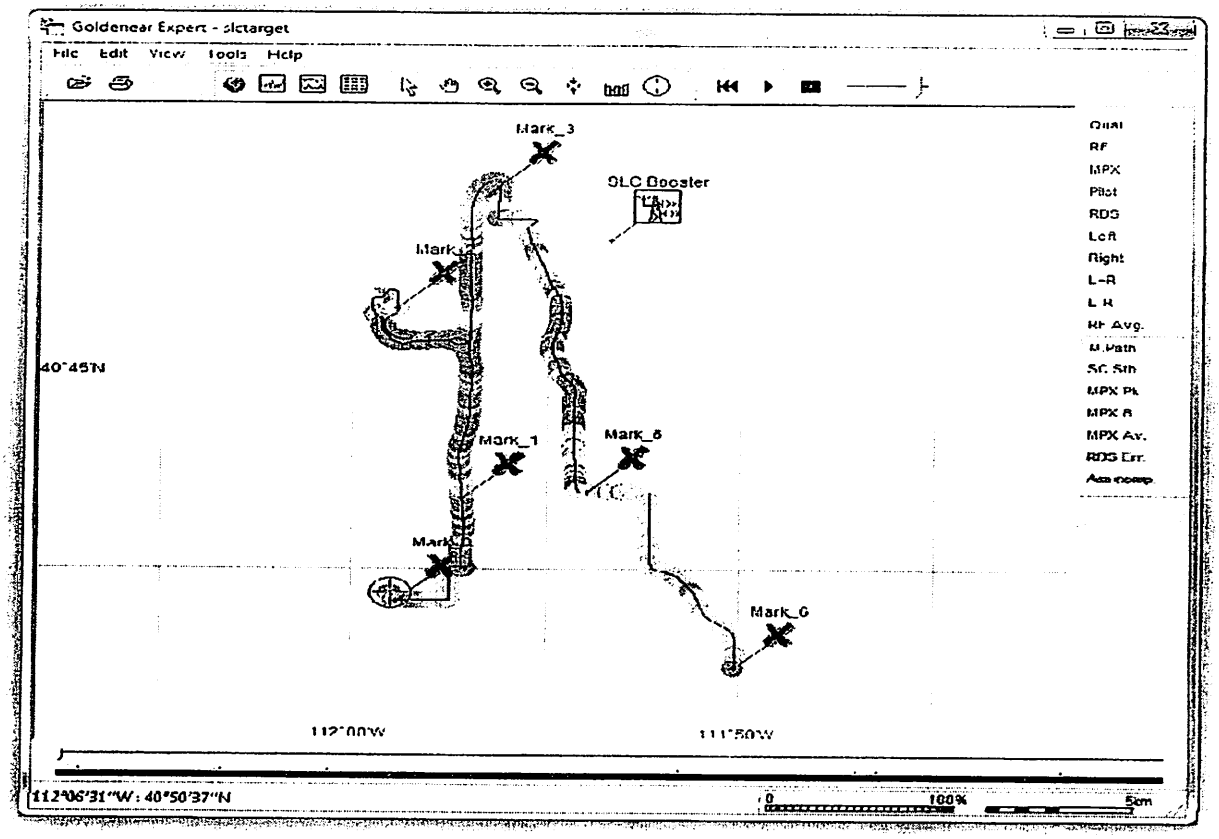

Figure Eight: GoldenEar™ SLC Plot

The FM-MC4 enables the following main operations to be carried out on a FM audio signal:

- Quantifying the signal value constituting the Base-band MPX signal
- Quantifying the MPX signal's power value
- Quantifying the demodulated signals' value constituting the audio message
- Ensuring different processing of these quantifications (corrections, averages, statistical calculations, phase, synchronization)
- Ensuring different representations of these quantifications.

The FM-MC4 measurement receiver is also acquires raw data from the FM broadcasting station. These signals are read in digital form through the PC interface. They include:

- RF level
- MPX and sub-carriers (19 kHz Pilot)
- Demodulated audio signals (Left, Right, Left+Right, Left-Right)
- Stereo information.

From these raw signals, several calculated signals are deduced:

- Averaged RF level
- Multipath ratio
- Sub-carrier stability (variation ratio over nominal level)
- MPX exceeding (over nominal level)

The first signal processing is done within the FM-MC4™. The signal concerned by the acquisition is the Multiplex signal whose format is defined by a maximum pass-band of 100 kHz. This analog MPX signal is converted into a digital signal using an A/D converter. Sampling frequency is fixed at 256 kHz, which guarantees quantification of any signal up to theoretical maximum frequency of 128kHz. For subjective listening the audio output of the receiver was recorded digitally in a (CCIT 22.050 kHz, 8-bit, stereo, 43 Kbps sampling rate) WAV file format by the GoldenEar™ software.

In term of RF signal level, two output methods are possible and both are presented:

Relative field: dBμV/m, mV/m
Absolute field: dBμV, dBm

For conversion of the Absolute field (dBμV) into a Relative field (dBμV/m), several calibrated files are supplied with the FM-MC4™, including: K coefficient validation, RF Antenna and Cable validation, and Loss and Gain validation. Appendix One contains details on these files.

The GoldenEar™ software is meant to provide a numerical method for quantifying a pure subjective concept, which is quality of received FM audio. As the method is a numerical one, it will be applied every time the same way, therefore it is an objective measure, as opposed to having numerous subjects listen and evaluate the audio.

An example graphical output is shown below, indicating RF level (Green), Pilot Stability (Dark Blue), Multipath Ratio (Grey), and L+R (Light Blue), for a portion of a stationary PSA measurement recording.

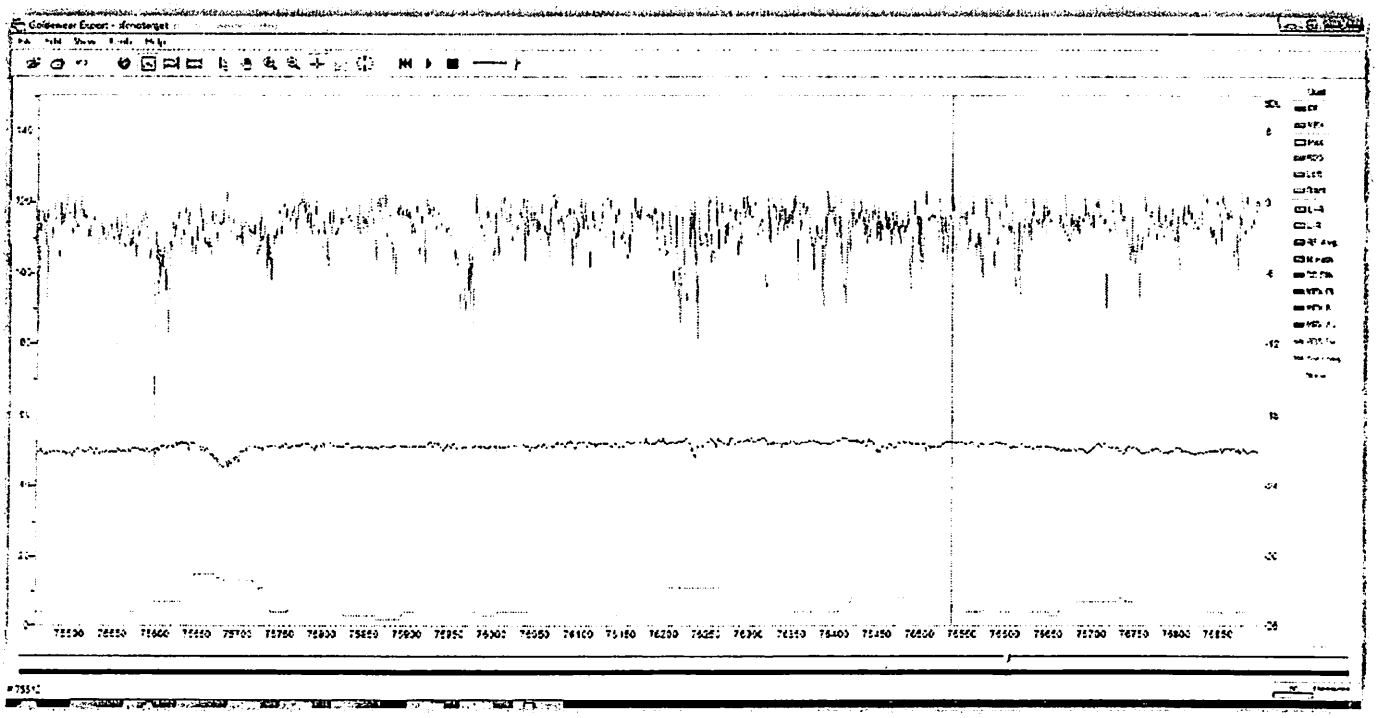

Figure Nine: GoldenEar™ Signal Display

MEASUREMENT VEHICLE

The measurement vehicle used in this test was a 2010 Ford Flex Crossover AWD. It was chosen because of the very large, flat metal roof with no obstructions, providing a ground plane to minimize pattern disturbances for the magnetic mount whip antenna. It should be noted that the FM-MC4™, antenna and cable were professionally calibrated at Audemat Labs in Paris on 4/7/2010.

Exterior

Length: 201.8 in.	**Width:** 75.9 in.
Height: 68 in.	**Wheel Base:** 117.9 in.
Curb Weight: 4643 lbs.	

Figure Ten: Test Vehicle

RF MEASUREMENT RESULTS

Non-Targeted Tests	Absolute field dBµV	Relative field dBµV/m	MPX Level (kHz)	Pilot subcarrier (kHz)	Multipath ratio (%)
OGDEN-BOUNTIFUL1	38.29	51.46	79.02	6.34	6.17
OGDEN1	41.71	54.88	63.81	6.99	9.24
OGDEN2	53.15	66.32	54.60	6.16	4.25
OGDEN3	60.71	73.88	53.22	6.09	25.95
BOUNTIFUL1	37.11	50.28	97.95	6.18	8.12
BOUNTIFUL2	38.01	51.18	77.23	6.18	6.89
BOUNTIFUL3	56.08	69.25	85.57	5.90	4.97
SLC-BOUNTIFUL1	55.18	68.35	73.59	6.60	4.00
SALT LAKE CITY1	51.04	64.21	60.70	5.91	2.83
SALT LAKE CITY2	48.74	61.91	59.26	5.90	2.93
SALT LAKE CITY3	52.83	66.00	56.70	5.88	5.89
SALT LAKE CITY4	43.35	56.52	57.85	5.96	3.88
SLC-PROVO1	29.64	42.81	64.86	6.35	7.49
SLC-PROVO2	47.34	60.51	59.94	5.93	3.36
SLC-PROVO3	34.77	47.94	73.04	6.62	8.94
SLC-PROVO4	30.01	43.18	67.92	7.18	13.63
PROVO1	49.84	63.01	69.05	6.65	9.58
PROVO2	59.73	72.90	57.58	6.61	5.77
PROVO3	46.49	59.65	57.44	6.75	13.07
PROVO4	41.62	54.79	58.44	6.74	6.66
Average of 20 Locations	***45.78***	***58.95***	***66.39***	***6.35***	***7.68***

Table Four: Non-Targeted Spot Measured Parameters

Targeted Tests	Absolute field : dBµV	Relative field : dBµV/m	MPX Level (kHz)	Pilot subcarrier (kHz)	Multipath ratio (%)
OGDEN-BOUNTIFUL1	39.61	52.78	89.13	6.08	7.09
OGDEN1	44.09	57.26	70.97	6.68	8.32
OGDEN2	51.36	64.53	65.24	6.46	9.08
OGDEN3	62.70	75.87	62.58	5.93	3.03
BOUNTIFUL1	39.04	52.21	82.48	5.91	6.17
BOUNTIFUL2	36.95	50.12	82.61	5.93	6.47
BOUNTIFUL3	56.34	69.51	79.61	5.92	2.85
SLC-BOUNTIFUL1	57.16	70.33	72.45	6.19	3.52
SALT LAKE CITY1	53.03	66.20	67.88	5.90	18.33
SALT LAKE CITY2	48.58	61.74	65.27	5.88	4.70
SALT LAKE CITY3	60.20	73.36	65.78	5.88	2.88
SALT LAKE CITY4	39.09	52.26	72.79	6.23	6.19
SLC-PROVO1	34.37	47.54	73.45	6.10	9.50
SLC-PROVO2	44.06	57.23	67.29	5.89	4.48
SLC-PROVO3	36.97	50.14	83.31	6.58	23.47
SLC-PROVO4	28.83	42.00	97.85	8.47	26.49
PROVO1	49.46	62.63	72.48	6.70	22.26
PROVO2	59.73	72.90	69.28	6.66	3.53
PROVO3	46.02	59.19	71.26	6.66	12.30
PROVO4	41.39	54.56	69.35	6.74	7.23
Average of 20 Locations	**46.45**	**59.62**	**74.05**	**6.34**	**9.40**

Table Five: Targeted Spot Measured Parameters

It is interesting to note that the difference between the measured RF signal level between the Non-Targeted and Targeted Spot locations is only 0.67 dB on average (the Targeted measurements slightly higher), indicating the measurement locations were positioned soundly for both measurements. Not surprisingly, the MPX and Multipath ratio was 11% and 22% higher, respectively, for the Targeted measurements. Much of this can be attributed to the SLC-PROVO3, SLC-PROVO4, and PROVO1 Targeted-Spot measurements where the multipath ratio was considerably higher, presumably due to the different content being received from multiple boosters. Also of note was the pilot carrier stability, which varied only 1.1% for the average of the two measurements.

IV. RF ANALYSIS OF THE TEST AREA

It is important to emphasize that no changes were made to the RF broadcast sites in terms of power, antennas, etc. at the KDUT broadcast stations. Because of the well designed booster placement and the uniqueness of the terrain, it was desired to see if implementing targeted messaging without any RF re-engineering could be successful, which was accomplished successfully as this report indicates.

60 dBu CONTOURS

The Broadcast (Part 73) propagation models are essentially simplified statistical methods of estimating field strength and coverage based only on a station's effective radiated power (ERP) and height above average terrain (HAAT). Since the terrain information is averaged, the model does not take into account specific individual localized obstructions or shadowing. Also, since the average used for this model only includes the terrain between three and 16 kilometers from the transmitter site, terrain obstructions outside of this range are ignored. This means that identical results will be calculated whether or not a transmitting antenna has clear line of sight or complete blockage by an obstruction in the first three kilometers portion of a path. Likewise, any terrain obstructions beyond 16 kilometers that block the line of sight to a more distant receiving antenna are ignored. The main use of this model is for license applications or other submissions to the FCC which specifically require the use of the methods described in Part 73.

Designated as F(50,50) (Estimated field strength exceeded at 50% of the potential receiver locations for at least 50% of the time at a receiving antenna height of 9.1 meters), the protected service contours for FM stations are the 54 dBμV/m for commercial Class B stations, 57 dBμV/m for commercial Class B1 stations, and 60 dBμV/m (1 mV/m) for commercial Class A, C3, C2, C1, and C stations, as well as 60 dBμV/m for all classes of noncommercial educational stations (including low power FM (LPFM) stations). City coverage for commercial FM stations is defined by the F(50,50) 70 dBμV/m contour, per Part 73.315. Comparatively, TIREM, Okumura, and Longley-Rice are more analytical models that consider a number of other factors, such as individual obstructions (either terrain or manmade), terrain roughness, Land Use Land Clutter (LULC) information, etc.

The 60 dBu contours for the KDUT stations, along with the test locations, are presented in the four distinct geographical test areas. These plots, along with the Longley-Rice RF prediction plots, were generated with the V-Soft Probe 4 Professional software.

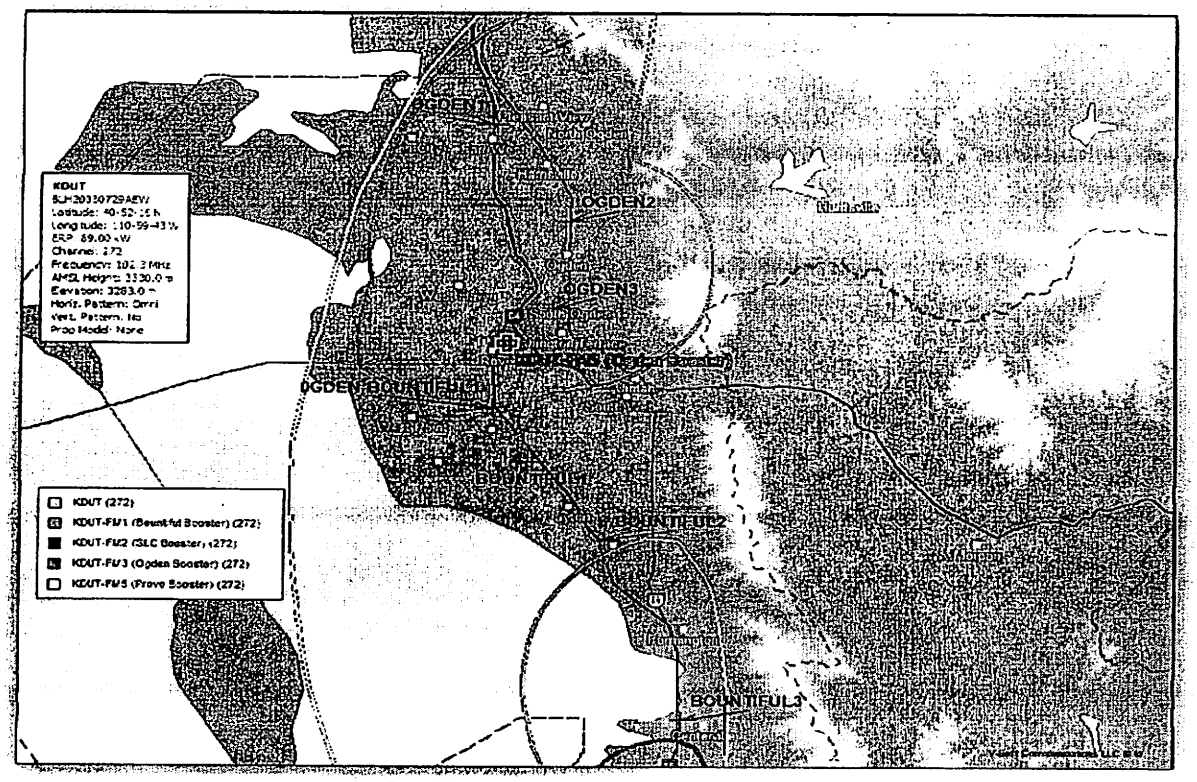

Figure 11: Ogden Area Contour and Test Locations

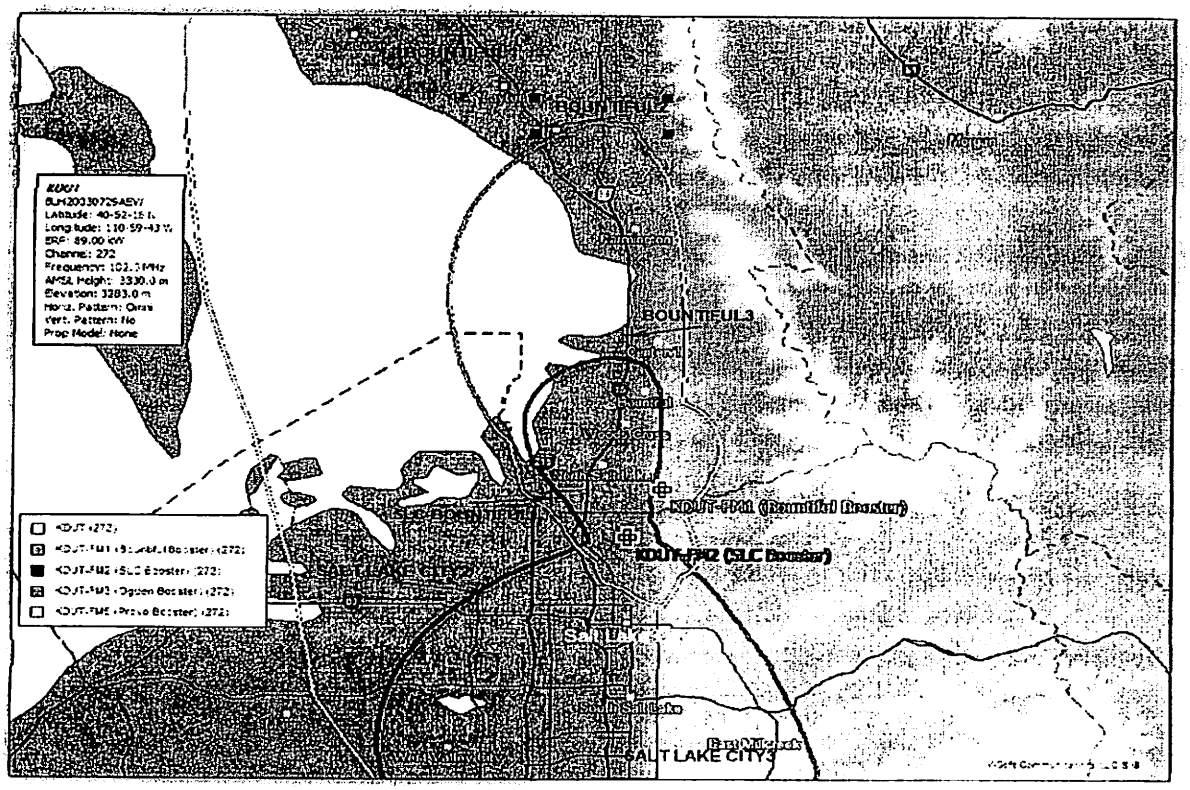

Figure 12: Bountiful Area Contour and Test Locations

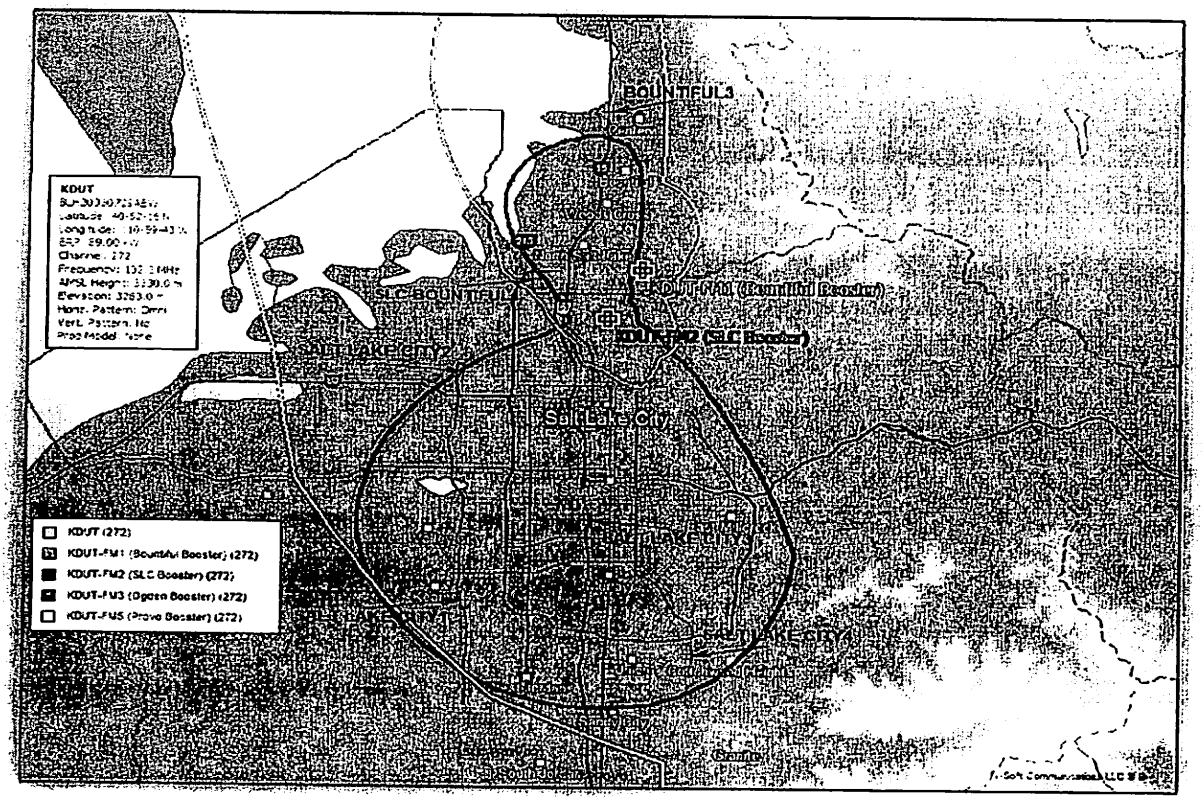

Figure 13: Salt Lake City Area Contour and Test Locations

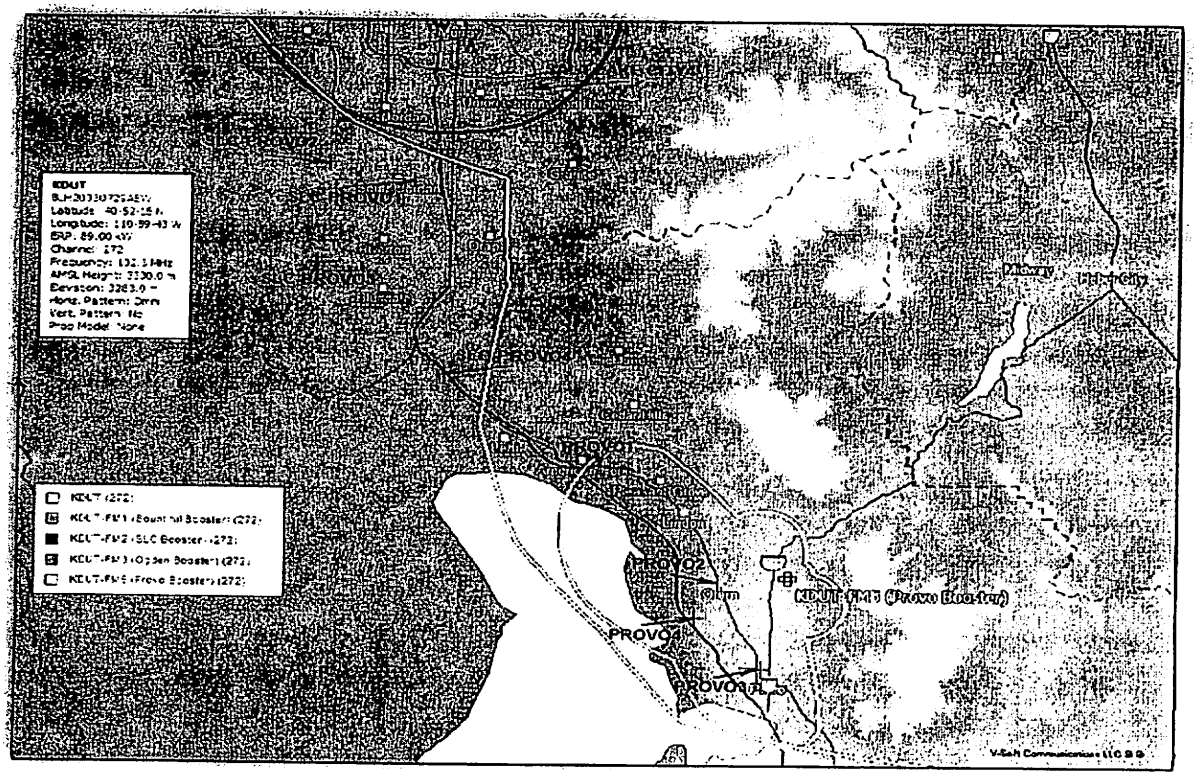

Figure 14: Provo Area Contour and Test Locations

LONGLEY-RICE RF COVERAGE AND D/U PREDICTIONS

It is helpful to illustrate the four distinct market segregations from a RF propagation examination. Therefore, a Longley-Rice prediction of the coverage of the main and four booster locations is used, at a height of the measurement antenna on the measurement vehicle (1.8 meters) and a cutoff field strength of 40 dBμV/m.

In addition to the RF coverage prediction, Desired-to-Undesired ratios were calculated for each of the 20 test locations, as this assists in the evaluation of possible interference that may exist.

	Targeted Tests		Non-Targeted Tests			
	Absolute field : dBμV	Relative field : dBμV/m	Absolute field : dBμV	Relative field : dBμV/m	Average Quality	D/U Ratio dB
OGDEN-BOUNTIFUL1	39.61	52.78	38.29	51.46	3.66	7.76
OGDEN1	44.09	57.26	41.71	54.88	3.87	26.72
OGDEN2	51.36	64.53	53.15	66.32	4.50	35.48
OGDEN3	62.70	75.87	60.71	73.88	4.50	50.73
BOUNTIFUL1	39.04	52.21	37.11	50.28	3.77	11.33
BOUNTIFUL2	36.95	50.12	38.01	51.18	3.96	11.82
BOUNTIFUL3	56.34	69.51	56.08	69.25	3.92	26.11
SLC-BOUNTIFUL1	57.16	70.33	55.18	68.35	4.07	4.38
SALT LAKE CITY1	53.03	66.20	51.04	64.21	4.50	19.28
SALT LAKE CITY2	48.58	61.74	48.74	61.91	4.50	7.88
SALT LAKE CITY3[1]	60.20	73.36	52.83	66.00	4.50	19.71
SALT LAKE CITY4[2]	39.09	52.26	43.35	56.52	4.32	29.71
SLC-PROVO1	34.37	47.54	29.64	42.81	4.19	27.61
SLC-PROVO2	44.06	57.23	47.34	60.51	4.50	15.09
SLC-PROVO3	36.97	50.14	34.77	47.94	3.69	18.53
SLC-PROVO4	28.83	42.00	29.09	42.26	3.49	39.74
PROVO1	49.46	62.63	49.84	63.01	4.43	35.96
PROVO2	59.73	72.90	59.73	72.90	4.50	42.48
PROVO3	46.02	59.19	46.49	59.65	4.50	36.72
PROVO4	41.39	54.56	41.62	54.79	4.50	25.11
Average of 20 Locations	46.45	59.62	45.74	58.91	4.19	24.61

Table Six: Desired-to-Undesired Ratios

From observation of the above table, it can be seen the D/U ratio varies from a low of 4.38 dB (SLC-BOUNTIFUL1, where there is significant simulcast overlap) to a high of 50.73 dB (OGDEN3, where the measurement location is very close to the Ogden booster). Two other notes of interest, locations SALT LAKE CITY3 and SALT LAKE CITY4 had a difference in measured signal levels of 7.37 dB and 4.26 dB respectively, two of the highest differences in the test. These two measurement locations are different than the typical measurement location in that the parking lots were smaller, and other cars passing by in close proximity during the spot recording occurred, which could explain the larger difference in signal level. Overall the average D/U ratio is a healthy 24.61 dB, again illustrating the combination of good booster placement and significant terrain blockage isolation.

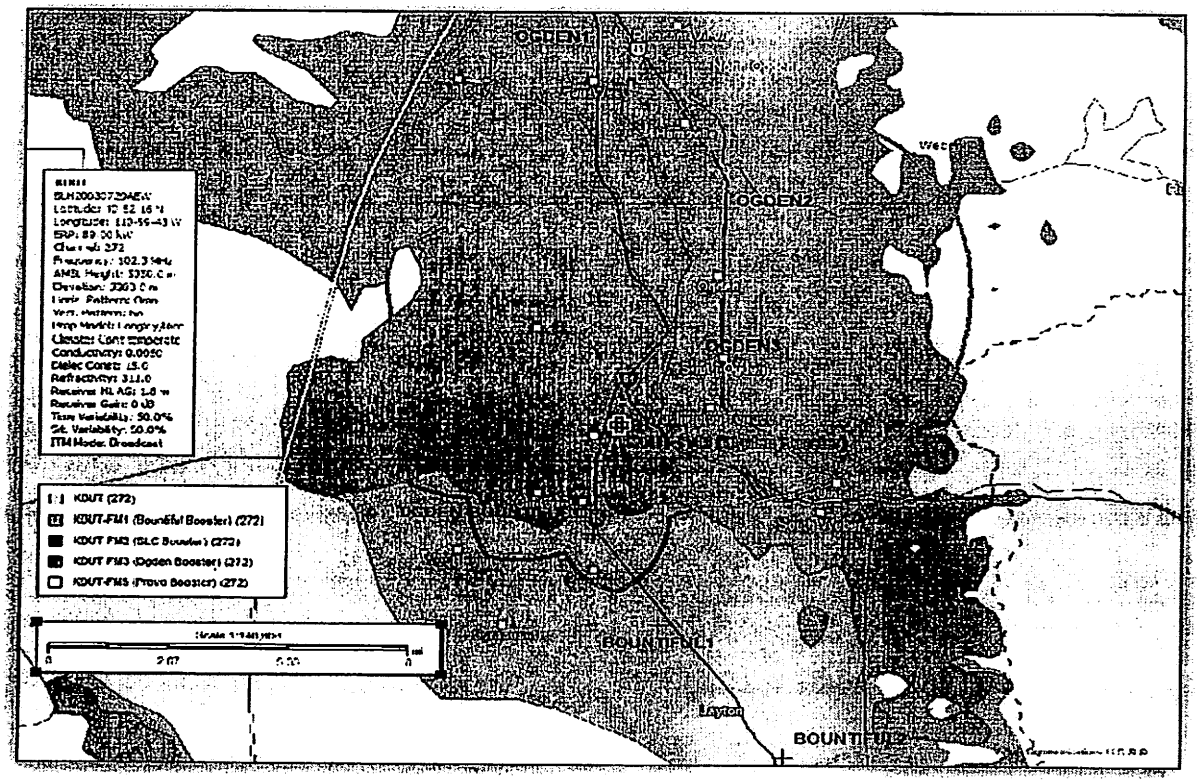

Figure 15: Ogden Longley-Rice Coverage Area

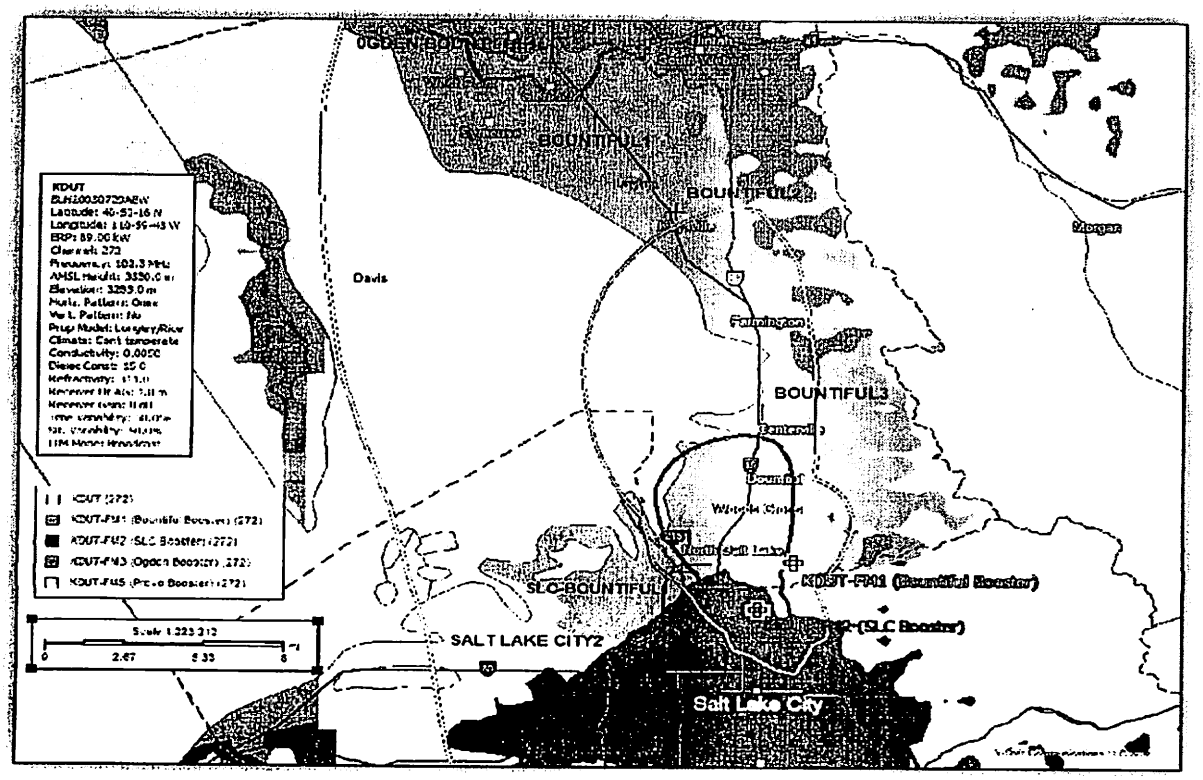

Figure 16: Bountiful Longley-Rice Coverage Area

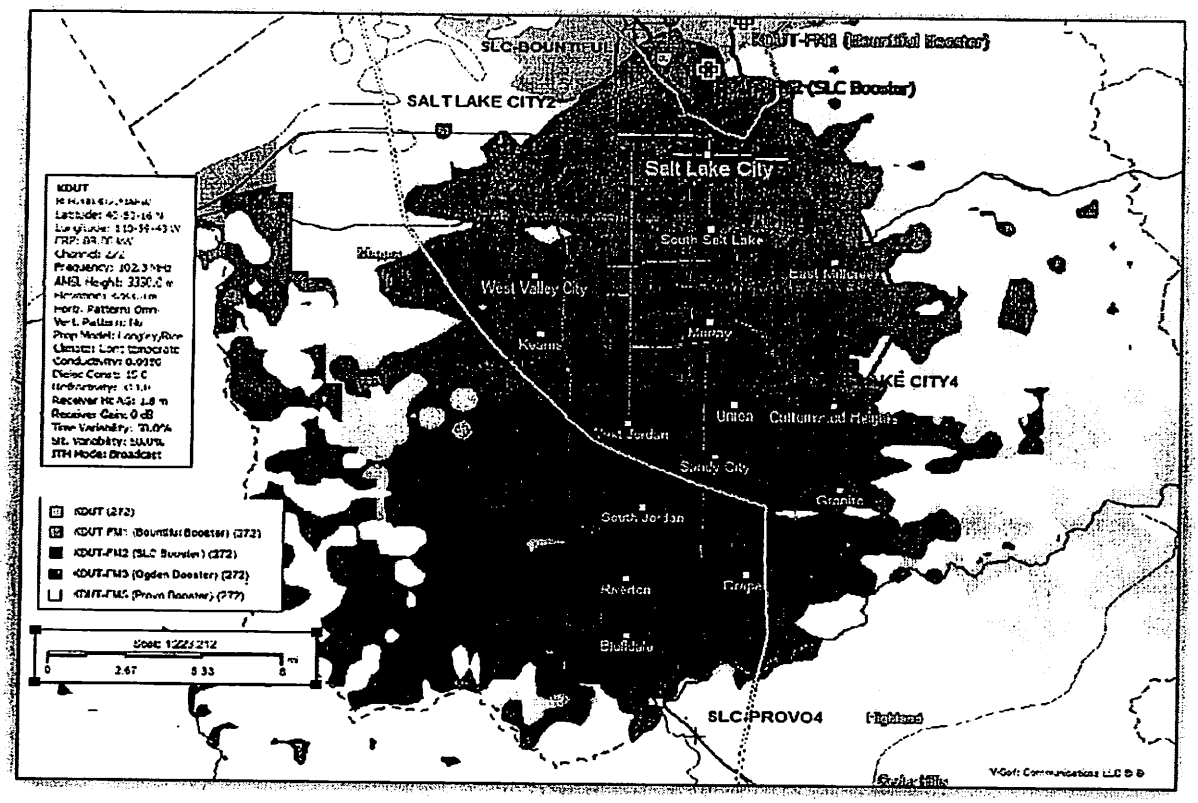

Figure 17: Salt Lake City Longley-Rice Coverage Area

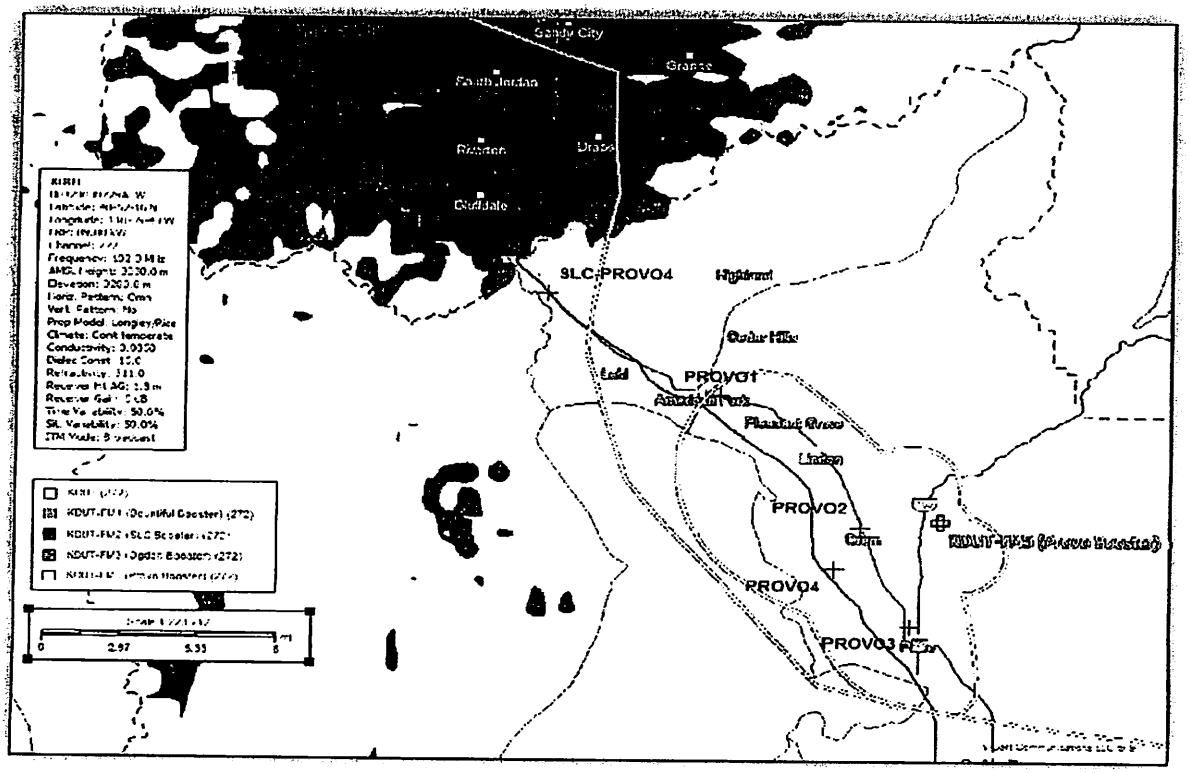

Figure 18: Provo Longley-Rice Coverage Area

V. NETWORK INFRASTRUCTURE AND TARGETED SPOT INSERTION

WiMAX OVERLAY AND DISTRIBUTION NETWORK

Because no change was made to the existing KDUT(FM) studio-to-transmitter (STL) distribution network, a method of sending distinct audio messages to several of the boosters was needed during the Targeted PSA spot times. This was accomplished by constructing a separate WiMAX wireless distribution network from the KDUT(FM) studio to the Salt Lake City booster and to the Ogden booster. This provided for independent distribution of different targeted audio messages on overlapping boosters during the Targeted messaging spot times. In actuality, it was not feasible to make a change to the existing STL distribution (shown below) as the version of Harris Synchrocast™ was at least 7 years old and non-IP based, and with limited bandwidth (typically a T1) there was not excess capacity to add additional audio streams with control information to indicate to the broadcast transmitter to switch audio sources during the Targeted spot times.

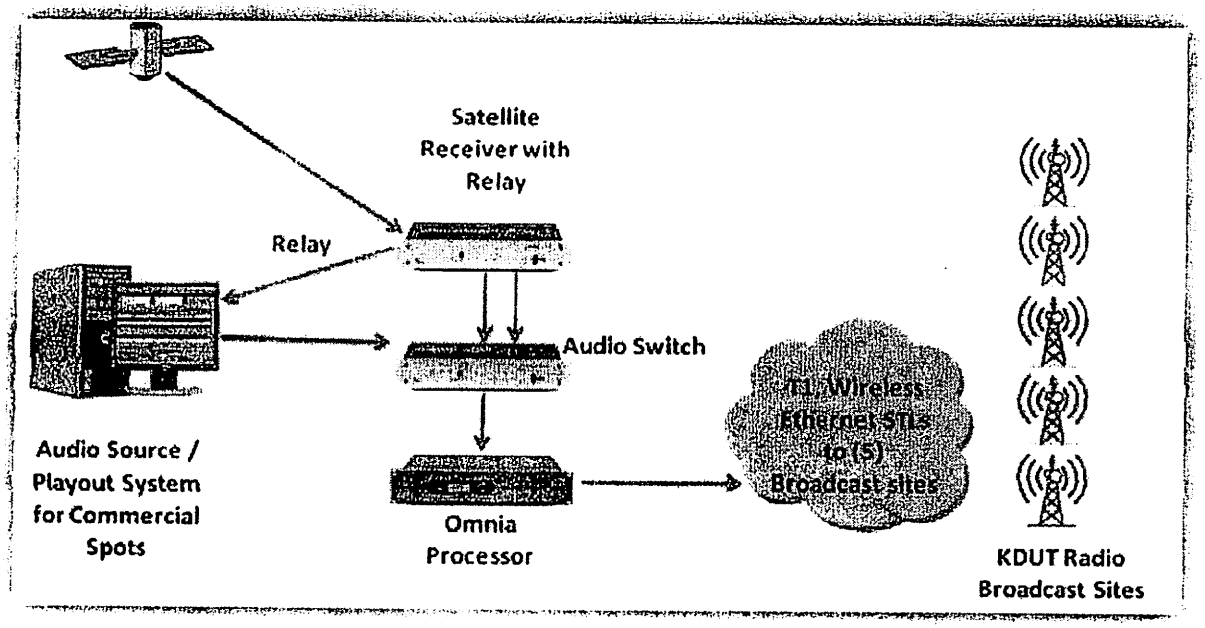

Figure 19: Current Audio and STL Distribution Network

THE LAZER SPOTS™ 'DBH CONTROL UNIT' (Patent Pending)

The Lazer Spots™ 'DBH Control Unit' is defined as a proprietary implementation of hardware and software that typically resides at the broadcast studio. The 'DBH Control Unit' design directs different audio feeds from new and existing automation and playout equipment (such as RCS -Prophet Systems, ENCO Systems, AudioVault-Broadcast Electronics, Scott Studios, Computer Concepts -Maestro, BSI Simian, WideOrbit- former Google automation, OMT Technologies –iMediatouch and others), through the 'DBH Control Unit' to different transmitter sites, while simultaneously turning the transmitters on and off (and/or increasing and decreasing the transmitters power) in synchronization with the new audio targeted audio feeds.

The 'DBH Control Unit' design is based on Ethernet, a mature technology which is the clear direction for audio routing. The major components use equipment which is 100% compatible with Ethernet networking standards, including Cisco networking equipment. The same network that switches and distributes live, linear audio targeted channels also carries GPIO signals, file transfers, and any other standard IP data.

The hardware and software that the 'DBH Control Unit' houses includes analog and digital input and output interfaces, General Purpose Input and Output (GPIO) logic interfaces, both trigger (TTL low-level voltage) and contact closure relays connections, routing software which controls consolidated access to all interfaces, and a Cisco Catalyst-Ethernet switch to connect interface nodes, PCs, WAN devices, and an internal playout system thru 10/100/1000 Mbps ports. The 'DBH Control Unit' performs timed updates (or via contact closure or audio detection) to reconfigure a few or many sources and destinations simultaneously. It also can provide the generation of Target spot audio if necessary.

ROUTING, SWITCHING, AND CONTROL FOR TARGETED SPOT DELIVERY

Each implementation of the 'DBH Control Unit' will vary in configuration depending on the broadcast studio audio equipment and STL interfaces. For KDUT(FM), during the Targeted spot time (two to three times per hour), pre-produced 30 second Targeted spot audio streams were generated with a PC running multiple playout system software instances. A relay trigger pulse from the existing on-air playout system to the 'DBH Control Unit' initiated the generation of Targeted audio playout streams. This was done by creating a script command in the existing playout system before each of the Targeted spots to pulse a relay that was connected to a trigger on the 'DBH Control Unit' multiple instance internal playout system. Once the trigger was pulsed, several new audio streams (the pre-produced Target spots) as well as GPIO control information were generated and output to an Ethernet switch/router at the IP network level.

The Ethernet switch/router interfaced directly with a WiMAX overlay distribution network. The WiMAX network connected directly to a wireless router at the Salt Lake City booster transmission site. At this site another wireless connection was made to the Ogden booster transmission site. A high-level architectural diagram of the KDUT(FM) Targeted audio distribution is shown below.

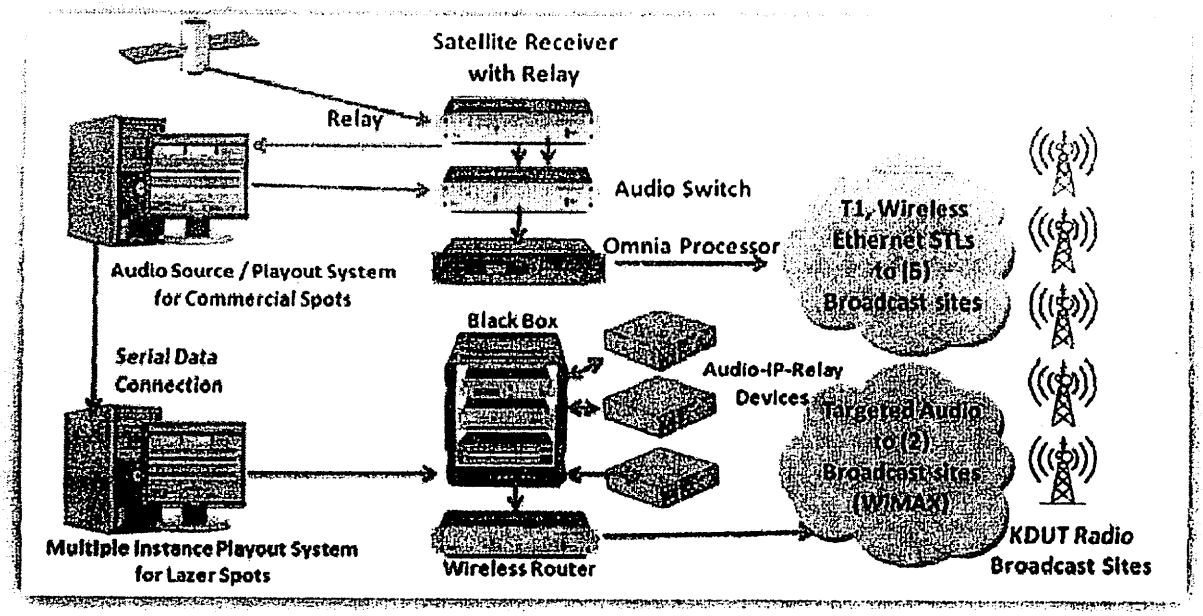

Figure 20: Target Spot Audio and STL Distribution Network

At the WiMAX connected booster sites, an audio switch controlled the digital audio from the current Harris Synchrocast™ stream and the new Targeted digital audio stream by using the GPIO signals generated at the 'DBH Control Unit'. This approach worked very well as the existing broadcast distribution system was not designed to perform this targeting messaging approach. There was one minor issue with the audio at these booster sites such that during the switch of audio sources there is a very brief but noticeable dropout of the broadcast RF signal. It is believed this may be due to the Harris Synchrocast™ system trying to resynchronize the new digital AES audio stream. It is important to note that if this concept were deployed in a non-test full time broadcast environment, a solution to prevent this would be implemented. The solution would be dependent on the new STL distribution network architecture for Targeted spot messaging. A high-level architectural diagram of the implemented KDUT(FM) Target audio test distribution is shown below.

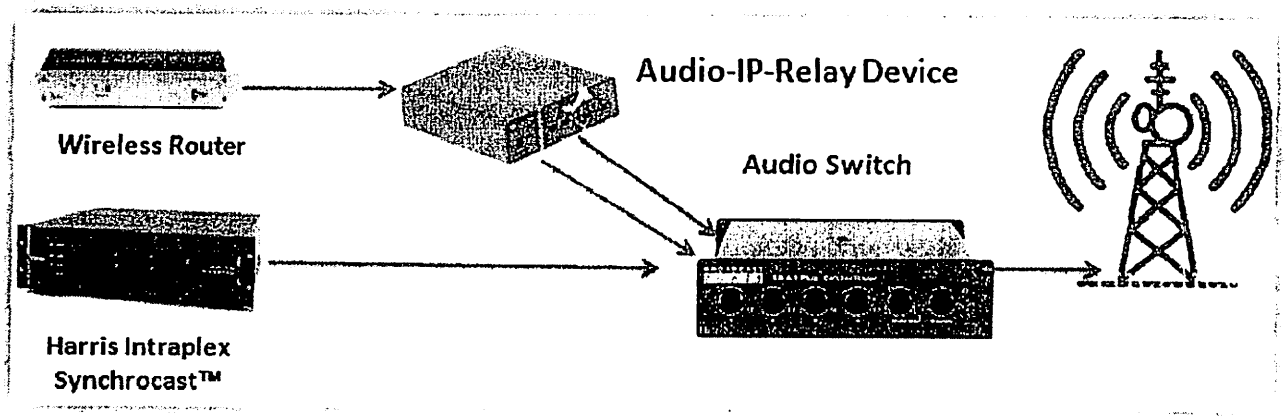

Figure 21: Targeted Spot Booster Site Implementation

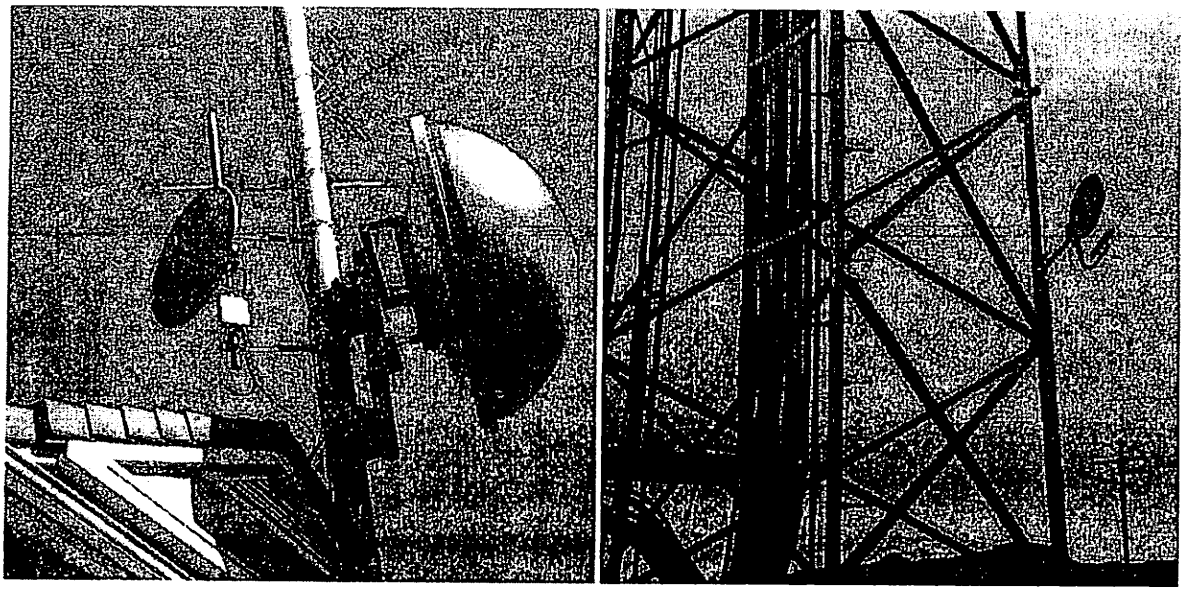

Figure 22: WiMax Overlay Distribution Studio-to-Booster Site Equipment

VI. ANALYSIS AND RATING OF THE AUDIO AND EFFECTIVENESS OF TARGETED SPOT DELIVERY WITH BOOSTERS

AUDIO SAMPLE RECORDINGS

In the KDUT(FM) service contour, the four boosters create four distinct coverage areas, in terms of RF isolation and segregated markets. Distinct Public Service Announcements (PSAs) were tested as each market area was playing a different PSA spot at the same time. For KDUT(FM), radio spots (non-commercial and commercial) start at :26, :42, and :56 minutes of each hour, and the main program is a syndicated feed (La Gran D 102.3 FM, a Spanish station broadcasting a Mexican music format) from a satellite link originating in Sacramento. The test PSAs were 30 seconds in length each, and occurred 2 to 3 times per hour depending on spot availability.

Preliminary testing occurred on 6/1/2010 to 6/7/2010 to determine appropriate test locations and drive distances between test locations. It is important to mention that 15 minutes or 30 minutes elapsed between spots, so drive distances had to be determined- typically 5-10 miles apart, and compensated by roads, construction delays, and alternate routes for high traffic or accidents. A typical test location was in an empty large parking lot with no close obstructions.

The submitted audio clips were recorded in the field on 6/23/2010 to 6/25/2010. Audio information was collected at 20 geographical locations as described in this report. At each of the 20 test locations, a measurement of the Non-Targeted, normal simulcast audio was made for a single PSA spot. This is referred to as the reference PSA spot and used as a comparative reference to the Targeted spot. For the targeted-test mode, distinct spots were broadcast on each adjacent booster. These spots were not in simulcast synchronization mode, as normally would be the case. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the Non-Targeted PSA spot.

At each of the 20 measured locations, each audio file attached with this report has the following format:

- Approximately 85 seconds in length.
- 5 seconds of audio before the Non-Targeted spot, the 30 second Non-Targeted spot, 5 seconds of audio after the Non-Targeted spot.
- 5 seconds of silence.
- 5 seconds of audio before the Targeted spot, the 30 second Targeted spot, 5 seconds of audio after the Targeted spot.

This format allows the listener to easily compare subjectively the Non-Targeted PSA reference spot audio to the Targeted spot audio.

NON TARGETED (SIMULCAST) PSA AUDIO SPOT

As mentioned, at each of the 20 test locations a measurement of the Non-Targeted, normal simulcast audio were made for a single PSA spot. This is referred to as the reference PSA spot. The following is the Non-Targeted Reference 30 second PSA Spot, transcribed to English:

National Foundation For Credit Counseling Inc.(Simulcast on all Boosters)
Ana V/O Dude, that is a pretty picture. You must be very proud.
Carlos V/O Yes, and see you, Peter, and I have only been in this country three years and already have a house.
Ana V/O Yeah, but my job is at risk and we could lose the house.
Carlos V/O We had the same problem, you need to act now.
Announcer V/O For free help in Spanish, call 1-800-682-9832 or visit nopierdastuhogarpunto O-R-G
A public service from the National Foundation for Credit Counseling Inc.

TARGETED (NON-SIMULCAST) PSA AUDIO SPOTS

For the targeted-test mode, distinct spots were broadcast on each adjacent booster. These spots were not in simulcast synchronization mode, as normally would be the case. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the non-targeted PSA spot. Each spot is 30 seconds in length and transcribed to English:

Habitat for Humanity's Salt Lake City ReStore (Broadcast on the Ogden Booster)
Cleaning out the garage? Have unused home improvement items? Clean up and help your community all at the same time. The Habitat for Humanity ReStore in Salt Lake City, 1276 South 500 West. Buy supplies, donate supplies or volunteer your time. Brand new doors only $10 or used doors for $5.00. Friday and Saturday, 50% off lawn and garden supplies. Come on in to the habitat restore today! 1276 south 500 west.

Utah Hispanic Chamber of Commerce (Broadcast on the SLC Booster)
The Utah Hispanic Chamber of Commerce is a net of companies, associations and entrepreneurs that promote the economic growth in the state. The Chamber promotes its members: leadership,

opportunities to grow, professional growth and community participation. Show off your business at our events increase your contacts, better your operation, find your next partner or client, and meet important people in the community and prominent businessmen. For more information contact us at 801-532-3308 or visit hcc.com. We invite you to become a member of the Utah Hispanic Chamber of Commerce.

Habitat for Humanity's Orem ReStore (Broadcast on the Bountiful and Provo Booster[2])
Cleaning out the garage? Have unused or barely used home improvement items? Don't trash them; restore them at Habitat for Humanity's new Orem ReStore! If you like building and home improvement supplies at 50 – 75% off come to the new ReStore at 340 South Orem Blvd. in Orem. Buy supplies, donate supplies, or volunteer your time... because all proceeds help build Habitat for Humanity homes! Visit the new ReStore at 340 South Orem Blvd. in Orem.

OBJECTIVE AUDIO ANALYSIS FOR NON-TARGETED/TARGETED SPOTS RESULTS

The measurement receiver and collection software, GoldenEar™ developed by WorldCast Systems.com/Audemat division, is described in other sections. The GoldenEar™ software is meant to provide a numerical method for quantifying a pure subjective concept, which is quality of received FM audio. As the method is a numerical one, it will be applied every time the same way, therefore it is an objective measure, as opposed to having numerous subjects listen and evaluate the audio.

The GoldenEar™ quality algorithm uses measured data to form a quality rating, ranging from 1 to 5, 5 being the best and 1 being the worst. An indication of the grading scale algorithm is intended to be analogous to ITU-R (BS.1284-1) [3] recommendations. The following five-grade scale is appropriate for the assessment of sound quality and impairment for the grading of the KDUT(FM) test audio samples which is specified by the ITU-R recommendations.

Quality		Impairment	
5	Excellent	5	Imperceptible
4	Good	4	Perceptible, but not annoying
3	Fair	3	Slightly annoying
2	Poor	2	Annoying
1	Bad	1	Very annoying

Table Seven: ITU-R Grading Scales

For comparison tests, the following ITU-R comparison scale is based on numerical differences using the above five-grade scales for the purposes of comparing the Non-Targeted PSA reference spot to the Targeted PSA spots.

[2] Due to the distance between Bountiful and Provo, and the multiple extreme terrain blockages between these two boosters, no significantly quantifiable RF interference exits between these two boosters. Because the WiMAX overlay distribution network did not reach these sites, KDUT had to broadcast the same spots as explained in the Network Infrastructure and Targeted Spot Insertion section.

[3] RECOMMENDATION ITU-R BS.1284-1*General methods for the subjective assessment of sound quality

Comparison	
3	Much better
2	Better
1	Slightly better
0	The same
−1	Slightly worse
−2	Worse
−3	Much worse

Table Eight: ITU-R Comparison Scales

As indicated in Table Nine, the Non-Targeted Simulcast PSA spot had an objective quality range of 3.54 to 4.5, with a 20 location average of 4.23. The Targeted PSA spots had an objective quality range of 2.94 to 4.5, with a 20 location average of 4.15. The difference between the two averages is 0.07, with the Non-Targeted result being less than a Slightly Better rating when compared to the Targeted results as indicated in Table Nine.

	Non-Targeted Tests			Targeted Tests		
Test Location	Date	Time	Objective Quality Analysis	Date	Time	Objective Quality Analysis
OGDEN-BOUNTIFUL1	6/23/10	10:56	3.65	6/25/10	10:41	3.68
OGDEN1	6/23/10	11:26	4.13	6/25/10	10:56	3.62
OGDEN2	6/23/10	11:41	4.50	6/25/10	11:26	4.50
OGDEN3	6/23/10	11:56	4.50	6/25/10	11:41	4.50
BOUNTIFUL1	6/24/10	15:26	3.54	6/25/10	12:26	4.00
BOUNTIFUL2	6/24/10	15:41	3.93	6/25/10	12:41	4.00
BOUNTIFUL3	6/24/10	15:56	3.83	6/25/10	12:56	4.00
SLC-BOUNTIFUL1	6/24/10	10:56	4.00	6/25/10	14:56	4.15
SALT LAKE CITY1	6/24/10	9:56	4.50	6/25/10	13:41	4.50
SALT LAKE CITY2	6/24/10	10:26	4.50	6/25/10	14:26	4.50
SALT LAKE CITY3	6/24/10	10:41	4.50	6/25/10	14:41	4.50
SALT LAKE CITY4	6/24/10	11:26	4.50	6/25/10	15:26	4.15
SLC-PROVO1	6/24/10	12:26	4.37	6/25/10	19:26	4.00
SLC-PROVO2	6/24/10	12:41	4.50	6/25/10	19:41	4.50
SLC-PROVO3	6/24/10	12:56	3.71	6/26/10	9:26	3.68
SLC-PROVO4	6/24/10	13:26	4.05	6/26/10	9:41	2.94
PROVO1	6/24/10	13:56	4.50	6/26/10	10:26	4.37
PROVO2	6/24/10	14:26	4.50	6/26/10	10:41	4.50
PROVO3	6/24/10	14:41	4.50	6/26/10	10:56	4.50
PROVO4	6/24/10	14:56	4.50	6/26/10	11:26	4.50
Average of 20 Locations			4.23			4.15

Table Nine: Objective Audio Test Results

Based on the fact that no RF broadcast network design changes were implemented, good correlation between the objective calculation and the subjective audio clips, and the fact that all PSA spots were completely perceptible, it is concluded that the implementation of the Lazer Spots™ Targeted messaging test was shown to be extremely successful- it is believed that it could acceptably be implemented commercially. This comment is confirmed by the KDUT(FM) radio operations staff and feedback from them on the quality of the audio during the Targeted spots.

VII. APPENDIX ONE: AUDEMAT FM-MC4 CALIBRATION DATA

On April 7, 2010 the Audemat FM-MC4™, antenna and RF cable were sent to the Audemat Lab in Paris for calibration. Some of the calibration data is shown below.

ANTENNA CALIBRATION

This window displays antenna response curve to be displayed as well as different loss and gain values to be taken into account for calculating the field level's real value from the raw value supplied by the measuring equipment during station acquisition.

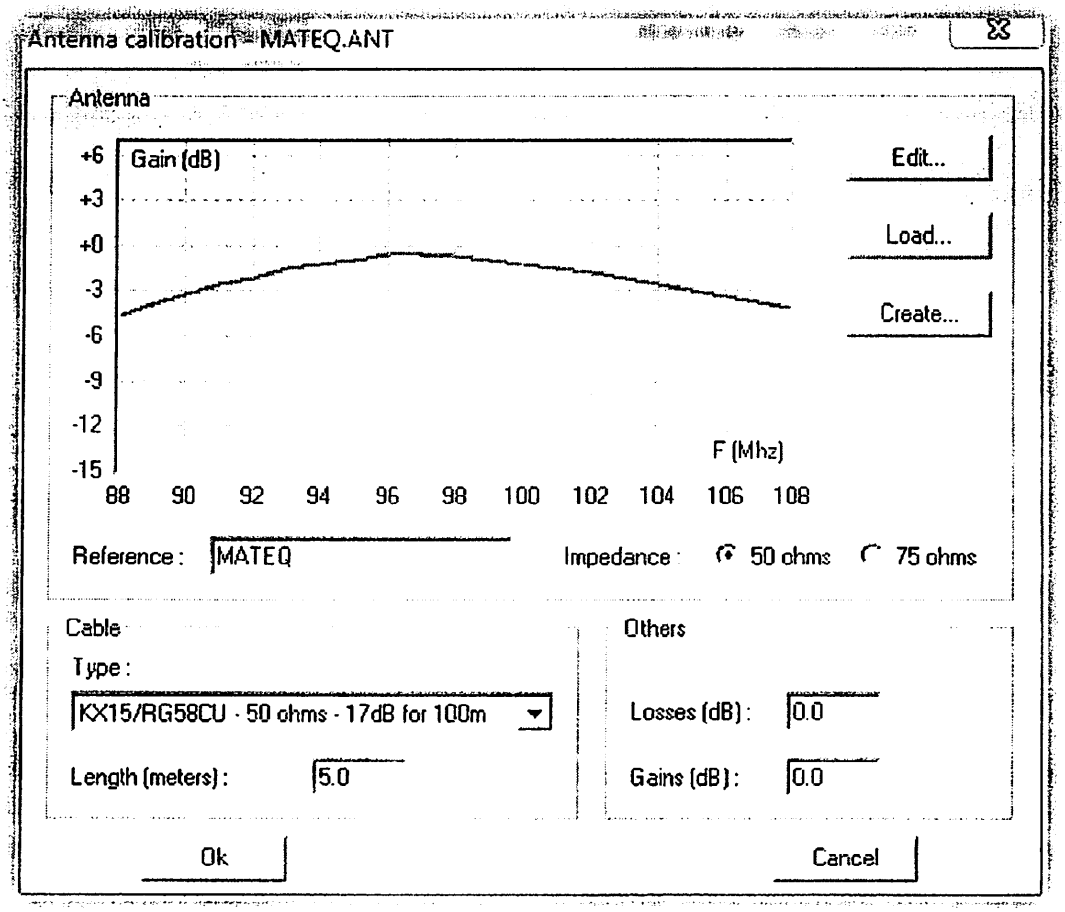

Figure 23: Antenna Calibration Curves

RECEIVER CALIBRATION

This window displays the receiver's response curve of the FM-MC4™ equipment used. The window displays the curves corresponding to different frequencies for which the equipment has been calibrated. These values are in the receiver calibration file which is loaded when the program is launched. This file is supplied with the equipment or when recalibrated in the factory.

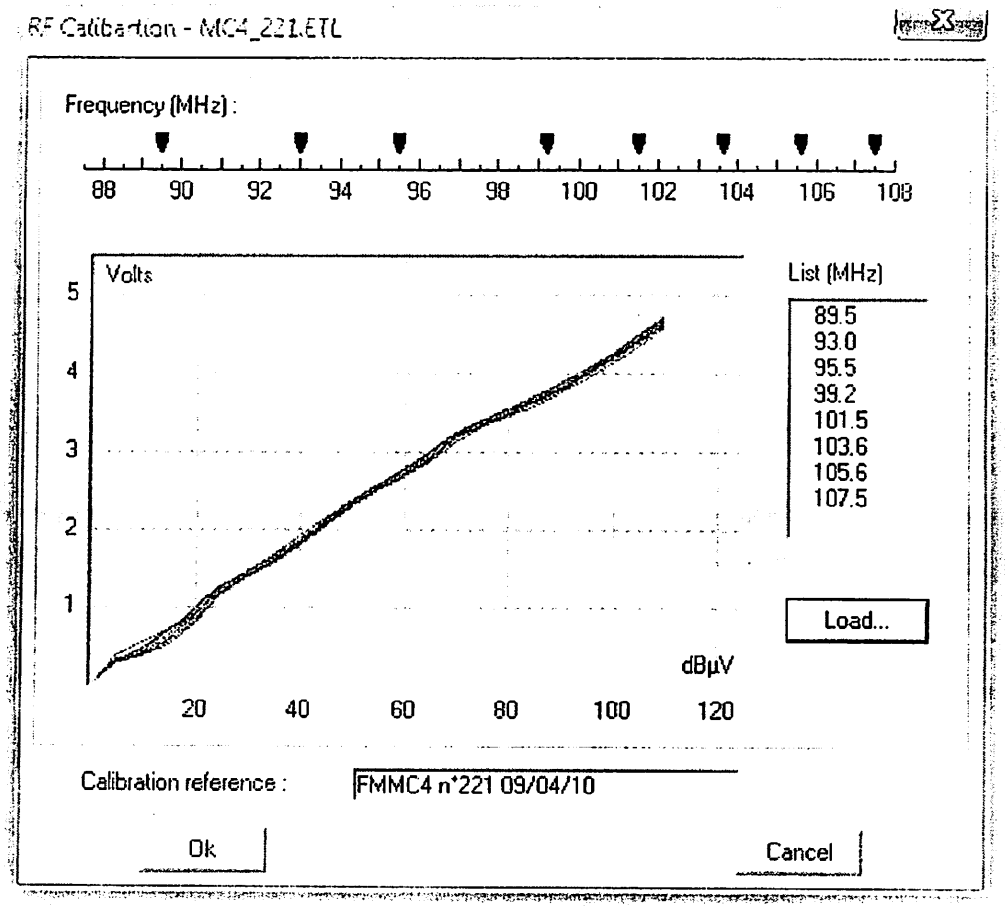

Figure 24: RF Receiver Calibration Curves

VIII. APPENDIX TWO: REFERENCE STANDARDS RELEVANT TO THIS REPORT

FCC AUDIO DIVISION
http://www.fcc.gov/mb/audio/
The Media Bureau licenses commercial and noncommercial educational AM, FM, FM Translator, and FM Booster radio services, and also the noncommercial educational Low Power FM radio service. The Division provides legal analysis of broadcast, technical and engineering radio filings and recommends appropriate disposition of applications, requests for waivers, and other pleadings. Telecommunications falls under **Title 47** of the CFR. AM, FM, and TV broadcast stations fall under **Part 73 and 74** of Title 47.

INTERNATIONAL TELECOMMUNICATIONS UNION (ITU)
ITU Radiocommunication Sector
http://www.itu.int/ITU-R/index.html

ITU-R BS.1114-5: Systems for terrestrial digital sound broadcasting to vehicular, portable and fixed receivers in the frequency range 30-3,000 MHz
ITU-R BS.412-9 17, ANNEX 3: Protection ratio for FM sound broadcasting in the case of the same programme and synchronized signals
ITU-R BS.1387-1: Method for objective measurements of perceived audio quality
ITU-R BS.1284-1 General methods for the subjective assessment of sound quality

WORLDCAST SYSTEMS / AUDEMAT DIVISION MENTION REFERENCES
http://worldcastsystems.com/

CCIR [Recommendation 638] : Terms and definitions used in planning frequencies for audio and television Broadcasting – Protection ratio in Audio Frequency
CCIR [Recommendation 559-2] : Objective measuring of RF protection ratios in broadcasting – parameters taken into consideration
CCIR [Recommendation 559-2] : Objective measuring of RF protection ratios in broadcasting – Standardised noise spectrum – Coloured noise signal used for generator modulation
CCIR [Recommendation 641] : Determining RF protection ratios in audio broadcasting at frequency modulation –Appendix 1 – Maximum deviation of measurement generator frequency
IUT-R [Recommendation BS.450-2] : Transmission standards for audio broadcasting at frequency modulation in metric waves
IUT-R [Recommendation 412-6] : Planning standards for audio broadcasting at frequency modulation in metric waves – Note 4 – Sinusoid signal power
IUT-R [Recommendation 412-7] : Planning standards for audio broadcasting at frequency modulation in metric waves – Appendix 4 – Measuring complete multiplex signal power and peak deviation of an FM audio broadcasting signal
IUT-R [Recommendation 642-1] : Limiters for high quality radio-phonic programme signals
AFNOR 97330 :Weighting curve representing average musical messages
CEPT/ERC : [Recommendation ERC 54-01 E] – Method of measuring the maximum frequency deviation of FM Broadcast emissions in the band 87,5 MHz to 108 MHz at monitoring stations
UIT-R [Recommendation 704] : Characteristics of reference receivers in audio broadcasting at frequency modulation, at end of planning
UIT-R [Recommendation 599] : Audio broadcasting reception antenna directivity

ATTACHMENT A

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March 9, 2010

PLEASE STAMP
AND RETURN
THIS COPY TO FRM
FLETCHER, HEALD & HILDRETH

VIA HAND DELIVERY
Marlene H. Dortsch
Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW – A325
445 12th Street SW
Washington, DC 20554

FILED/ACCEPTED

MAR – 9 2010

Federal Communications Commission
Office of the Secretary

Dear Ms. Dortsch:

Bustos Media of Utah License, LLC ("Bustos"), the licensee of KDUT(FM), Facility ID. No. 88272, Randolph, Utah; KDUT-FM1, Facility ID No. 122076, Bountiful, Utah; KDUT-FM2, Facility ID No. 122078, Salt Lake City, Utah; KDUT-FM3, Facility ID No. 123370, Ogden, Utah; and KDUT-FM5, Facility ID No. 131424, Provo, Utah, by its attorneys, and pursuant to Section 73.1510 of the Commission's rules, requests an experimental authorization. In support, Bustos submits the following:

Bustos seeks an experimental authorization to allow it to utilize certain of the boosters associated with KDUT to originate limited programming. In this regard, Bustos intends to utilize KDUT-FM2, KDUT-FM3 and KDUT-FM5. Specifically, Bustos intends to simultaneously broadcast on each of the aforementioned boosters different non-commercial announcements targeted to discreet audiences. Bustos intends to target the broadcasts to appeal to specific diverse audiences which are encompassed within the boosters' service areas. Each of the boosters in question will concurrently broadcast a different non-commercial message.

Methodology

The broadcasts shall be conducted over a thirty (30) day period. Broadcasts will be done between the hours of 9:00 a.m. and 3:00 p.m. and 7:00 p.m. and 11:00 p.m. It is anticipated that no more than four (4) non-commercial announcements shall be broadcast on each of the boosters in a given hour. The announcements will be directed to the specific needs and interests of the communities served by the respective booster in question.

The broadcasts shall be done at the direction and under the control of Bustos. Bustos is utilizing the services of GEO Spots, LLC ("GEO") to assist it in this endeavor. In this regard, the placement of the announcements shall be done using a master control device.[1] GEO will be employing proprietary technology (patent pending) which will allow different announcements to be placed on each of the boosters in a synchronized time sequence.

Technical Operations/Interference

During the broadcasts, no changes to the authorized facilities are contemplated. Thus, the stations (the boosters and the primary station) will broadcast consistent with their authorizations.

Reynolds Technical Associated ("Reynolds") was retained to determine the interference by the boosters to any other facilities (i.e. either co-channel, 1st, 2nd or 3rd adjacent). The maps which were prepared by Reynolds are attached in Exhibit A. These maps demonstrate that the interference is identical to that allowed by the Commission in granting the various booster licenses.

Public Interest Considerations

Each of the boosters serve a variety of communities. Exhibit B lists the communities and their respective populations which are encompassed within the service contour of KDUT-FM3 (the Ogden booster); Exhibit C provides the same information with respect to KDUT-FM2 (the Salt Lake City booster); and Exhibit D provides the same information with respect to KDUT-FM5 (the Provo booster).

Exhibit E, utilizing 2000 Census data, provides the demographic breakdown for the area encompassed by each of the boosters. While there are certain similarities between the service areas of the boosters, there are also some significant differences. For example, the Salt Lake City booster serves a significantly larger Hispanic population than either Ogden or Provo. Similarly, the Asian population is greatest in the area served by the Salt Lake City booster but there are few Asians in the area served by the Provo booster. It is submitted that an announcement concerning an event affecting the Asian community (e.g. in the form of a PSA) would have little interest to those residents encompassed within the Provo booster. Bustos intends to broadcast some of the announcements in several foreign languages.

It is also submitted that, independent of ethnicity, the needs of these communities are also different. For example, information relevant to the Salt Lake City schools would not necessarily be relevant to those residents of Provo or Ogden. Separate announcements to each of the communities would clearly be in the public interest.

The instant request is consistent with the Commission's recent focus on the future of information needs of communities. See FCC Launches Examination of the Future of Media and Information Needs of Communities in the Digital Age, DA 10-100, released January 21, 2010.

---

[1]GEO has an application pending for a patent for the master control device and associated software that will control the boosters by automated means.

Bustos shall, within thirty (30) days of termination of the experimental authorization, submit a report of the results of the experimental operation. See 73.1510(d). That report shall specifically address the extent any interference presented by the simultaneous operation of the boosters when different broadcasts are being concurrently done.

It is submitted that good cause exists for issuance of the experimental authorization as the instant request satisfies all of the criteria enumerated in Section 73.1510 of the Commission's rules.

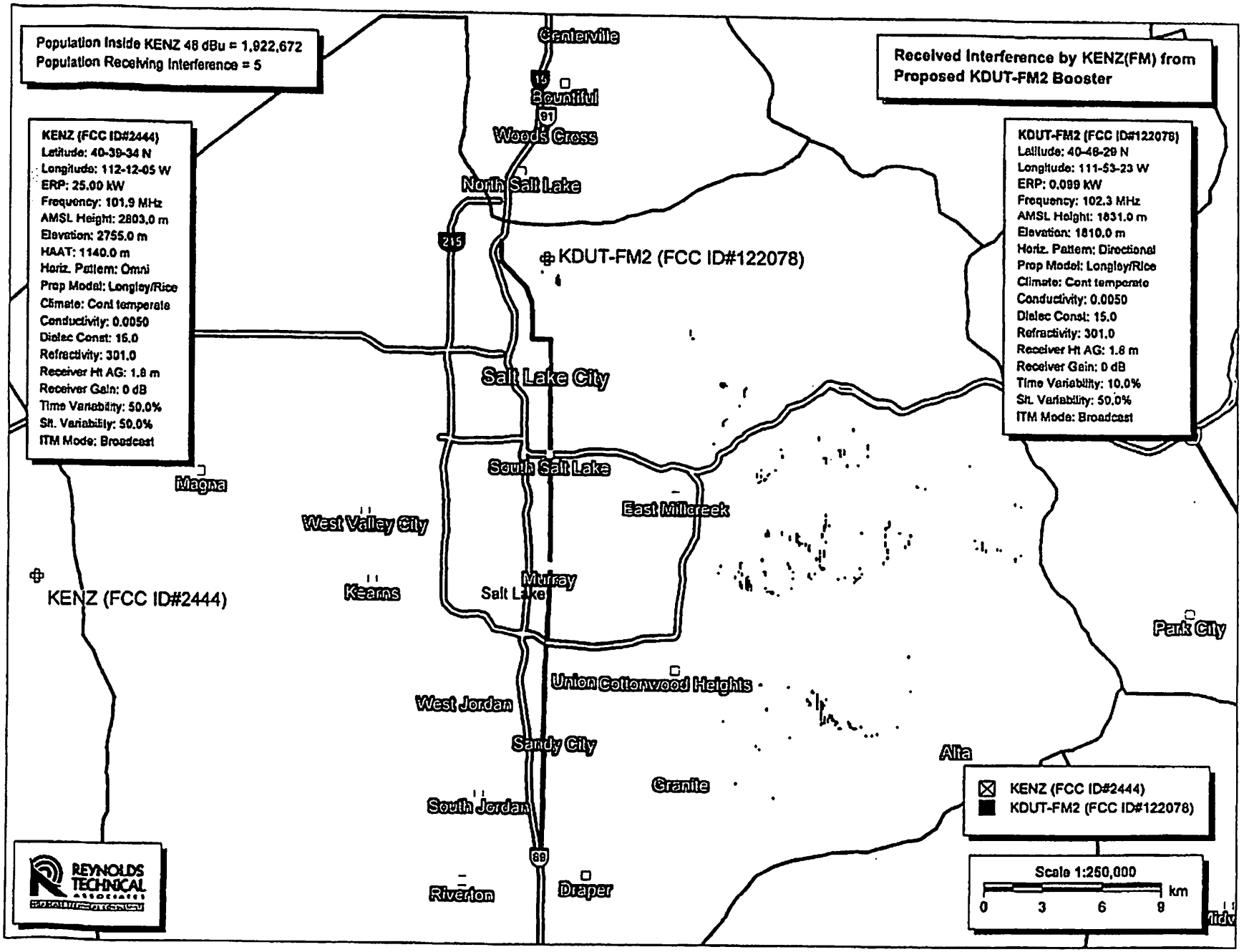
Bustos certifies that neither it nor any party to the application is subject to denial of federal benefits pusuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

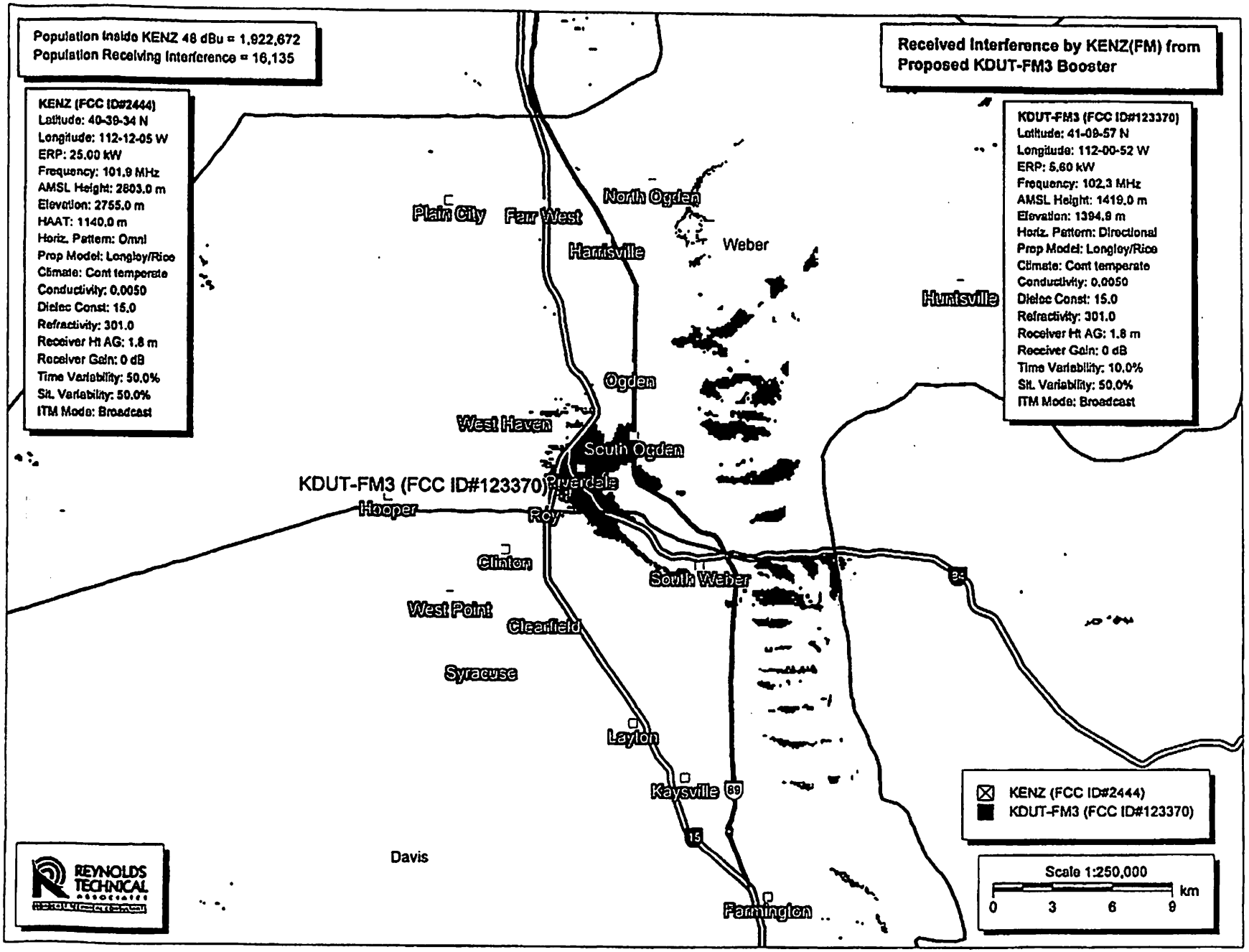
Respectfully submitted,

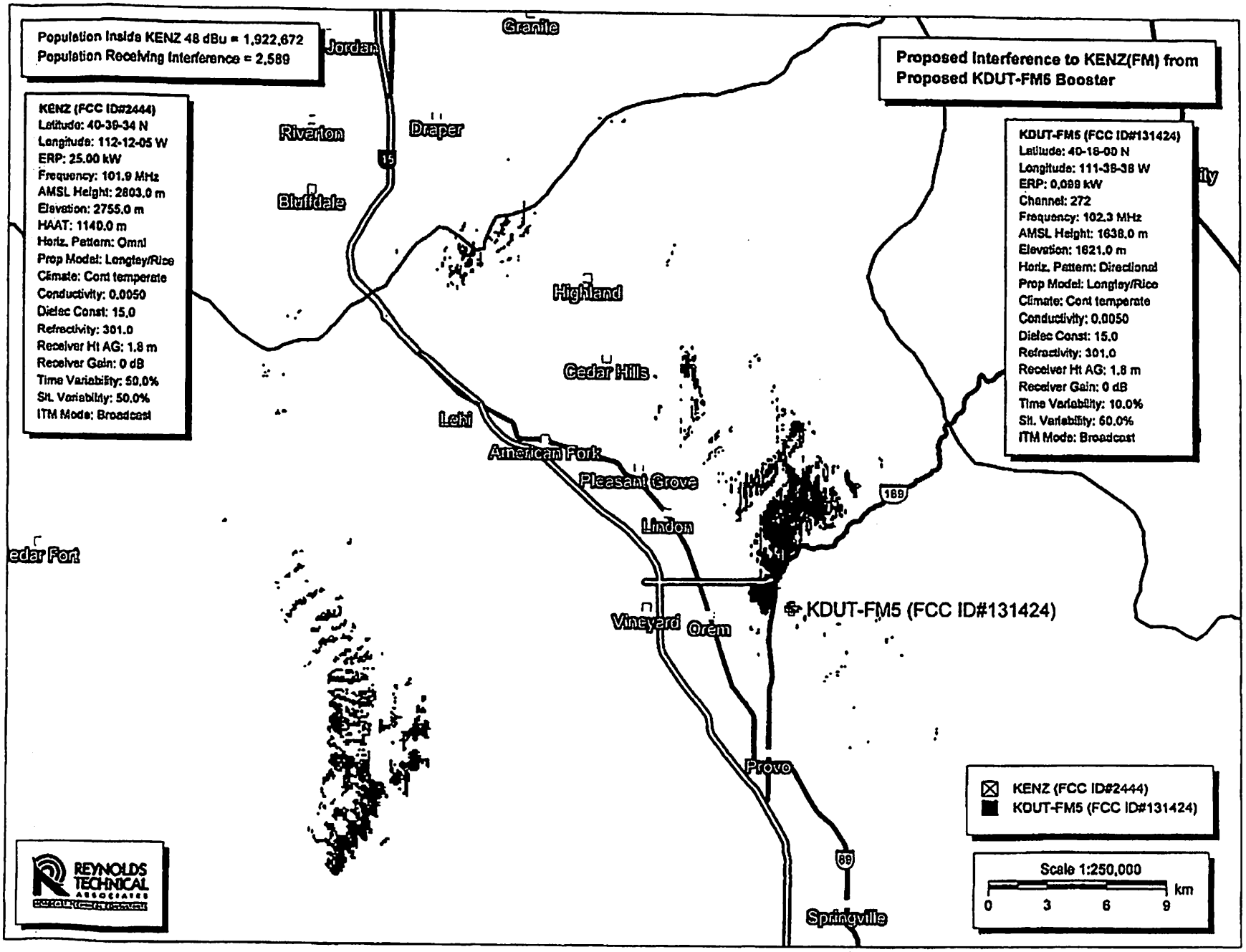
BUSTOS MEDIA OF UTAH LICENSE, LLC

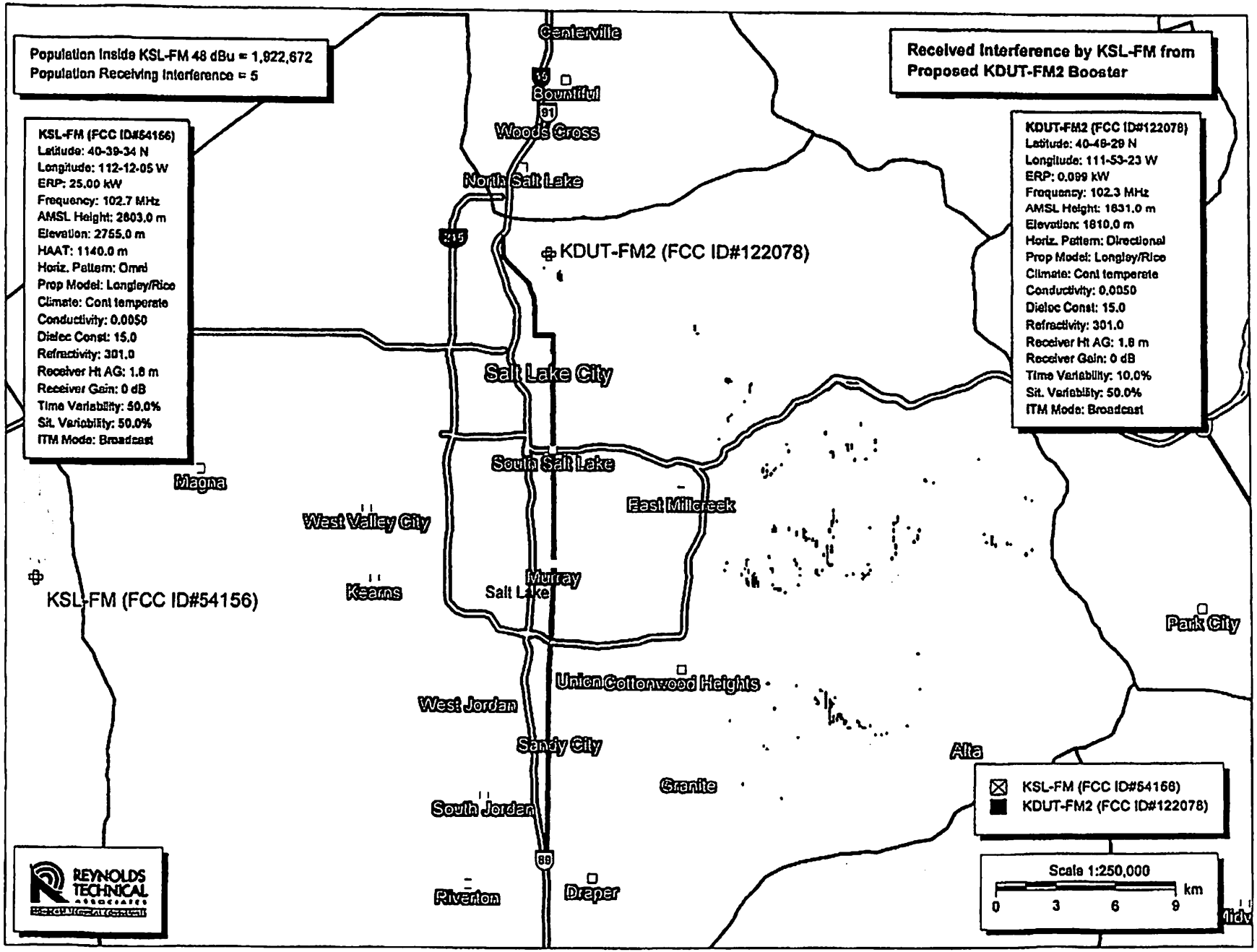
By: _____
Francisco R. Montero
Fletcher Heald & Hildreth, PLC
Its Counsel

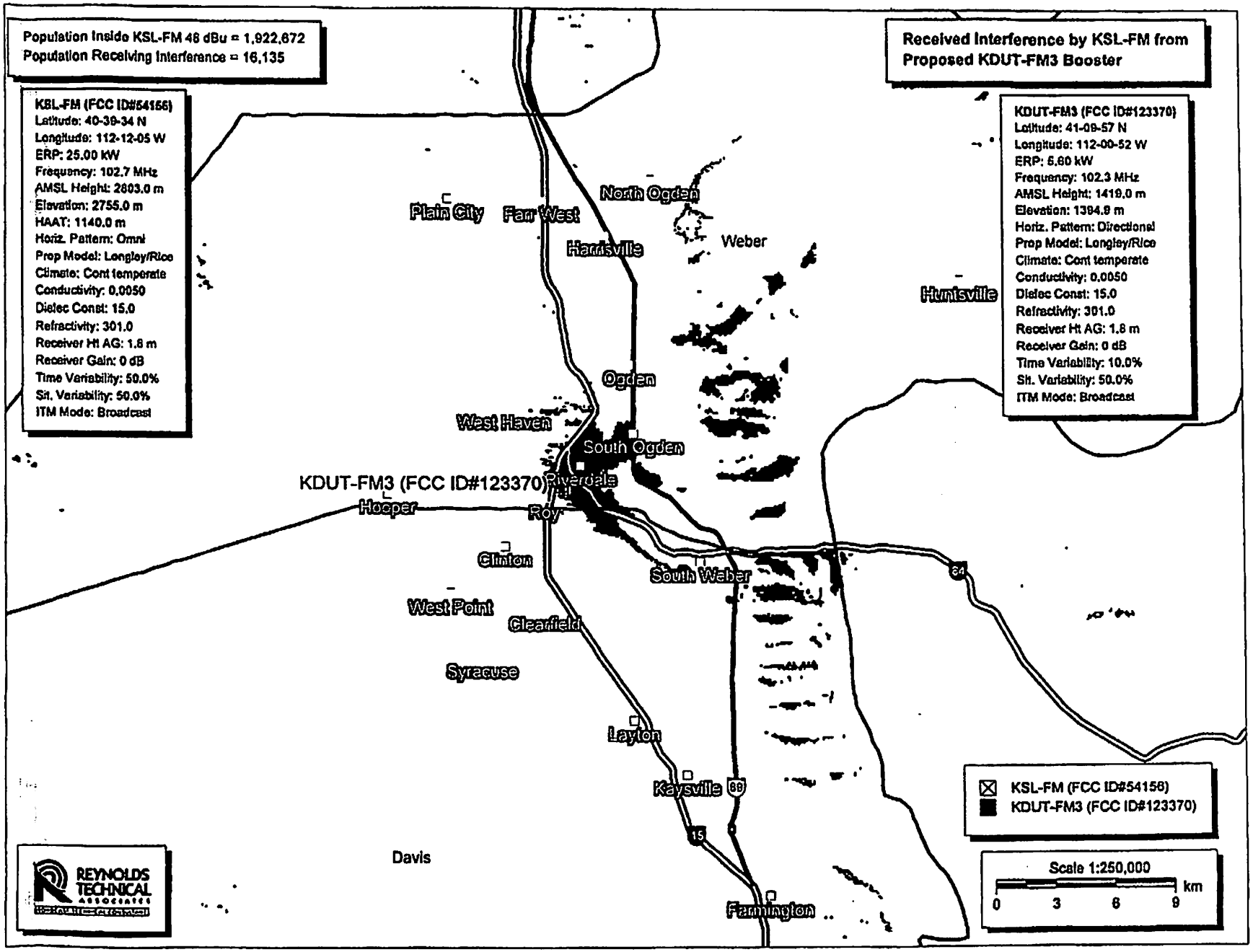
EXHIBIT A


Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 5
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KENZ(FM) from Proposed KDUT-FM2 Booster
KDUT-FM2 (FCC ID#122078)
Latitude: 40-46-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
West Valley City
East Millcreek
KENZ (FCC ID#2444)
Kearns
Murray
Salt Lake
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KENZ (FCC ID#2444)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0 3 6 9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 16,135
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KENZ(FM) from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
Riverdale
KDUT-FM3 (FCC ID#123370)
Hooper
Roy
Clinton
South Weber
West Point
Clearfield
Syracuse
Layton
Kaysville
89
15
Davis
Farmington
84
KENZ (FCC ID#2444)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KENZ(FM) from Proposed KDUT-FM5 Booster
KDUT-FM5 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
Vineyard
Orem
Provo
Springville
KDUT-FM5 (FCC ID#131424)
KENZ (FCC ID#2444)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
km
0 3 6 9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 5
KSL-FM (FCC ID#54166)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2603.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM2 Booster
KDUT-FM2 (FCC ID#122078)
Latitude: 40-46-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1631.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
West Valley City
East Millcreek
KSL-FM (FCC ID#54156)
Kearns
Murray
Salt Lake
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KSL-FM (FCC ID#54166)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0 3 6 9
REYNOLDS TECHNICAL ASSOCIATES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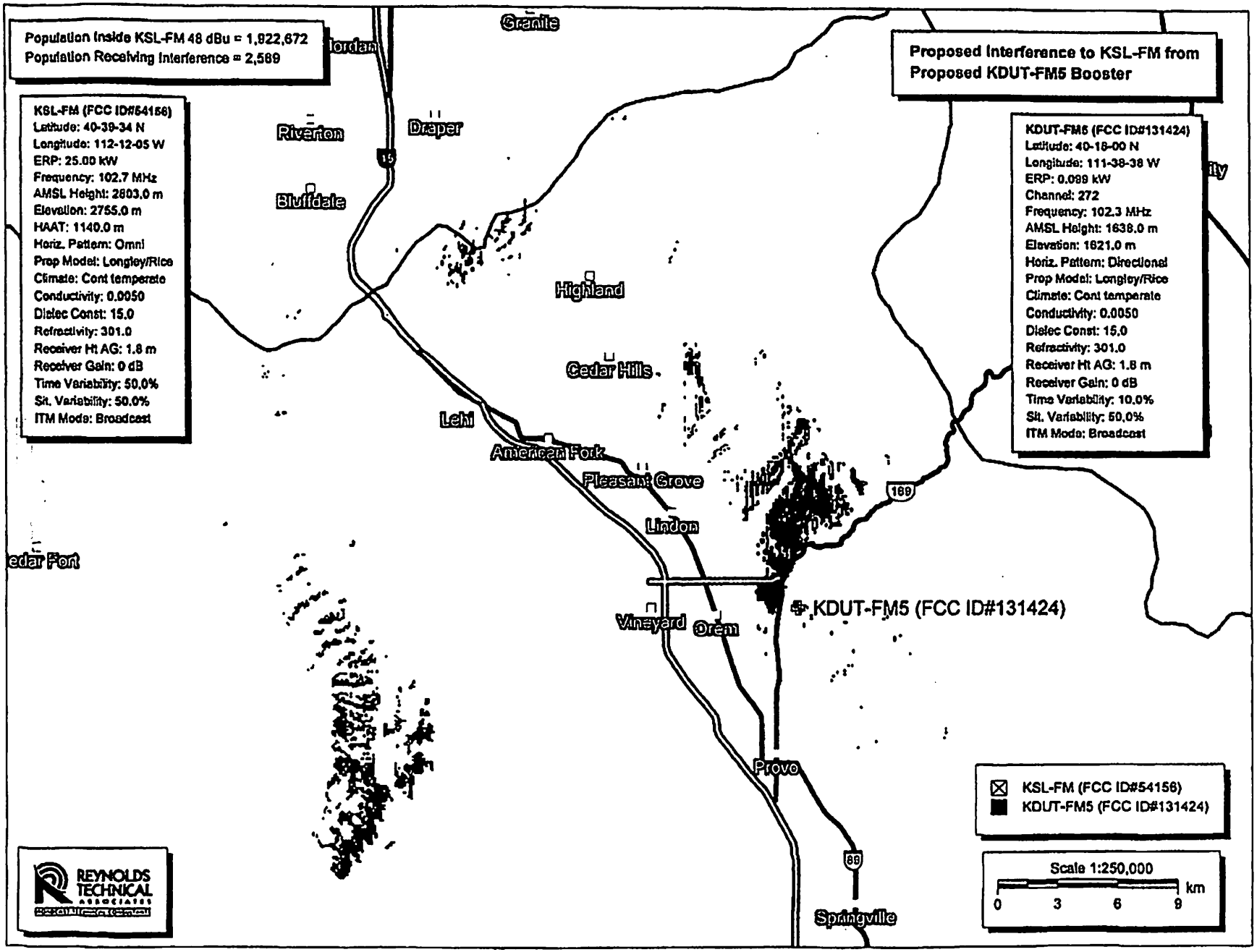
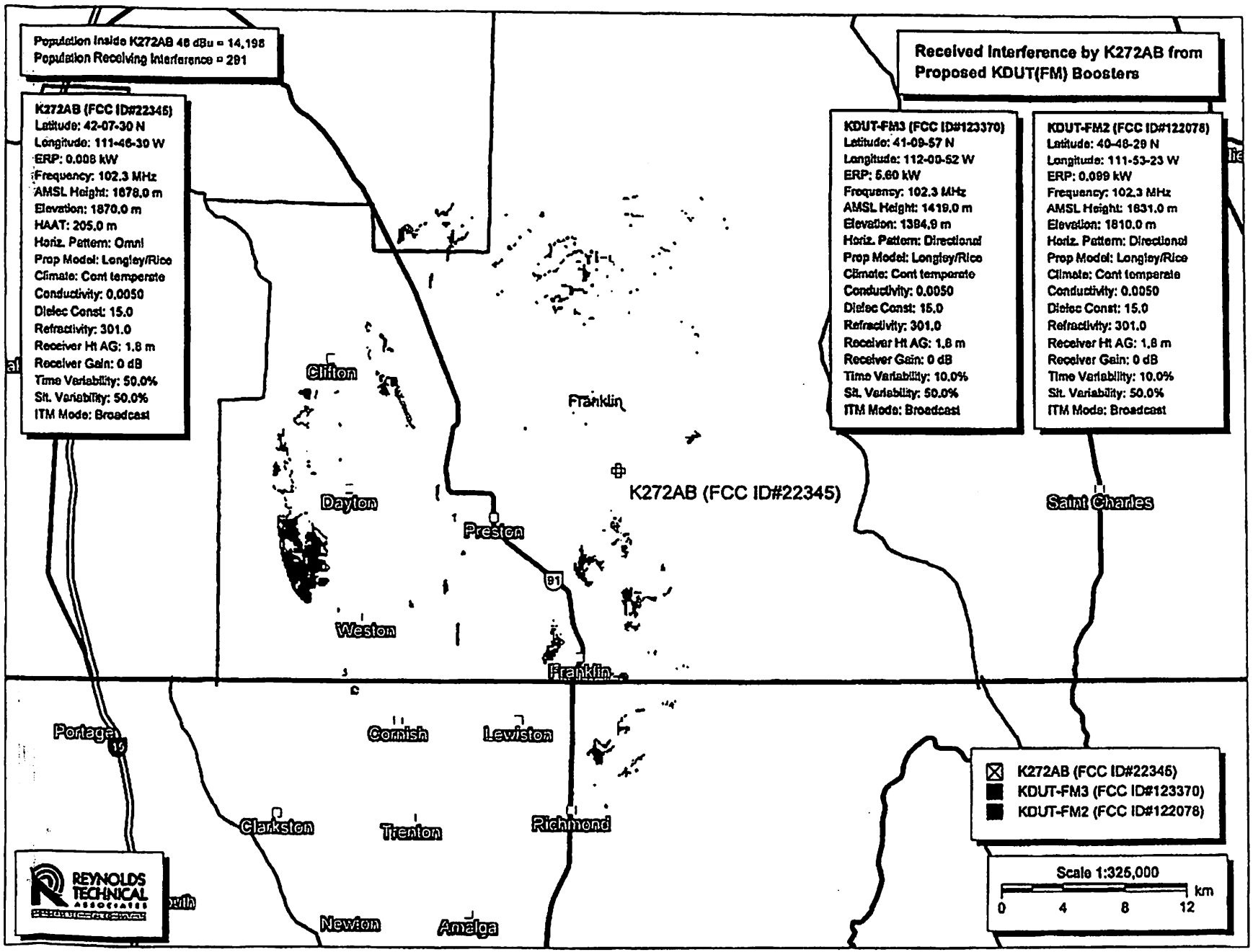
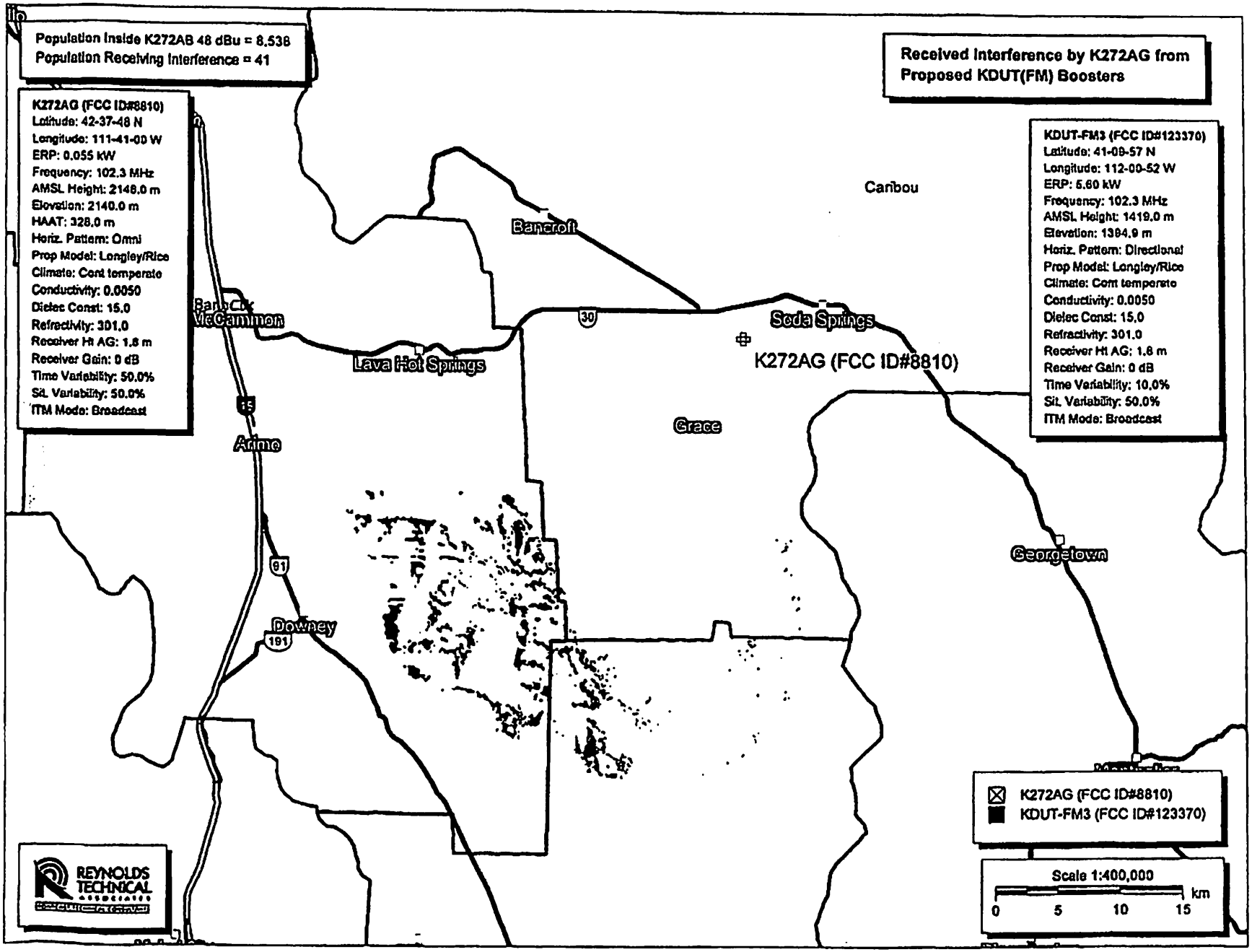
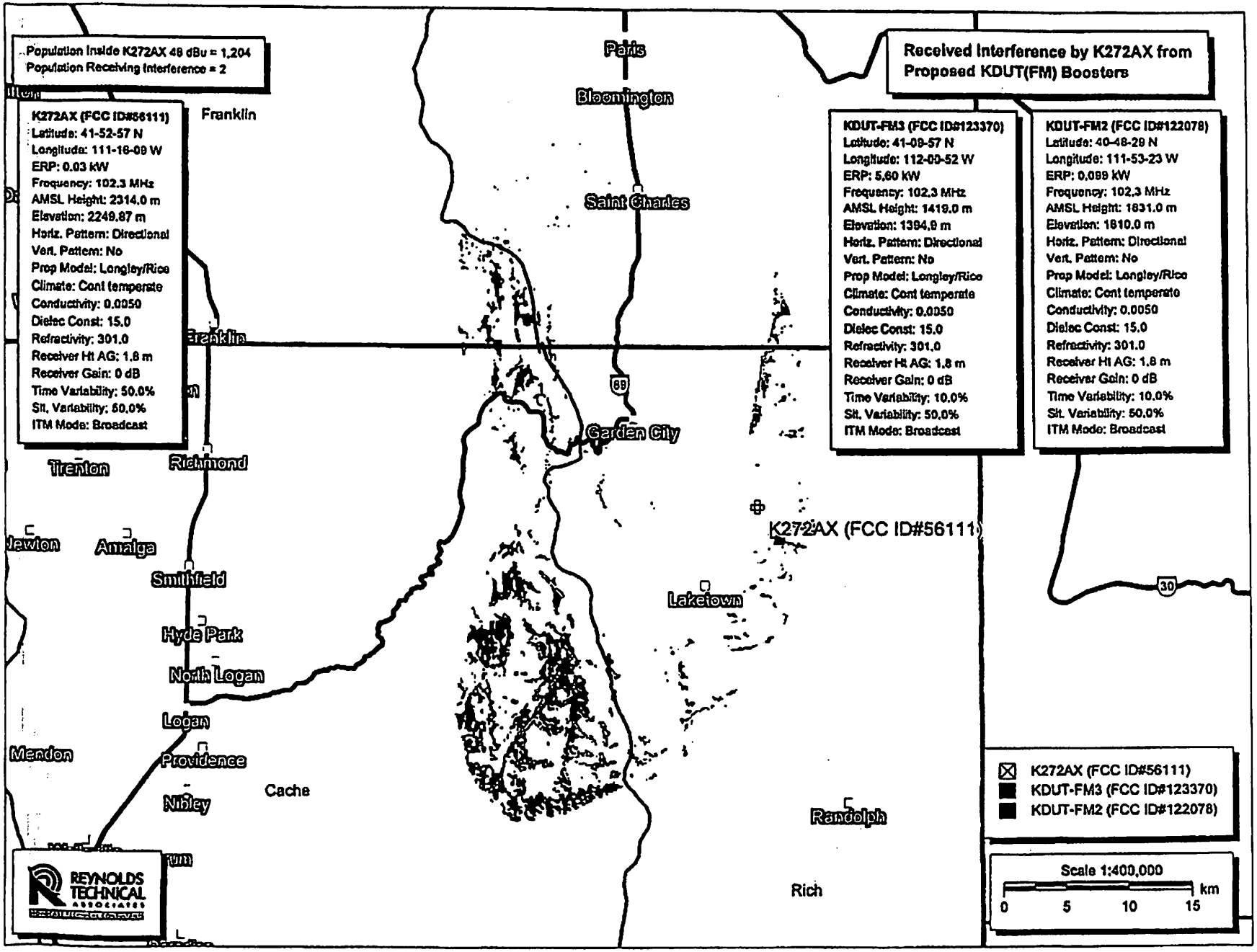
Population Receiving Interference = 16,135
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 6.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
KDUT-FM3 (FCC ID#123370)
Riverdale
Hooper
Roy
Clinton
South Weber
West Point
Clearfield
Syracuse
Layton
Kaysville
Davis
Farmington
84
89
15
KSL-FM (FCC ID#54156)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KSL-FM from
Proposed KDUT-FM5 Booster
KDUT-FM5 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
Vineyard
Orem
Provo
Springville
Cedar Fort
15
189
89
KDUT-FM5 (FCC ID#131424)
KSL-FM (FCC ID#54156)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES


Population Inside K272AB 46 dBu = 14,198
Population Receiving Interference = 291
K272AB (FCC ID#22345)
Latitude: 42-07-30 N
Longitude: 111-46-30 W
ERP: 0.008 kW
Frequency: 102.3 MHz
AMSL Height: 1678.0 m
Elevation: 1870.0 m
HAAT: 205.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by K272AB from Proposed KDUT(FM) Boosters
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1384.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1631.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Clifton
Franklin
K272AB (FCC ID#22345)
Dayton
Preston
Saint Charles
91
Weston
Franklin
Portage
19
Cornish
Lewiston
Clarkston
Trenton
Richmond
Newton
Amalga
K272AB (FCC ID#22345)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:325,000
0
4
8
12
km
REYNOLDS TECHNICAL ASSOCIATES


Population Inside K272AB 48 dBu = 8,538
Population Receiving Interference = 41
Received Interference by K272AG from Proposed KDUT(FM) Boosters
K272AG (FCC ID#8810)
Latitude: 42-37-48 N
Longitude: 111-41-00 W
ERP: 0.055 kW
Frequency: 102.3 MHz
AMSL Height: 2148.0 m
Elevation: 2140.0 m
HAAT: 328.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1384.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Caribou
Bancroft
Soda Springs
K272AG (FCC ID#8810)
Lava Hot Springs
Grace
Arimo
Downey
Georgetown
30
15
91
191
K272AG (FCC ID#8810)
KDUT-FM3 (FCC ID#123370)
Scale 1:400,000
km
0
5
10
15
REYNOLDS TECHNICAL


Population Inside K272AX 48 dBu = 1,204
Population Receiving Interference = 2
Received Interference by K272AX from Proposed KDUT(FM) Boosters
K272AX (FCC ID#56111)
Latitude: 41-52-57 N
Longitude: 111-18-09 W
ERP: 0.03 kW
Frequency: 102.3 MHz
AMSL Height: 2314.0 m
Elevation: 2249.87 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Paris
Bloomington
Saint Charles
Franklin
Garden City
Trenton
Richmond
Lewiston
Amalga
Smithfield
Hyde Park
North Logan
Logan
Mendon
Providence
Nibley
Cache
Laketown
Randolph
Rich
K272AX (FCC ID#56111)
K272AX (FCC ID#56111)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:400,000
km
0
5
10
15
REYNOLDS TECHNICAL ASSOCIATES

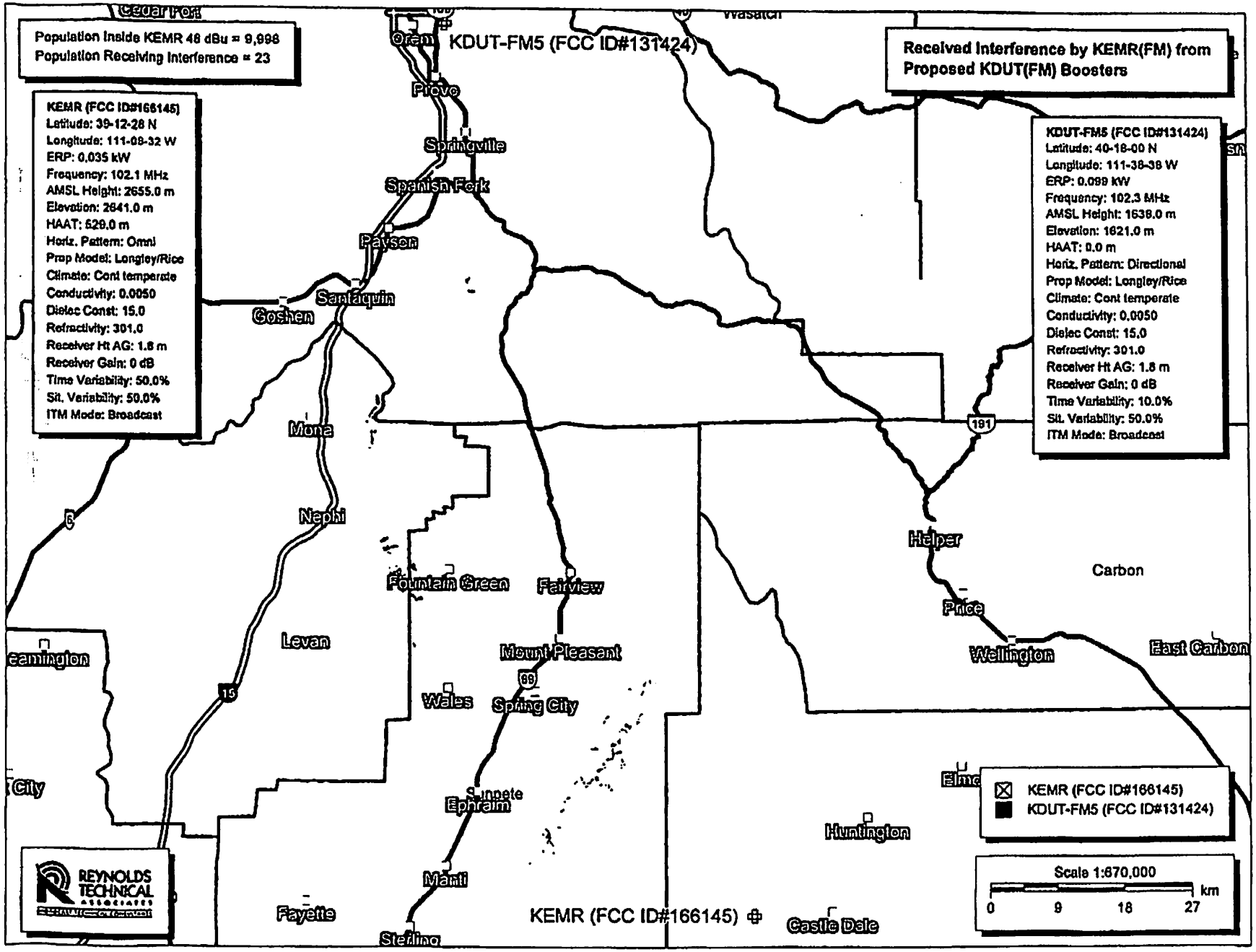

Population Inside KEMR 48 dBu = 9,998
Population Receiving Interference = 23
KEMR (FCC ID#166145)
Latitude: 39-12-28 N
Longitude: 111-09-32 W
ERP: 0.035 kW
Frequency: 102.1 MHz
AMSL Height: 2655.0 m
Elevation: 2641.0 m
HAAT: 529.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM5 (FCC ID#131424)
Received Interference by KEMR(FM) from Proposed KDUT(FM) Boosters
KDUT-FM5 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
HAAT: 0.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Orem
Provo
Springville
Spanish Fork
Payson
Santaquin
Goshen
Mona
Nephi
Fountain Green
Fairview
Levan
Mount Pleasant
Wales
Spring City
Ephraim
Manti
Fayette
Sterling
Helper
Carbon
Price
Wellington
East Carbon
Huntington
Castle Dale
191
15
89
KEMR (FCC ID#166145)
KDUT-FM5 (FCC ID#131424)
Scale 1:670,000
km
0
9
18
27
REYNOLDS TECHNICAL ASSOCIATES
KEMR (FCC ID#166145)

EXHIBIT B

Population within KDUT-FM3 Contour (Ogden)

Brigham City (18,709)
Mantua (756)
Perry (3,889)
Willard (1,747)
South Willard* (586)
North Ogden (17,682)
Pleasant View (7,052)
Plain City (5,288)
Farr West (5,335)
Marriott-Slaterville (1,537)
Ogden (82,865)
Huntsville (653)
West Haven (8,357)
Riverdale (8,126)
Roy (35,672)
Hooper* (5,665)
South Ogden (15,891)
South Weber (6,167)
Sunset (4,945)
Clinton (19,855)
Clearfield (27,851)
West Point (9,001)
Syracuse (22,195)
Layton (65,514)

(* Denotes CDP)

EXHIBIT C

Population within KDUT-FM2 Contour (Salt Lake City)

Farmington (17,217)
Centerville (15,270)
West Bountiful (5,337)
Bountiful (44,473)
Woods Cross (8,705)
North Salt Lake (13,446)
Salt Lake City (181,698)
Magna* (22,770)
West Valley City (123,447)
Canyon Rim* (10,428)
South Salt Lake (21,607)
Millcreek* (30,377)
East Millcreek* (21,385)
Mount Olympus* (7,103)
Taylorsville (58,785)
Kearns* (33,659)
Murray (46,201)
Oquirrh* (10,390)
Cottonwood West* (18,727)
Holladay (25,676)
Midvale (28,129)
Cottonwood Heights* (35,418)
Little Cottonwood Creek Valley* (7,221)
Sandy (96,660)
West Jordan (104,447)
South Jordan (51,131)
Herriman (17,689)
Riverton (39,751)
Bluffdale (8,016)
Draper (42,317)
Alpine (9,885)
Highland (16,189)
Lehi (46,802)

(* Denotes CDP)

EXHIBIT D

Population within KDUT-FM52 Contour (Provo)

American Fork (27,064)
Pleasant Grove (33,798)
Lindon (10,466)
Vineyard (148)
Orem (93,250)
Provo (118,581)
Palmyra* (485)
Lake Shore* (755)
Springville (28,520)
Spanish Fork (31,538)

(* Denotes CDP)

EXHIBIT E

Ogden booster

Total Population: 257,686

White:	214,675
Black:	3,673
Hispanic:	29,965
Native American:	1,602
Asian:	3,578
Pacific Islander:	407
Mixed Race:	3,579
Other:	207

Salt Lake City booster

Total Population: 983,981

White:	807,523
Black:	8,730
Hispanic:	109,569
Native American:	6,780
Asian:	23,510
Pacific Islander:	11,145
Mixed Race:	15,751
Other:	973

Provo booster

Total Population: 308,005

White:	272,198
Black:	943
Hispanic:	22,989
Native American:	1,695
Asian:	3,669
Pacific Islander:	1,965
Mixed Race:	4,253
Other:	293

ATTACHMENT B

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

March 29, 2010

Francisco R. Montero, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209-3801

In re: Bustos Media of Utah License, LLC
KDUT (FM), Randolph, Utah
Facility Identification Number: 88272
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed March 9, 2010, on behalf of Bustos Media of Utah License, LLC ("BMU"), licensee of Station KDUT(FM), Randolph, Utah[1], and several associated FM Booster Stations[2]. BMU proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on the FM Booster stations. BMU proposes to simultaneously broadcast different noncommercial announcements, targeted to specific, diverse audiences, on each of the booster stations. BMU proposes to use proprietary technology provided by GEO Spots, LLC, which will allow different announcements to be placed on each of the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. BMU states that the experimental broadcasts will be conducted over a 30-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that BMU will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing in addition to the proposed 30-day experimentation, a term of 60 days is appropriate.

---

[1] KDUT is licensed for operation on Channel 272C (102.3 MHz), with effective radiated power of 89 kilowatts (H only) and antenna height above average terrain of 647 meters.

[2] KDUT-FM1, Bountiful, UT; KDUT-FM2, Salt Lake City, UT; KDUT-FM3, Ogden, UT; KDUT-FM5, Provo, UT.

Accordingly, the request for Experimental Authorization IS GRANTED. Station KDUT may transmit independent, noncommercial announcements on its associated FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted, only to the extent necessary for the proposed experimentation. BMU shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, BMU shall file a full report of the research, experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Any construction undertaken pursuant to this authority is entirely at BMU's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **May 29, 2010**.

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Bustos Media of Utah License, LLC
Aaron P. Shainis, Esq. (Counsel for GEO Spots, LLC)

ATTACHMENT C

HARRY F. COLE
ANNE GOODWIN CRUMP
PAUL J. FELDMAN
JEFFREY J. GEE
CHRISTINE GOEPP*
KEVIN M. GOLDBERG
FRANK R. JAZZO
M. SCOTT JOHNSON
DANIEL A. KIRKPATRICK
MITCHELL LAZARUS
STEPHEN T. LOVELADY*
SUSAN A. MARSHALL
HARRY C. MARTIN
MICHELLE A. McCLURE
MATTHEW H. McCORMICK
FRANCISCO R. MONTERO
LEE G. PETRO*
RAYMOND J. QUIANZON
JAMES P. RILEY
DAVINA SASHKIN
PETER TANNENWALD
KATHLEEN VICTORY
HOWARD M. WEISS

* NOT ADMITTED IN VIRGINIA

FLETCHER, HEALD & HILDRETH, P.L.C.

ATTORNEYS AT LAW
11th FLOOR, 1300 NORTH 17th STREET
ARLINGTON, VIRGINIA 22209

OFFICE: (703) 812-0400
FAX: (703) 812-0486
www.fhhlaw.com

RETIRED MEMBERS
VINCENT J. CURTIS, JR.
RICHARD HILDRETH
GEORGE PETRUTSAS

OF COUNSEL
ALAN C. CAMPBELL
THOMAS J. DOUGHERTY, JR.
DONALD J. EVANS
ROBERT M. GURSS*
RICHARD F. SWIFT

WRITER'S DIRECT
(703) 812-0480
MONTERO@FHHLAW.COM

May 26, 2010

VIA HAND DELIVERY
Marlene H. Dortch
Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW – A325
445 12th Street, S.W.
Washington, DC 20554

Re: Bustos Media of Utah License, LLC
KDUT(FM), Randolph, Utah
Facility ID No.: 88272
Application for Experimental Authorization

Dear Ms. Dortch:

On March 29, 2010, the Commission granted Bustos Media of Utah License, LLC ("BMU") an Experimental Authorization with respect to the above-referenced facility (copy attached). That authorization expires on May 29, 2010. BMU respectfully requests an additional 60 days to complete the experimental broadcasts which were the subject of the March 9, 2010 request. The additional time is necessitated since BMU has been advised by Lazer Spots, LLC (formerly Geo Spots, LLC) that there has been a delay in getting the equipment utilized to conduct the tests. The additional time requested would be consistent with the amount of time originally granted by the Commission. If you have any questions with respect to this matter, please communicate with the undersigned.

Sincerely yours,

Francisco R. Montero
Counsel for
Bustos Media of Utah License, LLC

cc: Norm Miller, via e-mail
Aaron P. Shainis, counsel for Lazer Spots, LLC

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

March 29, 2010

Francisco R. Montero, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209-3801

In re: Bustos Media of Utah License, LLC
KDUT (FM), Randolph, Utah
Facility Identification Number: 88272
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed March 9, 2010, on behalf of Bustos Media of Utah License, LLC ("BMU"), licensee of Station KDUT(FM), Randolph, Utah[1], and several associated FM Booster Stations[2]. BMU proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on the FM Booster stations. BMU proposes to simultaneously broadcast different noncommercial announcements, targeted to specific, diverse audiences, on each of the booster stations. BMU proposes to use proprietary technology provided by GEO Spots, LLC, which will allow different announcements to be placed on each of the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. BMU states that the experimental broadcasts will be conducted over a 30-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that BMU will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing in addition to the proposed 30-day experimentation, a term of 60 days is appropriate.

---

[1] KDUT is licensed for operation on Channel 272C (102.3 MHz), with effective radiated power of 89 kilowatts (H only) and antenna height above average terrain of 647 meters.

[2] KDUT-FM1, Bountiful, UT; KDUT-FM2, Salt Lake City, UT; KDUT-FM3, Ogden, UT; KDUT-FM5, Provo, UT.

Accordingly, the request for Experimental Authorization IS GRANTED. Station KDUT may transmit independent, noncommercial announcements on its associated FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted, only to the extent necessary for the proposed experimentation. BMU shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, BMU shall file a full report of the research, experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Any construction undertaken pursuant to this authority is entirely at BMU's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **May 29, 2010.**

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Bustos Media of Utah License, LLC
Aaron P. Shainis, Esq. (Counsel for GEO Spots, LLC)

ATTACHMENT D

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

June 3, 2010

Francisco R. Montero, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209-3801

In re: Bustos Media of Utah License, LLC
KDUT (FM), Randolph, Utah
Facility Identification Number: 88272
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request filed May 26, 2010, for extension of the Experimental Authorization granted to Bustos Media of Utah License, LLC ("BMU"), on March 29, 2010. In support of the request, BMU states that it has experienced delays in the delivery of the equipment necessary to conduct the planned tests. Our review indicates that good cause has been shown for grant of the requested extension.

Accordingly, the Experimental Authorization granted to Bustos Media of Utah License, LLC, on March 29, 2010, IS HEREBY EXTENDED through **August 3, 2010**. All other terms of the original authorization remain unchanged.

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Bustos Media of Utah License, LLC
Aaron P. Shainis, Esq. (Counsel for GEO Spots, LLC)

ATTACHMENT D

Shainis & Peltzman, Chartered

Counselors at Law

Aaron P. Shainis
aaron@s-plaw.com

Lee J. Peltzman
lee@s-plaw.com

Suite 240
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Washington, D.C. 20036

(202) 293-0011
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e-mail: shainispeltzman@s-plaw.com

Special Counsel
Stephen C. Lecker
steve@s-plaw.com

Of Counsel
William H. DuRoss, III
bill@s-plaw.com

Robert J. Keller
bob@s-plaw.com

July 19, 2011

FILED/ACCEPTED

JUL 19 2011

Federal Communications Commission
Office of the Secretary

VIA HAND DELIVERY
Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Cohan Radio Group, Inc.
WWOJ(FM)
Avon Park, FL
Facility ID No. 27199

Dear Ms. Dortch:

Cohan Radio Group, Inc. ("Cohan"), the licensee of WWOJ(FM), Facility ID No. 27199, Avon Park, Florida, by its attorney and pursuant to Section 73.1510 of the Commission's rules, requests an experimental authorization. In support, Cohan submits the following:

Cohan seeks an experimental authorization to allow it to utilize boosters (unlicensed) to originate limited programming. Specifically, attached to the instant submission are the engineering portions of FCC Form 349.[1] Cohan intends to build the boosters and utilize them only for the period of the experimental authorization. Once the authorization has expired, the boosters would be dismantled.

Cohan intends to simultaneously broadcast on each of the boosters different non-commercial announcements targeted to discreet audiences. Cohan intends to target the broadcasts to appeal to specific diverse audiences which are encompassed within the boosters'

[1] Attachments A, B and C.

STAMP & RETURN

service areas. Each of the boosters in question will concurrently broadcast a different non-commercial message.

Methodology

The broadcasts shall be done over a sixty (60) day period.[2] Broadcasts will be done between the hours of 9:00 a.m. and 3:00 p.m. and 7:00 p.m. and 5:00 a.m. It is anticipated that no more than four (4) non-commercial announcements shall be broadcast on each of the boosters in a given hour. The announcements will be directed to the specific needs and interests of the areas served by the respective booster in question.

The broadcasts shall be done at the direction and under the control of Cohan. Cohan is utilizing the services of Lazer Spots, LLC ("Lazer") (formerly GEO Spots, LLC), to assist it in this endeavor. In this regard, the placement of the announcements shall be done using a master control device. Lazer Spots will be employing proprietary technology (patent pending), which will allow different announcements to be placed on each of the boosters in a synchronized time sequence.

Technical Operation

During the broadcasts, no changes to the authorized facilities are contemplated. The boosters and the primary station will broadcast consistent with their authorizations.

Public Interest Considerations

On March 9, 2010, Bustos Media of Utah License, LLC ("Bustos") requested a similar experimental authorization (Attachment D) for boosters associated with KDUT(FM), Facility ID No. 88272, Randolph, Utah. Specifically, KDUT-FM2, KDUT-FM3 and KDUT-FM5. On March 29, 2010, the Commission granted the experimental authorization (Attachment E).

[2] It is requested that the sixty (60) day period commence when construction of the boosters has been completed and the Commission is so notified.

The instant authorization would allow for testing in more challenging terrain. It is submitted that, similar to the Bustos Utah authorization request, an event in a discreet area covered by a particular booster would have a specific relevance and interested independent from the service area as a whole. The grant of the authorization would allow for the testing of the technology in a non-conducive terrain.

The instant request is consistent with the Commission's focus on the future information needs of communities. See *FCC Launches Examination of the Future of Media and Information Needs of Communities in the Digital Age*, DA-10-100, released January 21, 2010.

Cohan shall, within thirty (30) days of termination of the experimental authorization, submit a report of the results of the experimental operation. See Section 73.1510(d) of the Commission's rules. That report shall specifically address the extent of any interference presented by the simultaneous operation of the boosters when different broadcasts are being concurrently done.

It is submitted that good cause exists for issuance of the experimental authorization as the instant request satisfies all of the criteria enumerated in Section 73.1510 of the Commission's rules.

Neither Cohan nor any of its principals is subject to denial of federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 USC Section 862.

Respectfully submitted,

COHAN RADIO GROUP, INC.

By: Aaron P. Shainis

Aaron P. Shainis
Shainis & Peltzman, Chartered
Its counsel

cc: Norm Miller
James Bradshaw

ATTACHMENT A

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 7/13/2011
Mailing Address DU TREIL, LUNDIN & RACKLEY, INC. 201 FLETCHER AVENUE	
City SARASOTA	State or Country (if foreign address) FL / Zip Code 34237 - 6019
Telephone Number (include area code) 9413296000	E-Mail Address (if available) JEFF@DLR.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).

Unable to find table

Section III-A - 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: 256
2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
   ○ Off-air ○ Microwave ○ Satellite ○ Via ◉ Other
4. Antenna Location Coordinates: (NAD 27)

   Latitude:
   Degrees 27 Minutes 21 Seconds 59 ◉ North ○ South

   Longitude:
   Degrees 81 Minutes 47 Seconds 52 ◉ West ○ East
5. Antenna Structure Registration Number: 1028566
   ☐ Not Applicable ☐ Notification filed with FAA
6. Antenna Location Site Elevation Above Mean Sea Level: 17 meters
7. Overall Tower Height Above Ground Level: 115 meters
8. Height of Radiation Center Above Ground Level: meters(H) 64 meters(V)
9. Effective Radiated Power: kW(H) 5 kW(V)
10. Transmitting Antenna:

    Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.

    ○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

    Manufacturer ALD Model LOG PERIODIC ARRAY

    Rotation:137degrees ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
60	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11.	**For FM Boosters and Fill-in translators only.** a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site. b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.	○ Yes ○ No ◉ N/A See Explanation in [Exhibit 10] ◉ Yes ○ No ○ N/A See Explanation in [Exhibit 11]
12.	**Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply: **Overlap Requirements.** ☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** **Television Channel 6 Protection.** ☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.**	◉ Yes ○ No See Explanation in [Exhibit 12] [Exhibit 13] [Exhibit 14]
13.	**Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.	◉ Yes ○ No See Explanation in [Exhibit 15]
14.	**Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.	◉ Yes ○ No See Explanation in [Exhibit 16]
15.	**Environmental Protection Act.** Applicant certifies that 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 Appendix A, an **Exhibit is required.** 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.	◉ Yes ○ No See Explanation in [Exhibit 17]

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?	○ Yes ○ No
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.	○ Yes ○ No
2. **Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4. **Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
New (increased) area served in square kilometers (excluding areas of water):	
Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers	
5. **Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6. **Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL AND WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 64 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 5 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.0004 MW/CM2. THIS IS 0.2% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

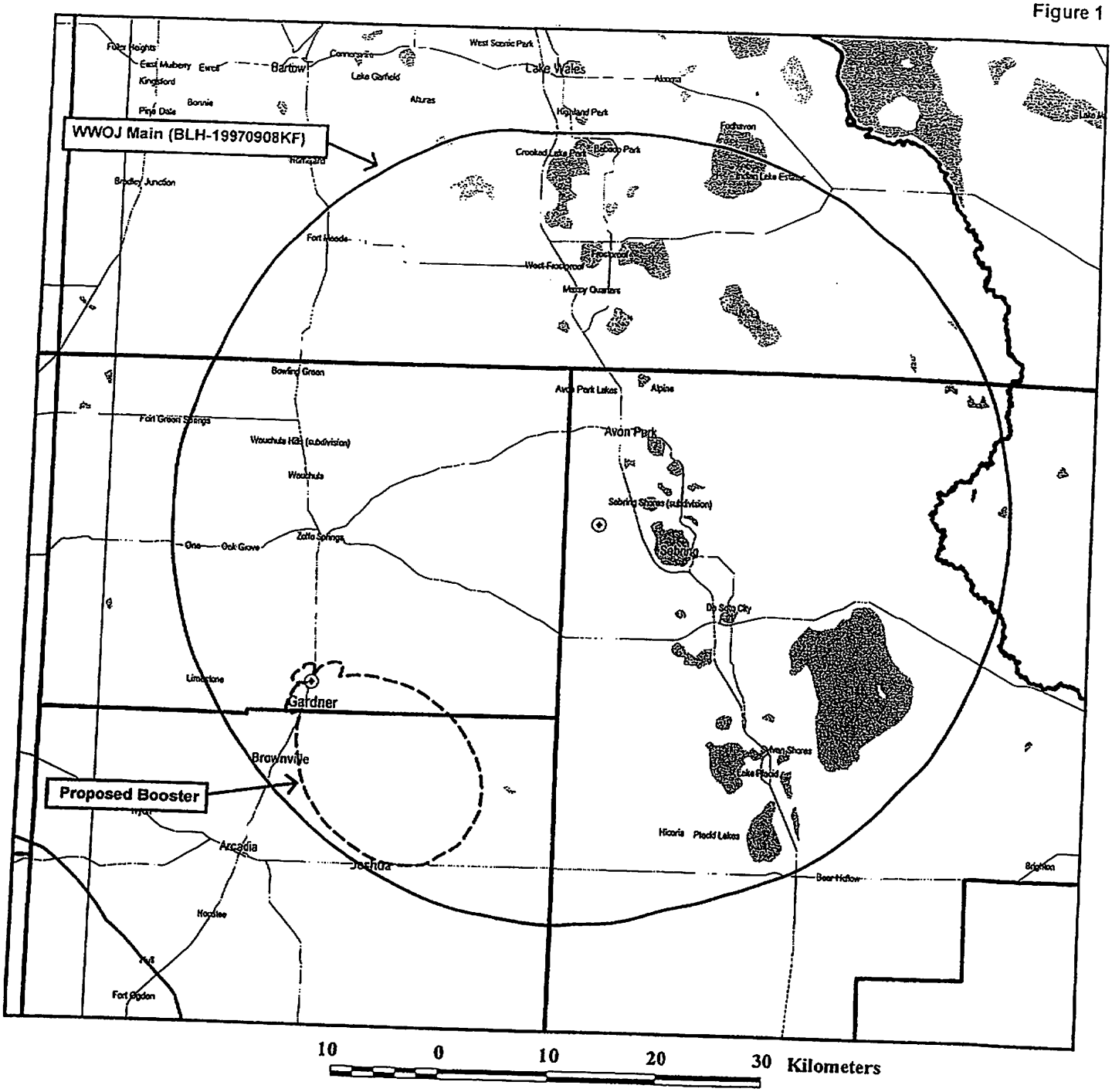
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME, WEARING ACCEPTED RFR PROTECTIVE CLOTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY ADDRESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER

ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - GARDNER BOOSTER

Figure 1

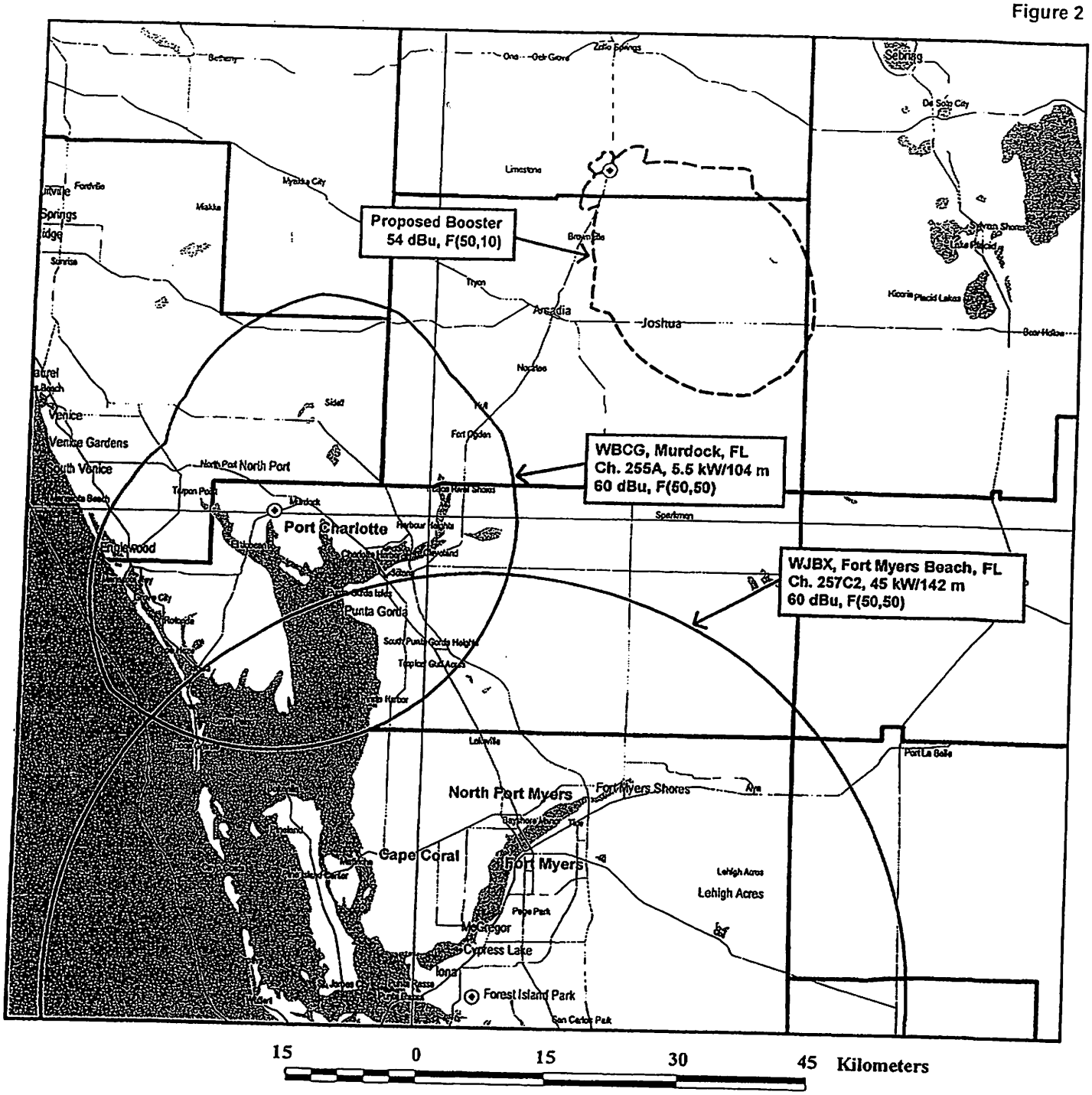


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
GARDNER, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
GARDNER, FLORIDA
CH 256 5 KW (MAX-DA)

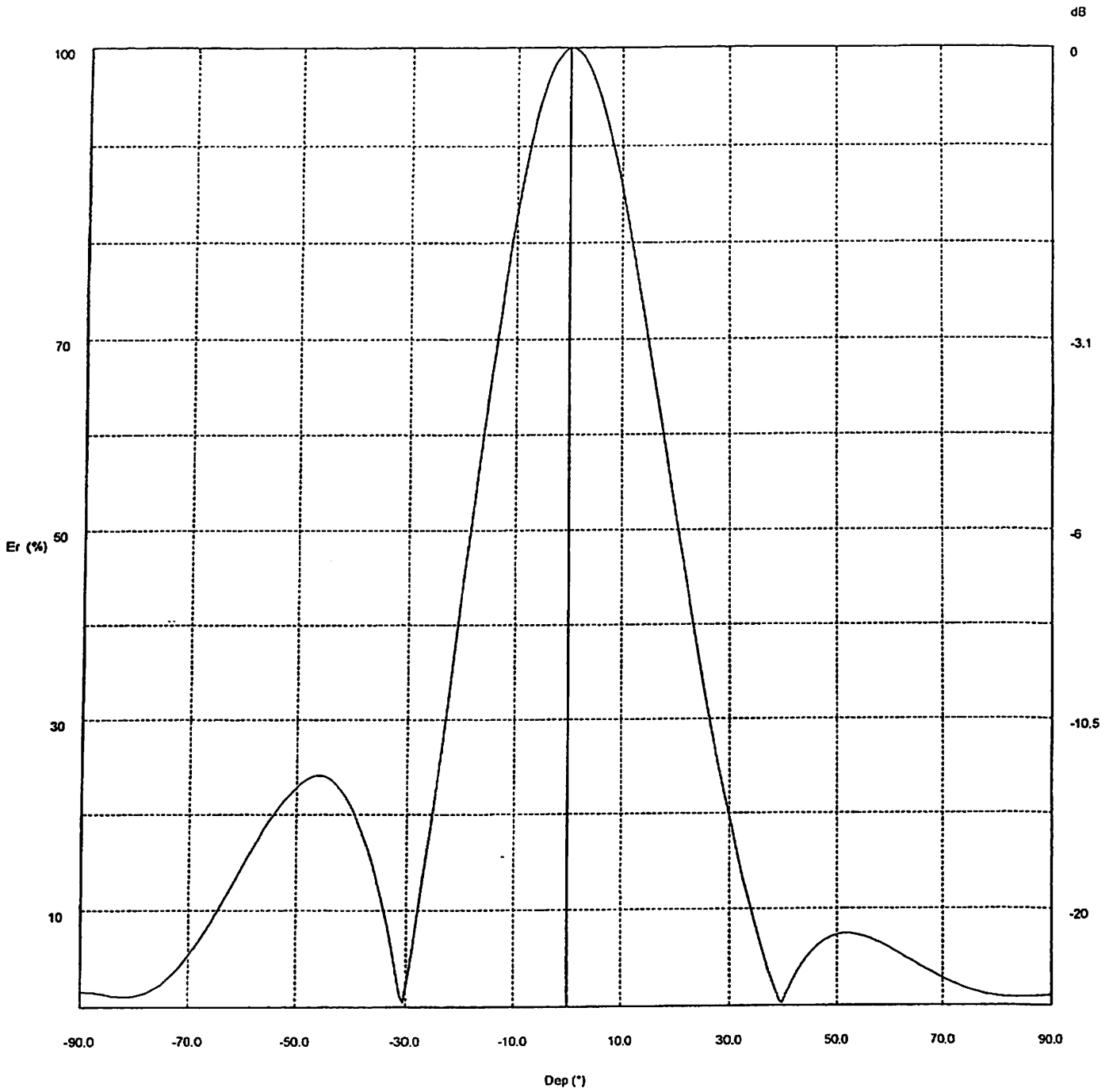
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 3

TX station: 05ov2011 Lazer Spots Project
Frequency: 99.10 MHz
Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW): 3.2894

ATTACHMENT B

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 7/13/2011

Mailing Address DU TREIL, LUNDIN & RACKLEY, INC. 201 FLETCHER AVENUE		
City SARASOTA	State or Country (if foreign address) FL	Zip Code 34237 - 6019
Telephone Number (include area code) 9413296000	E-Mail Address (if available) JEFF@DLR.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 III-A - 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: 256

2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
○ Off-air ○ Microwave ○ Satellite ○ Via ◉ Other

4. Antenna Location Coordinates: (NAD 27)

Latitude:
Degrees 27 Minutes 12 Seconds 40 ◉ North ○ South

Longitude:
Degrees 81 Minutes 40 Seconds 30 ◉ West ○ East

5. Antenna Structure Registration Number: 1208800
☐ Not Applicable ☐ Notification filed with FAA

6.	Antenna Location Site Elevation Above Mean Sea Level:	24 meters
7.	Overall Tower Height Above Ground Level:	80 meters
8.	Height of Radiation Center Above Ground Level:	meters(H) 55 meters(V)
9.	Effective Radiated Power:	kW(H) 5 kW(V)

10. Transmitting Antenna:

Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.

○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

Manufacturer ALD Model LOG PERIODIC ARRAY

Rotation:348degrees ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
9	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11. **For FM Boosters and Fill-in translators only.**

a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.

○ Yes ○ No ◉ N/A

See Explanation in [Exhibit 10]

b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.

◉ Yes ○ No ○ N/A

See Explanation in [Exhibit 11]

12. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply:

◉ Yes ○ No

See Explanation in [Exhibit 12]

Overlap Requirements.

☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** [Exhibit 13]

Television Channel 6 Protection.

☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.** [Exhibit 14]

13. **Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.

◉ Yes ○ No

See Explanation in [Exhibit 15]

14. **Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.

◉ Yes ○ No

See Explanation in [Exhibit 16]

15. **Environmental Protection Act.** Applicant certifies that 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 Appendix A, an Exhibit is required.

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.

◉ Yes ○ No

See Explanation in [Exhibit 17]

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?	○ Yes ○ No
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.	○ Yes ○ No
2. **Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4. **Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
New (increased) area served in square kilometers (excluding areas of water):	
Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers	
5. **Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6. **Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

ertify 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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL AND WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 55 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 5 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.0006 MW/CM2. THIS IS 0.3% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

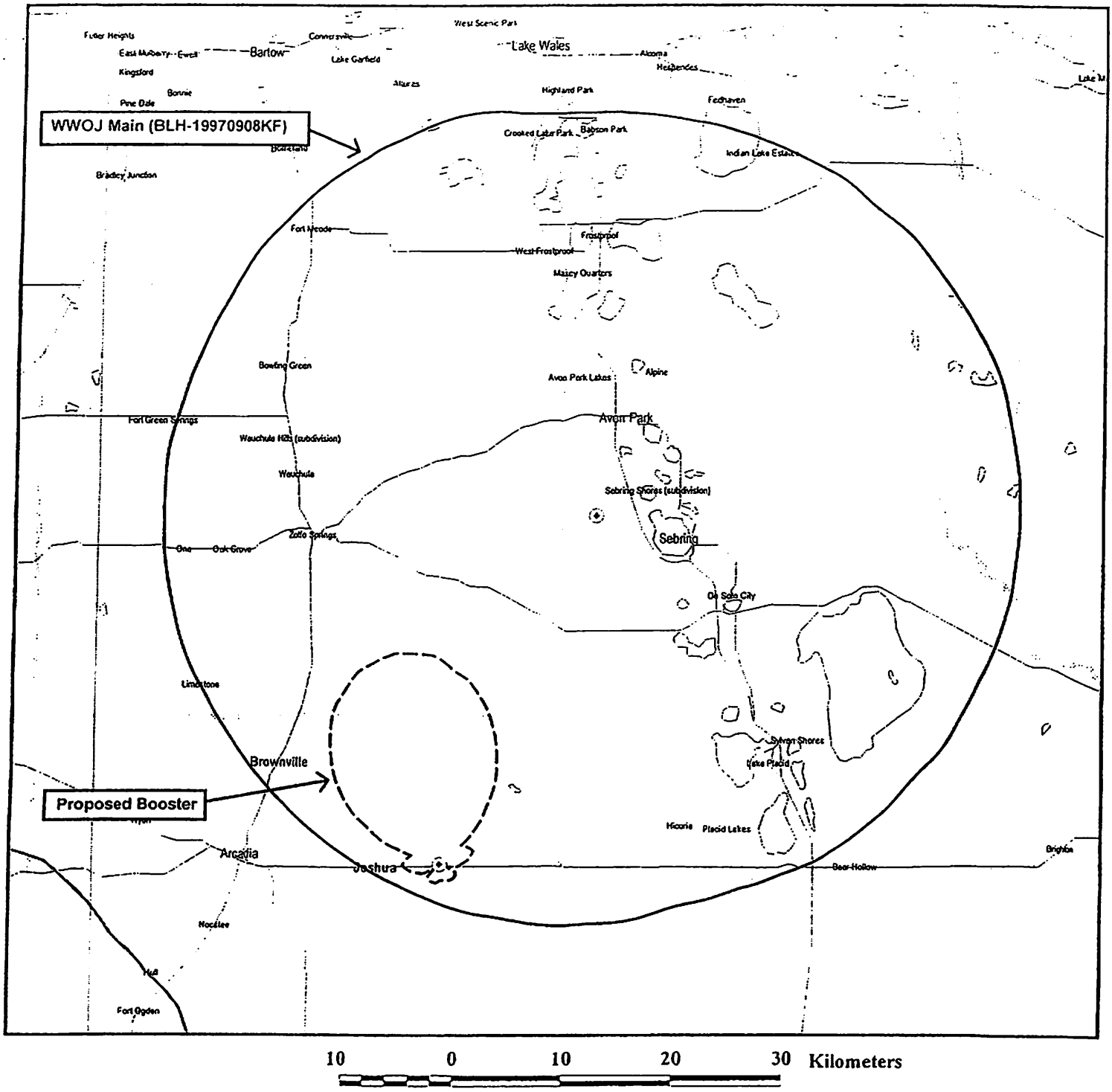
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME, WEARING ACCEPTED RFR PROTECTIVE
OTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY
)RESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER

ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - BROWNSVILLE BOOSTER

Figure 1

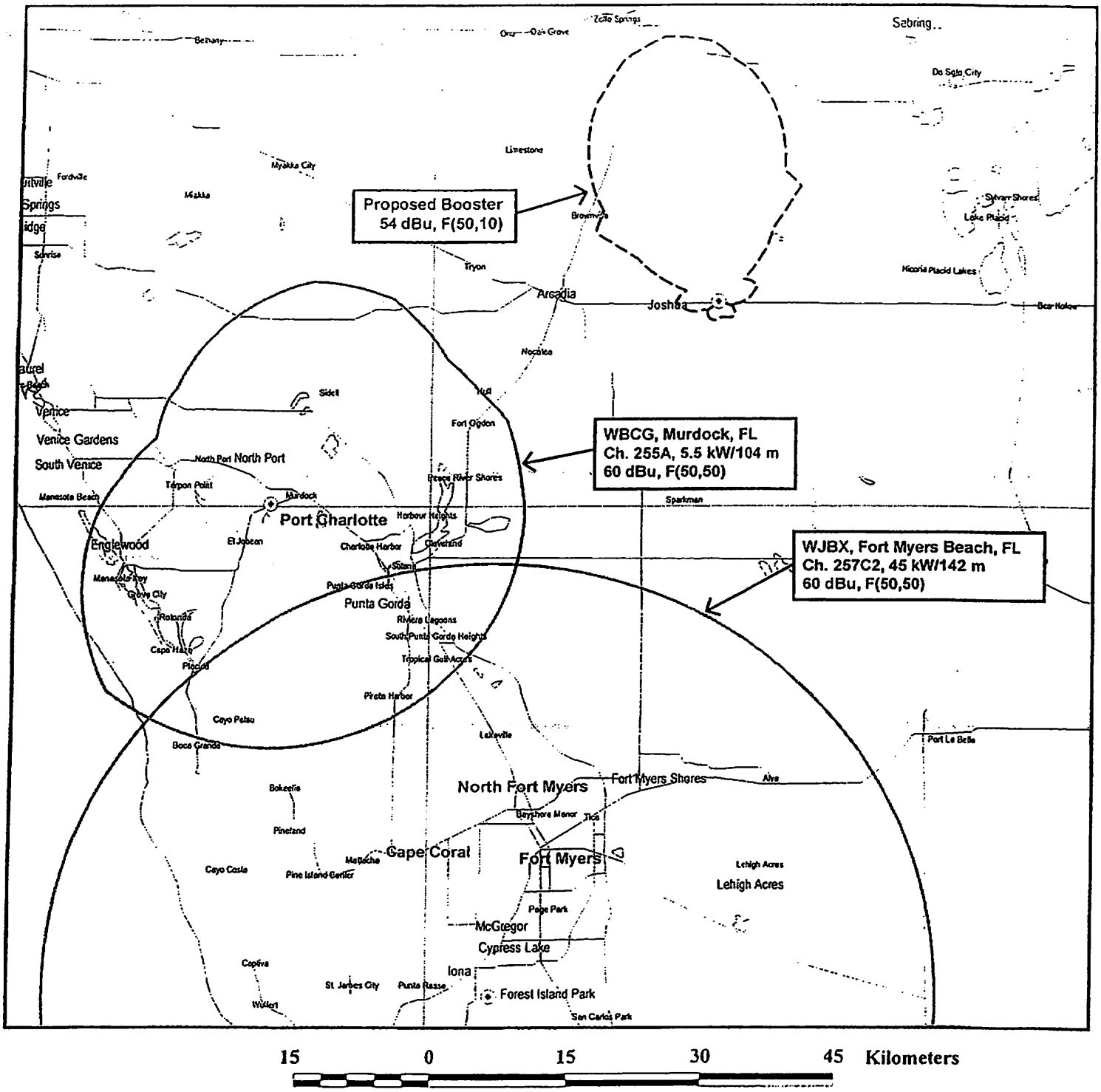


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
BROWNSVILLE, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
BROWNSVILLE, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

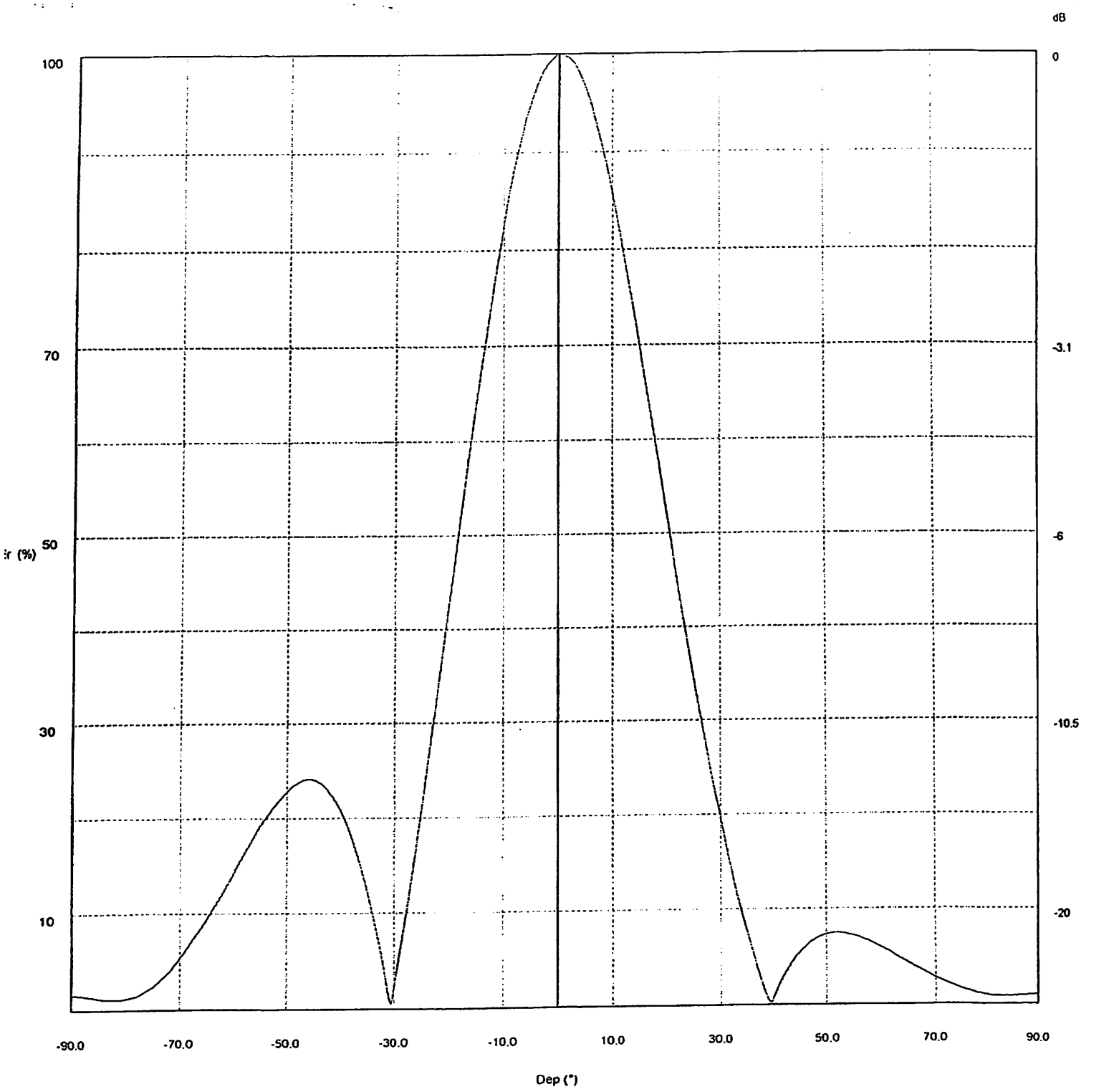
TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW): 3.289

ATTACHMENT C

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 7/13/2011

Mailing Address DU TREIL, LUNDIN & RACKLEY, INC. 201 FLETCHER AVENUE		
City SARASOTA	State or Country (if foreign address) FL	Zip Code 34237 - 6019
Telephone Number (include area code) 9413296000	E-Mail Address (if available) JEFF@DLR.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 III-A - 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: 256
2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
   ○ Off-air ○ Microwave ○ Satellite ○ Via ○ Other
4. Antenna Location Coordinates: (NAD 27)

   Latitude:
   Degrees 27 Minutes 12 Seconds 35 ◉ North ○ South

   Longitude:
   Degrees 81 Minutes 33 Seconds 31 ◉ West ○ East
5. Antenna Structure Registration Number: 1022372
   ☐ Not Applicable ☐ Notification filed with FAA
6. Antenna Location Site Elevation Above Mean Sea Level: 26 meters
7. Overall Tower Height Above Ground Level: 61 meters
8. Height of Radiation Center Above Ground Level: meters(H) 47 meters(V)
9. Effective Radiated Power: kW(H) 5 kW(V)
10. Transmitting Antenna:

    Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.

    ○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

    Manufacturer ALD Model LOG PERIODIC ARRAY

    Rotation:291degrees ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
60	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11.	**For FM Boosters and Fill-in translators only.** a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site. b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.	○ Yes ○ No ◉ N/A See Explanation in [Exhibit 10] ◉ Yes ○ No ○ N/A See Explanation in [Exhibit 11]
12.	**Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply: **Overlap Requirements.** ☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** **Television Channel 6 Protection.** ☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.**	◉ Yes ○ No See Explanation in [Exhibit 12] [Exhibit 13] [Exhibit 14]
13.	**Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.	◉ Yes ○ No See Explanation in [Exhibit 15]
14.	**Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.	◉ Yes ○ No See Explanation in [Exhibit 16]
15.	**Environmental Protection Act.** Applicant certifies that 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 Appendix A, an **Exhibit is required.** 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.	◉ Yes ○ No See Explanation in [Exhibit 17]

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?		○ Yes ○ No
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.	○ Yes ○ No
2.	**Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4.	**Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
	New (increased) area served in square kilometers (excluding areas of water):	
	Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers		
5.	**Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6.	**Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL AND WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 47 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 5 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.0008 MW/CM2. THIS IS 0.4% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

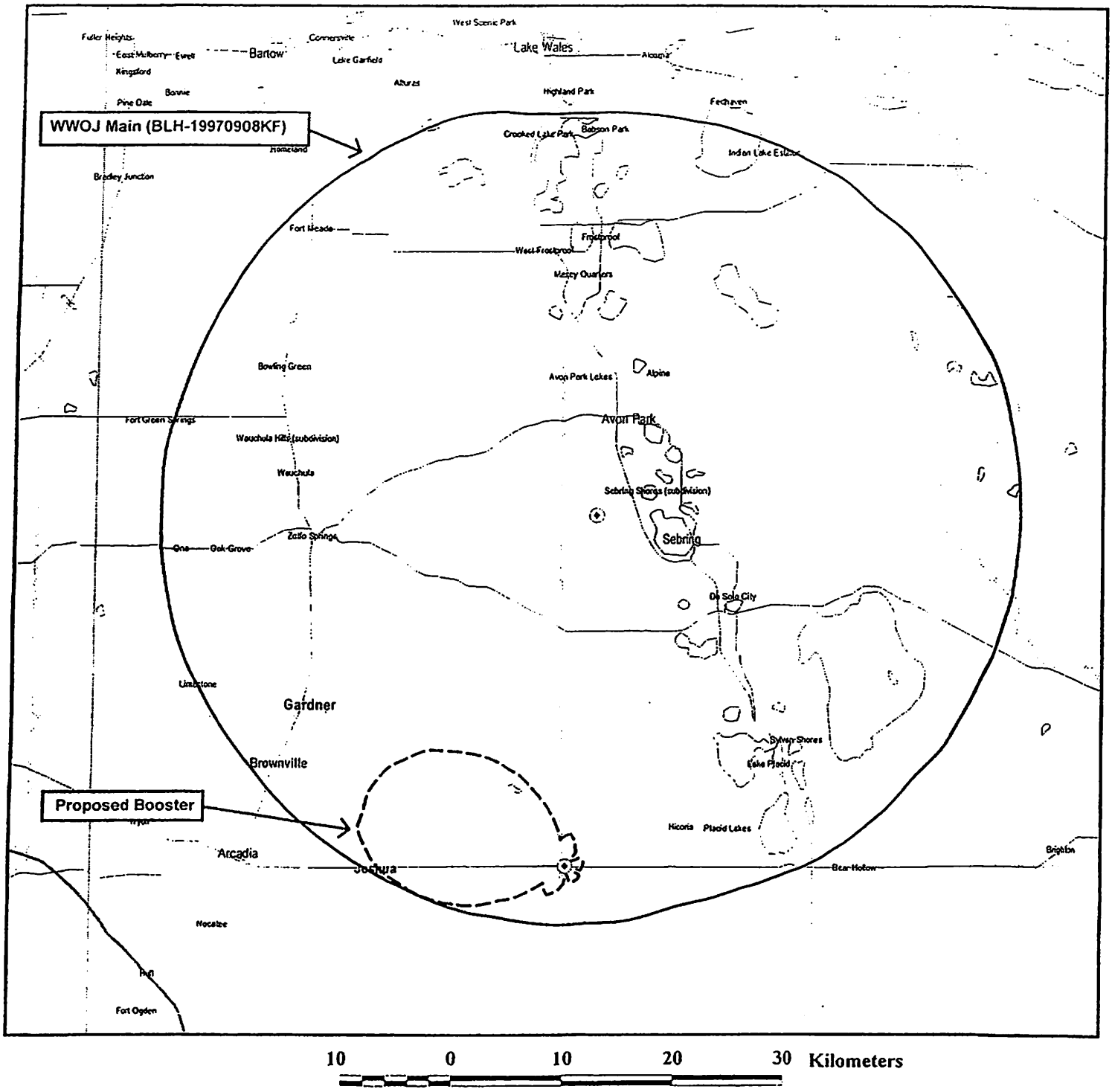
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME, WEARING ACCEPTED RFR PROTECTIVE CLOTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY ADDRESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER

ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - JOSHUA BOOSTER

Figure 1

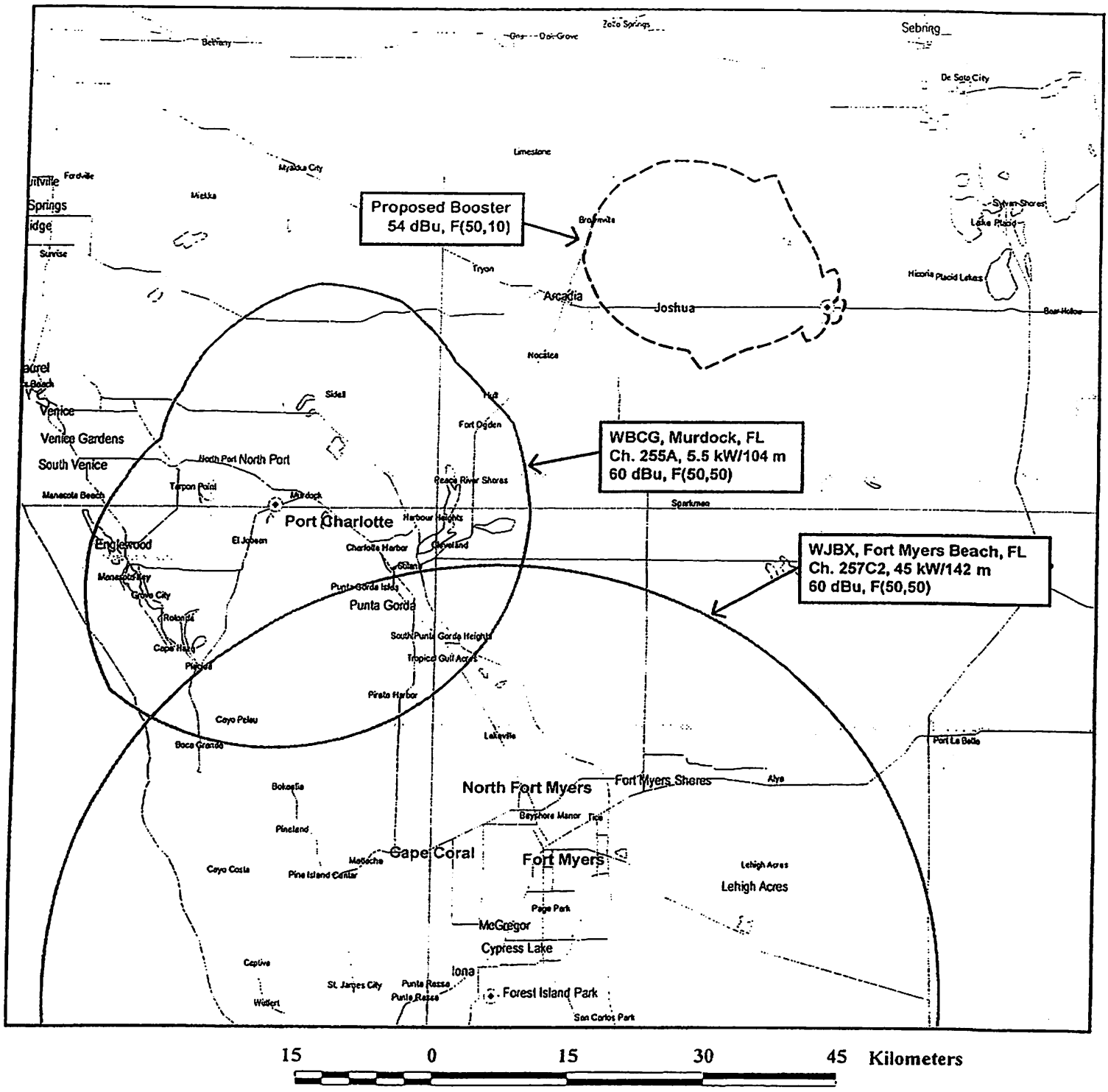


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
JOSHUA, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
JOSHUA, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

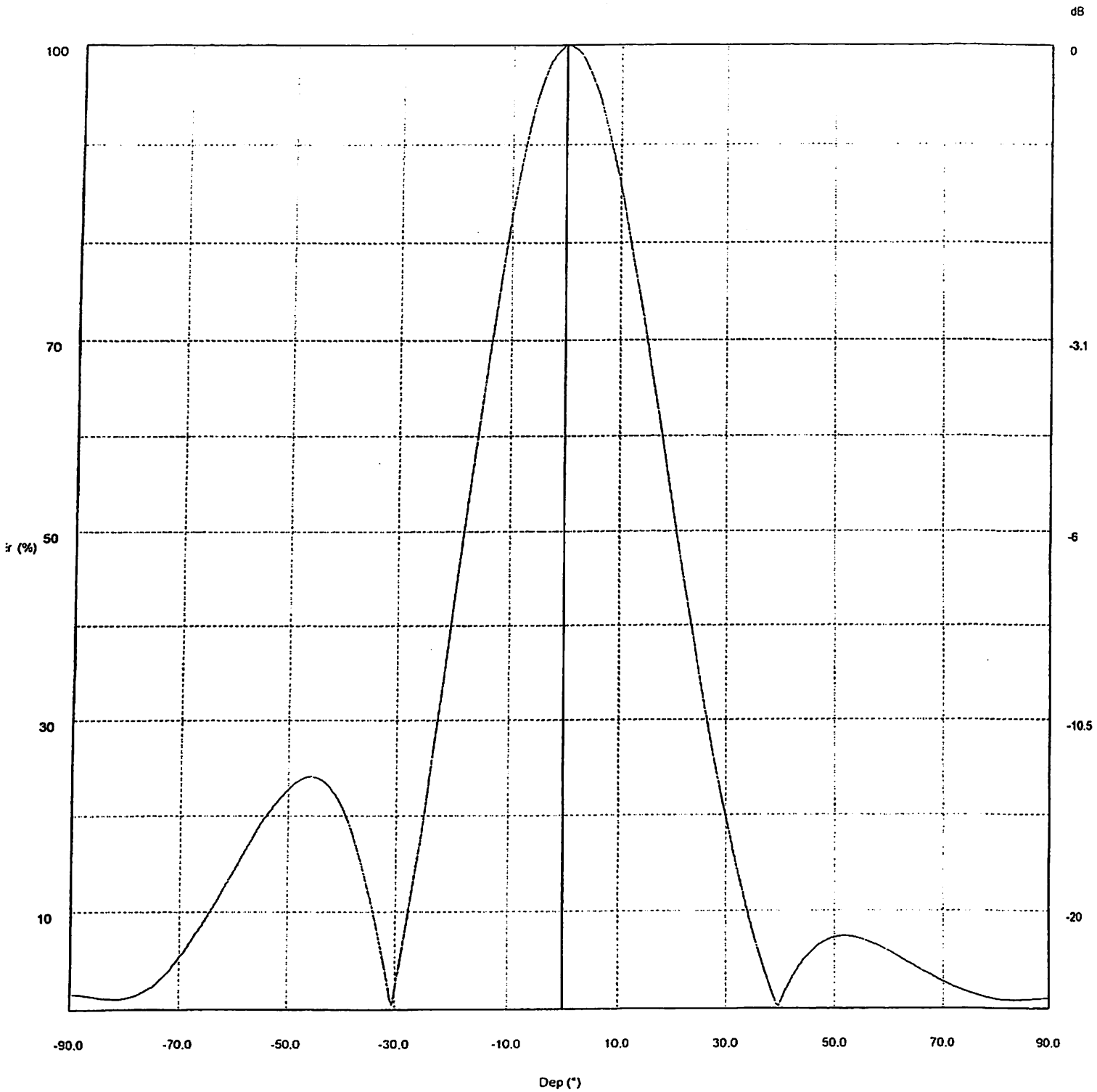
TX Station: 050V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd): 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW): 3.2894

ATTACHMENT D

HARRY F. COLE
ANNE GOODWIN CRUMP
PAUL J. FELDMAN
JEFFREY J. GEE
CHRISTINE GOEPP*
KEVIN M. GOLDBERG
FRANK R. JAZZO
M. SCOTT JOHNSON
DANIEL A. KIRKPATRICK
MITCHELL LAZARUS
STEPHEN T. LOVELADY*
SUSAN A. MARSHALL
HARRY C. MARTIN
MICHELLE A. McCLURE
MATTHEW H. McCORMICK
FRANCISCO R. MONTERO
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JAMES P. RILEY
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PETER TANNENWALD
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* NOT ADMITTED IN VIRGINIA

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March 9, 2010

PLEASE STAMP
AND RETURN
THIS COPY TO FRM
FLETCHER, HEALD & HILDRETH

VIA HAND DELIVERY
Marlene H. Dortsch
Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW – A325
445 12th Street SW
Washington, DC 20554

FILED/ACCEPTED

MAR - 9 2010

Federal Communications Commission
Office of the Secretary

Dear Ms. Dortsch:

Bustos Media of Utah License, LLC ("Bustos"), the licensee of KDUT(FM), Facility ID. No. 88272, Randolph, Utah; KDUT-FM1, Facility ID No. 122076, Bountiful, Utah; KDUT-FM2, Facility ID No. 122078, Salt Lake City, Utah; KDUT-FM3, Facility ID No. 123370, Ogden, Utah; and KDUT-FM5, Facility ID No. 131424, Provo, Utah, by its attorneys, and pursuant to Section 73.1510 of the Commission's rules, requests an experimental authorization. In support, Bustos submits the following:

Bustos seeks an experimental authorization to allow it to utilize certain of the boosters associated with KDUT to originate limited programming. In this regard, Bustos intends to utilize KDUT-FM2, KDUT-FM3 and KDUT-FM5. Specifically, Bustos intends to simultaneously broadcast on each of the aforementioned boosters different non-commercial announcements targeted to discreet audiences. Bustos intends to target the broadcasts to appeal to specific diverse audiences which are encompassed within the boosters' service areas. Each of the boosters in question will concurrently broadcast a different non-commercial message.

Methodology

The broadcasts shall be conducted over a thirty (30) day period. Broadcasts will be done between the hours of 9:00 a.m. and 3:00 p.m. and 7:00 p.m. and 11:00 p.m. It is anticipated that no more than four (4) non-commercial announcements shall be broadcast on each of the boosters in a given hour. The announcements will be directed to the specific needs and interests of the communities served by the respective booster in question.

The broadcasts shall be done at the direction and under the control of Bustos. Bustos is utilizing the services of GEO Spots, LLC ("GEO") to assist it in this endeavor. In this regard, the placement of the announcements shall be done using a master control device.[1] GEO will be employing proprietary technology (patent pending) which will allow different announcements to be placed on each of the boosters in a synchronized time sequence.

Technical Operations/Interference

During the broadcasts, no changes to the authorized facilities are contemplated. Thus, the stations (the boosters and the primary station) will broadcast consistent with their authorizations.

Reynolds Technical Associated ("Reynolds") was retained to determine the interference by the boosters to any other facilities (i.e. either co-channel, 1st, 2nd or 3rd adjacent). The maps which were prepared by Reynolds are attached in Exhibit A. These maps demonstrate that the interference is identical to that allowed by the Commission in granting the various booster licenses.

Public Interest Considerations

Each of the boosters serve a variety of communities. Exhibit B lists the communities and their respective populations which are encompassed within the service contour of KDUT-FM3 (the Ogden booster); Exhibit C provides the same information with respect to KDUT-FM2 (the Salt Lake City booster); and Exhibit D provides the same information with respect to KDUT-FM5 (the Provo booster).

Exhibit E, utilizing 2000 Census data, provides the demographic breakdown for the area encompassed by each of the boosters. While there are certain similarities between the service areas of the boosters, there are also some significant differences. For example, the Salt Lake City booster serves a significantly larger Hispanic population than either Ogden or Provo. Similarly, the Asian population is greatest in the area served by the Salt Lake City booster but there are few Asians in the area served by the Provo booster. It is submitted that an announcement concerning an event affecting the Asian community (e.g. in the form of a PSA) would have little interest to those residents encompassed within the Provo booster. Bustos intends to broadcast some of the announcements in several foreign languages.

It is also submitted that, independent of ethnicity, the needs of these communities are also different. For example, information relevant to the Salt Lake City schools would not necessarily be relevant to those residents of Provo or Ogden. Separate announcements to each of the communities would clearly be in the public interest.

The instant request is consistent with the Commission's recent focus on the future of information needs of communities. See FCC Launches Examination of the Future of Media and Information Needs of Communities in the Digital Age, DA 10-100, released January 21, 2010.

---

[1]GEO has an application pending for a patent for the master control device and associated software that will control the boosters by automated means.

Bustos shall, within thirty (30) days of termination of the experimental authorization, submit a report of the results of the experimental operation. See 73.1510(d). That report shall specifically address the extent any interference presented by the simultaneous operation of the boosters when different broadcasts are being concurrently done.

It is submitted that good cause exists for issuance of the experimental authorization as the instant request satisfies all of the criteria enumerated in Section 73.1510 of the Commission's rules.

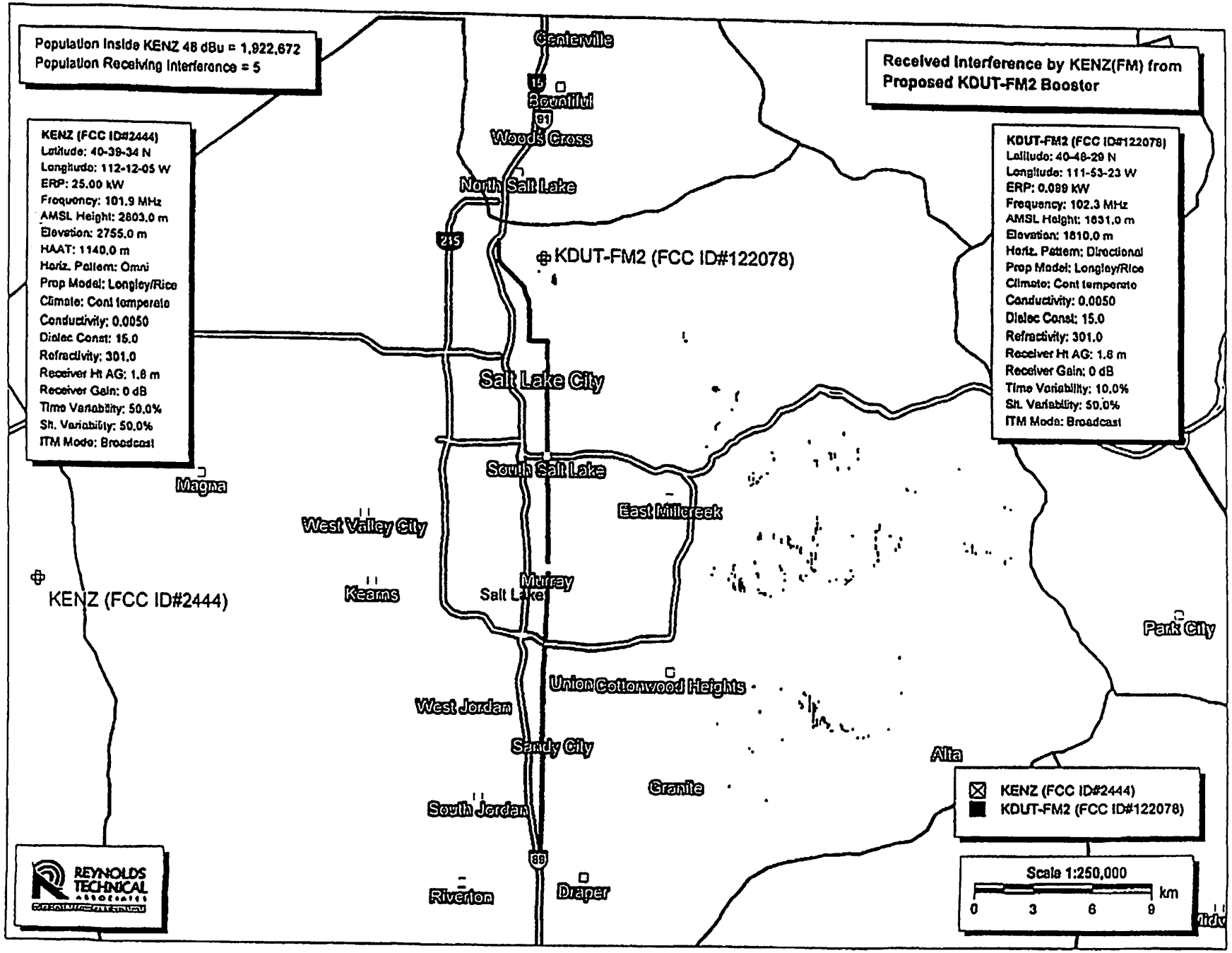
Bustos certifies that neither it nor any party to the application is subject to denial of federal benefits pusuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C. Section 862.

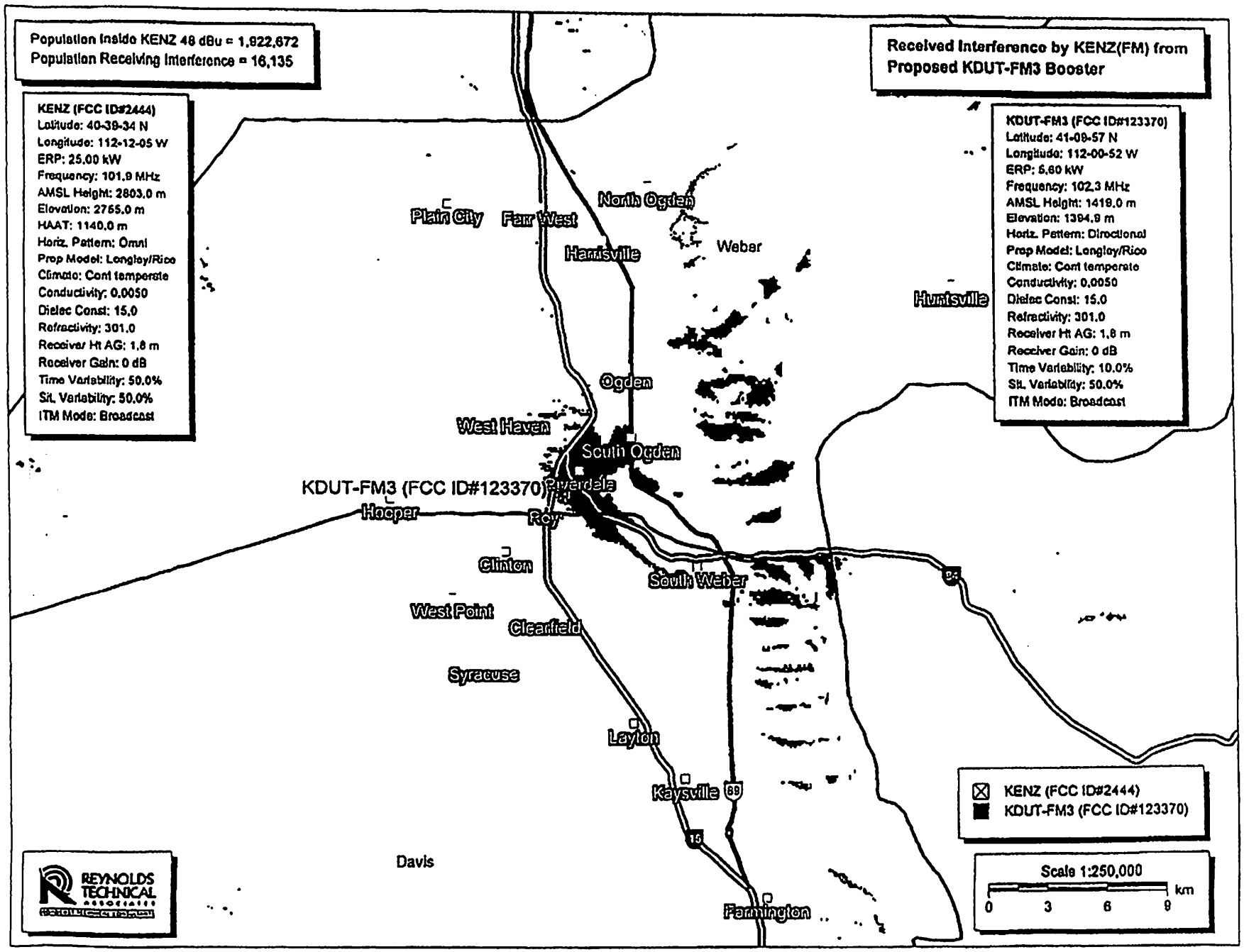
Respectfully submitted,

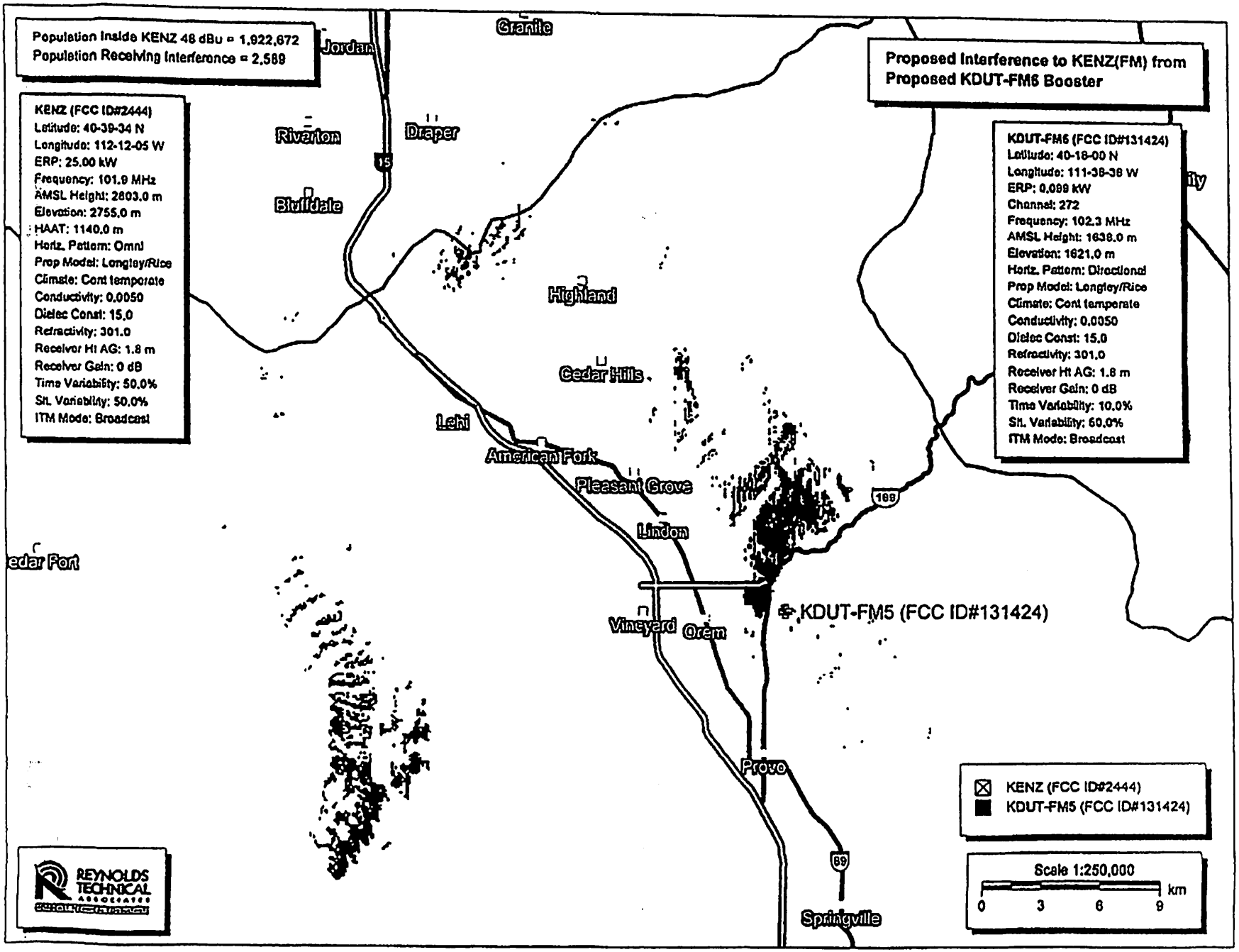
BUSTOS MEDIA OF UTAH LICENSE, LLC

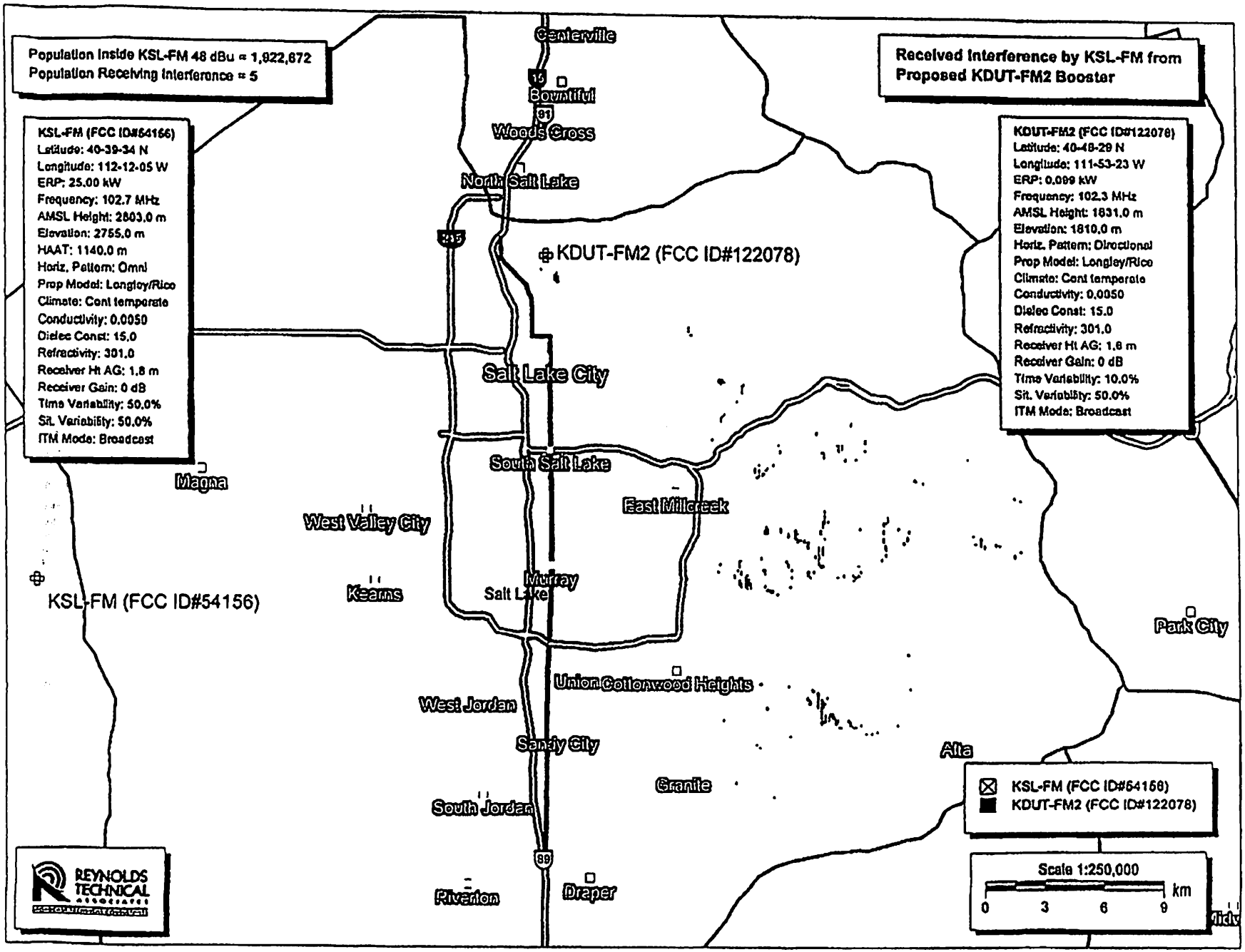
By: _____
Francisco R. Montero
Fletcher Heald & Hildreth, PLC
Its Counsel

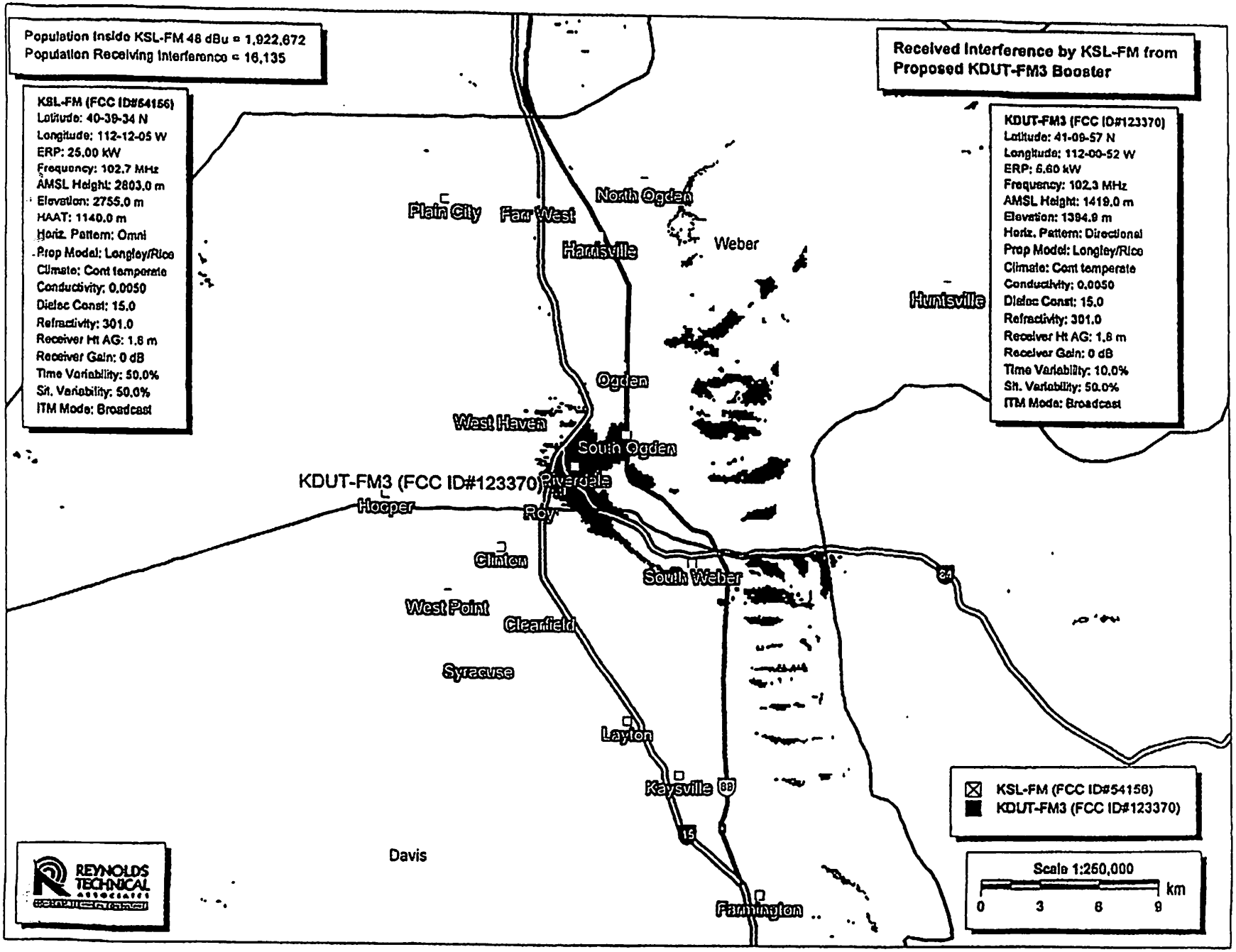
EXHIBIT A

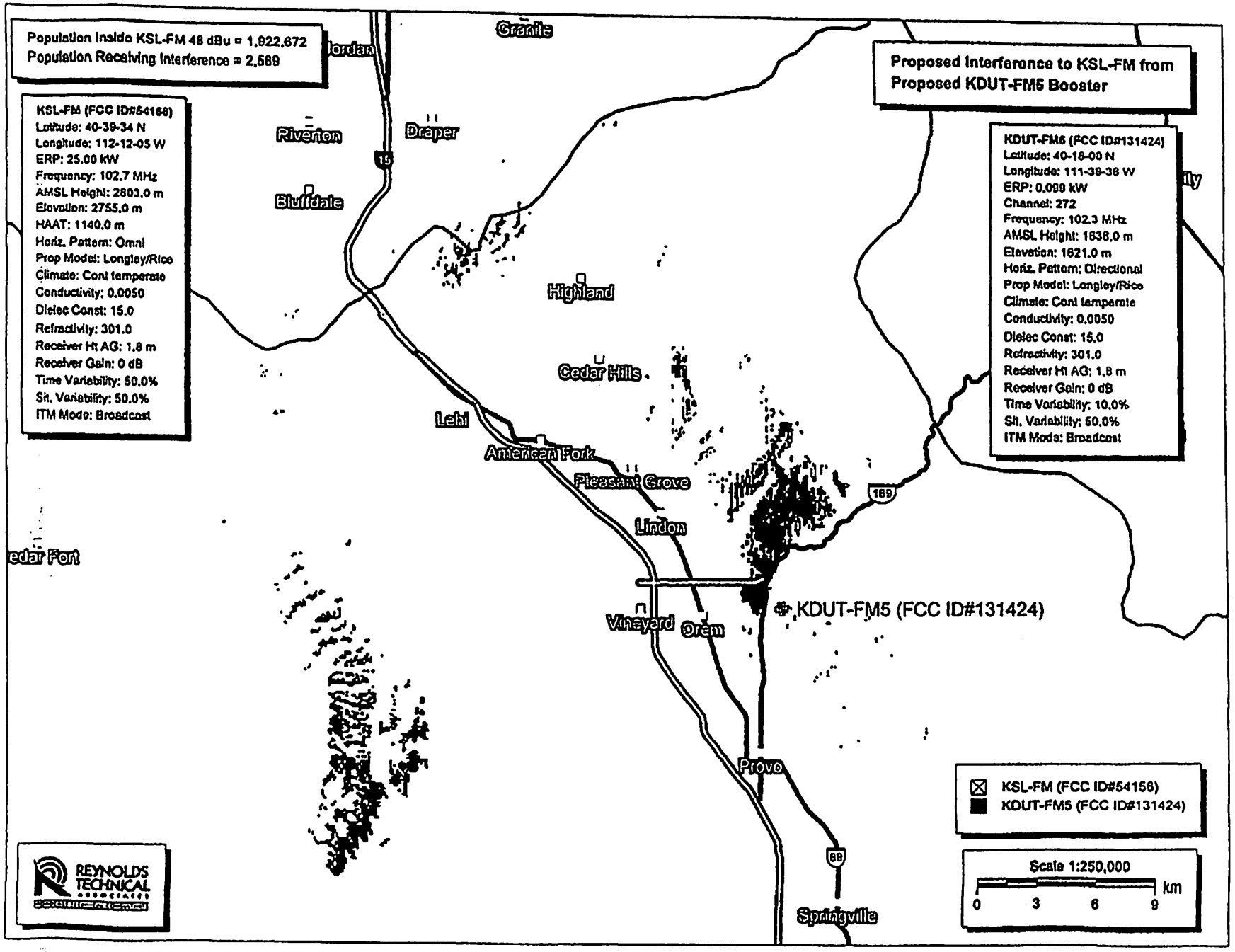

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 5
Received Interference by KENZ(FM) from Proposed KDUT-FM2 Booster
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2603.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1631.0 m
Elevation: 1610.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
West Valley City
East Millcreek
KENZ (FCC ID#2444)
Kearns
Murray
Salt Lake
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KENZ (FCC ID#2444)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL

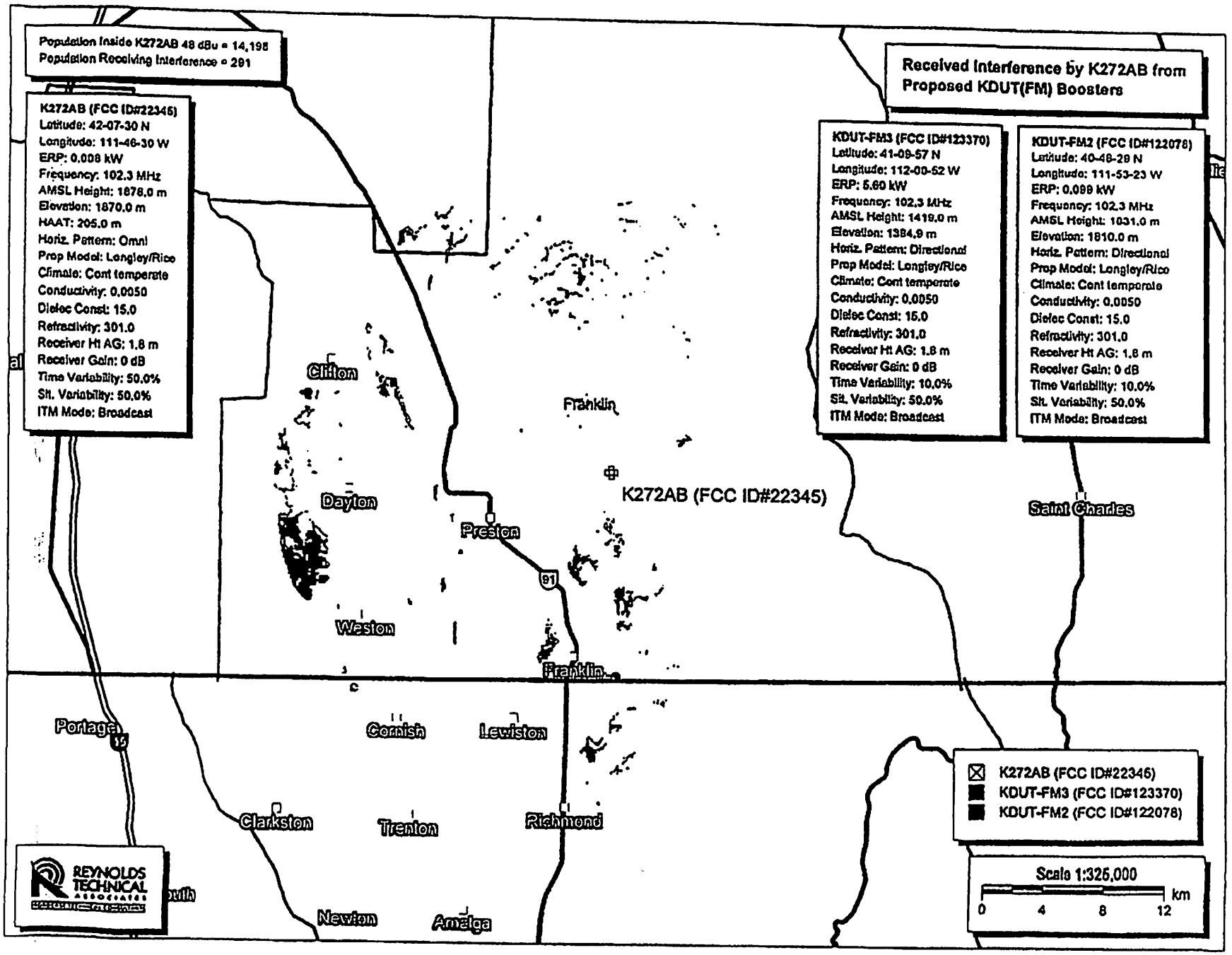

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 16,135
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2765.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KENZ(FM) from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 6.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
KDUT-FM3 (FCC ID#123370)
Riverdale
Hooper
Roy
Clinton
South Weber
West Point
Clearfield
Syracuse
Layton
Kaysville
89
15
Davis
Farmington
KENZ (FCC ID#2444)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES

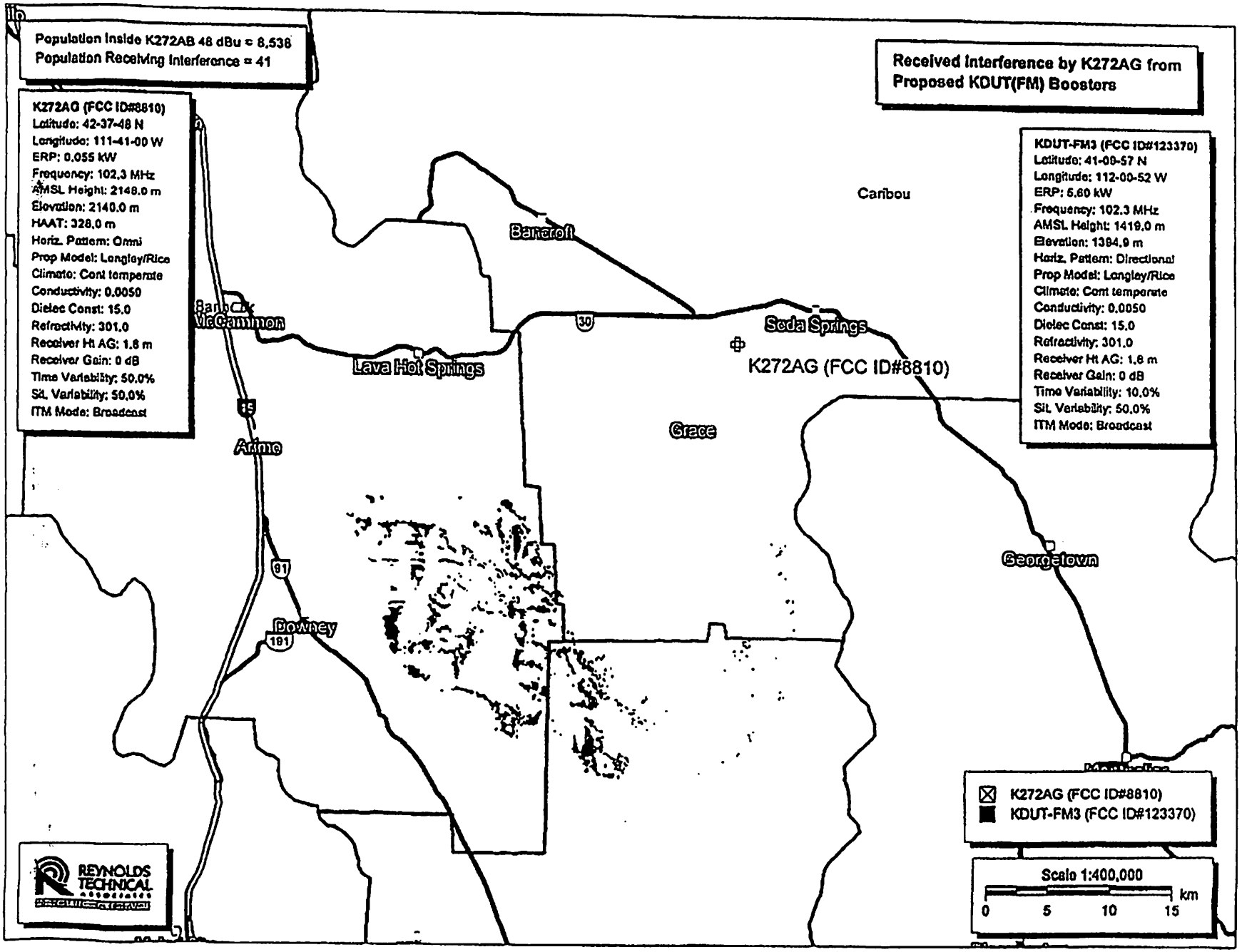

Population Inside KENZ 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KENZ (FCC ID#2444)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 101.9 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KENZ(FM) from
Proposed KDUT-FM6 Booster
KDUT-FM6 (FCC ID#131424)
Latitude: 40-18-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
15
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
189
Vineyard
Orem
KDUT-FM5 (FCC ID#131424)
Provo
89
Springville
KENZ (FCC ID#2444)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL ASSOCIATES

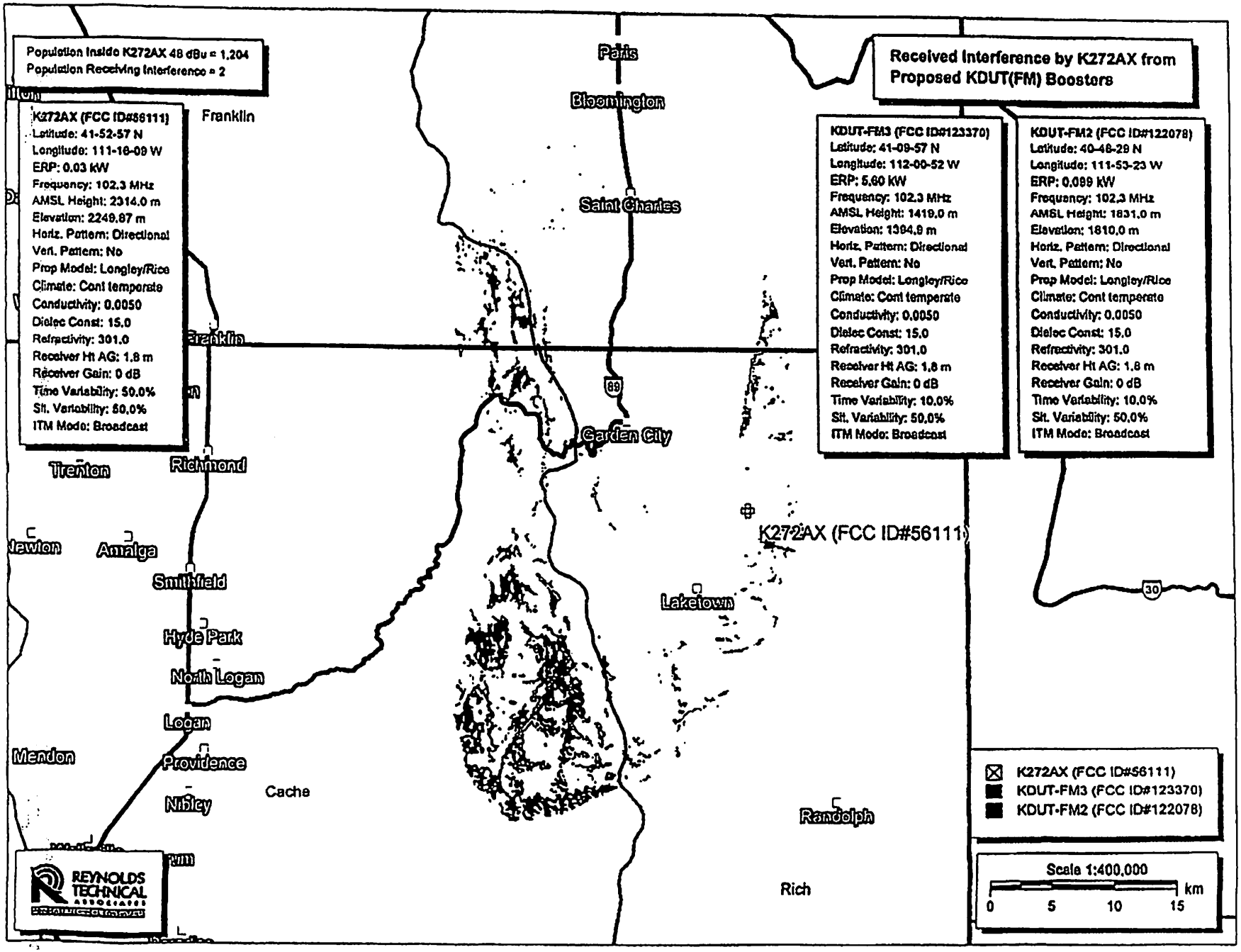

Population Inside KSL-FM 48 dBu = 1,922,872
Population Receiving Interference = 5
KSL-FM (FCC ID#64166)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM2 Booster
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Centerville
Bountiful
Woods Cross
North Salt Lake
KDUT-FM2 (FCC ID#122078)
Salt Lake City
South Salt Lake
Magna
West Valley City
East Millcreek
Murray
Kearns
Salt Lake
KSL-FM (FCC ID#54156)
Park City
Union
Cottonwood Heights
West Jordan
Sandy City
Alta
Granite
South Jordan
Riverton
Draper
KSL-FM (FCC ID#64166)
KDUT-FM2 (FCC ID#122078)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 16,135
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by KSL-FM from Proposed KDUT-FM3 Booster
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 6.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Plain City
Farr West
North Ogden
Harrisville
Weber
Huntsville
Ogden
West Haven
South Ogden
KDUT-FM3 (FCC ID#123370)
Riverdale
Hooper
Roy
Clinton
South Weber
West Point
Clearfield
Syracuse
Layton
Kaysville
Davis
Farmington
KSL-FM (FCC ID#54156)
KDUT-FM3 (FCC ID#123370)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL


Population Inside KSL-FM 48 dBu = 1,922,672
Population Receiving Interference = 2,589
KSL-FM (FCC ID#54156)
Latitude: 40-39-34 N
Longitude: 112-12-05 W
ERP: 25.00 kW
Frequency: 102.7 MHz
AMSL Height: 2803.0 m
Elevation: 2755.0 m
HAAT: 1140.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Proposed Interference to KSL-FM from
Proposed KDUT-FM5 Booster
KDUT-FM5 (FCC ID#131424)
Latitude: 40-16-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Channel: 272
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Granite
Jordan
Riverton
Draper
Bluffdale
Highland
Cedar Hills
Lehi
American Fork
Pleasant Grove
Lindon
Vineyard
Orem
Provo
Springville
Cedar Fort
KDUT-FM5 (FCC ID#131424)
KSL-FM (FCC ID#54156)
KDUT-FM5 (FCC ID#131424)
Scale 1:250,000
km
0
3
6
9
REYNOLDS TECHNICAL


Population Inside K272AB 48 dBu = 14,198
Population Receiving Interference = 291
K272AB (FCC ID#22346)
Latitude: 42-07-30 N
Longitude: 111-46-30 W
ERP: 0.008 kW
Frequency: 102.3 MHz
AMSL Height: 1878.0 m
Elevation: 1870.0 m
HAAT: 205.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by K272AB from Proposed KDUT(FM) Boosters
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1384.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-48-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1031.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Clifton
Franklin
Dayton
Preston
K272AB (FCC ID#22345)
Saint Charles
91
Weston
Franklin
Portage
Cornish
Lewiston
Clarkston
Trenton
Richmond
Newton
Amalga
REYNOLDS TECHNICAL ASSOCIATES
K272AB (FCC ID#22346)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:325,000
km
0
4
8
12


Population Inside K272AB 48 dBu = 8,536
Population Receiving Interference = 41
Received Interference by K272AG from Proposed KDUT(FM) Boosters
K272AG (FCC ID#8810)
Latitude: 42-37-48 N
Longitude: 111-41-00 W
ERP: 0.055 kW
Frequency: 102.3 MHz
AMSL Height: 2148.0 m
Elevation: 2140.0 m
HAAT: 328.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Caribou
Bancroft
Soda Springs
K272AG (FCC ID#8810)
Lava Hot Springs
Grace
Arimo
Downey
Georgetown
30
15
91
191
K272AG (FCC ID#8810)
KDUT-FM3 (FCC ID#123370)
Scale 1:400,000
0 5 10 15 km
REYNOLDS TECHNICAL ASSOCIATES


Population Inside K272AX 48 dBu = 1,204
Population Receiving Interference = 2
K272AX (FCC ID#56111)
Latitude: 41-52-57 N
Longitude: 111-16-09 W
ERP: 0.03 kW
Frequency: 102.3 MHz
AMSL Height: 2314.0 m
Elevation: 2249.87 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Received Interference by K272AX from Proposed KDUT(FM) Boosters
KDUT-FM3 (FCC ID#123370)
Latitude: 41-09-57 N
Longitude: 112-00-52 W
ERP: 5.60 kW
Frequency: 102.3 MHz
AMSL Height: 1419.0 m
Elevation: 1394.9 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM2 (FCC ID#122078)
Latitude: 40-46-29 N
Longitude: 111-53-23 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1831.0 m
Elevation: 1810.0 m
Horiz. Pattern: Directional
Vert. Pattern: No
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Paris
Bloomington
Saint Charles
Franklin
Garden City
Trenton
Richmond
Amalga
Smithfield
Hyde Park
North Logan
Logan
Providence
Nibley
Cache
Laketown
Randolph
Rich
89
30
K272AX (FCC ID#56111)
KDUT-FM3 (FCC ID#123370)
KDUT-FM2 (FCC ID#122078)
Scale 1:400,000
0 5 10 15 km
REYNOLDS TECHNICAL ASSOCIATES

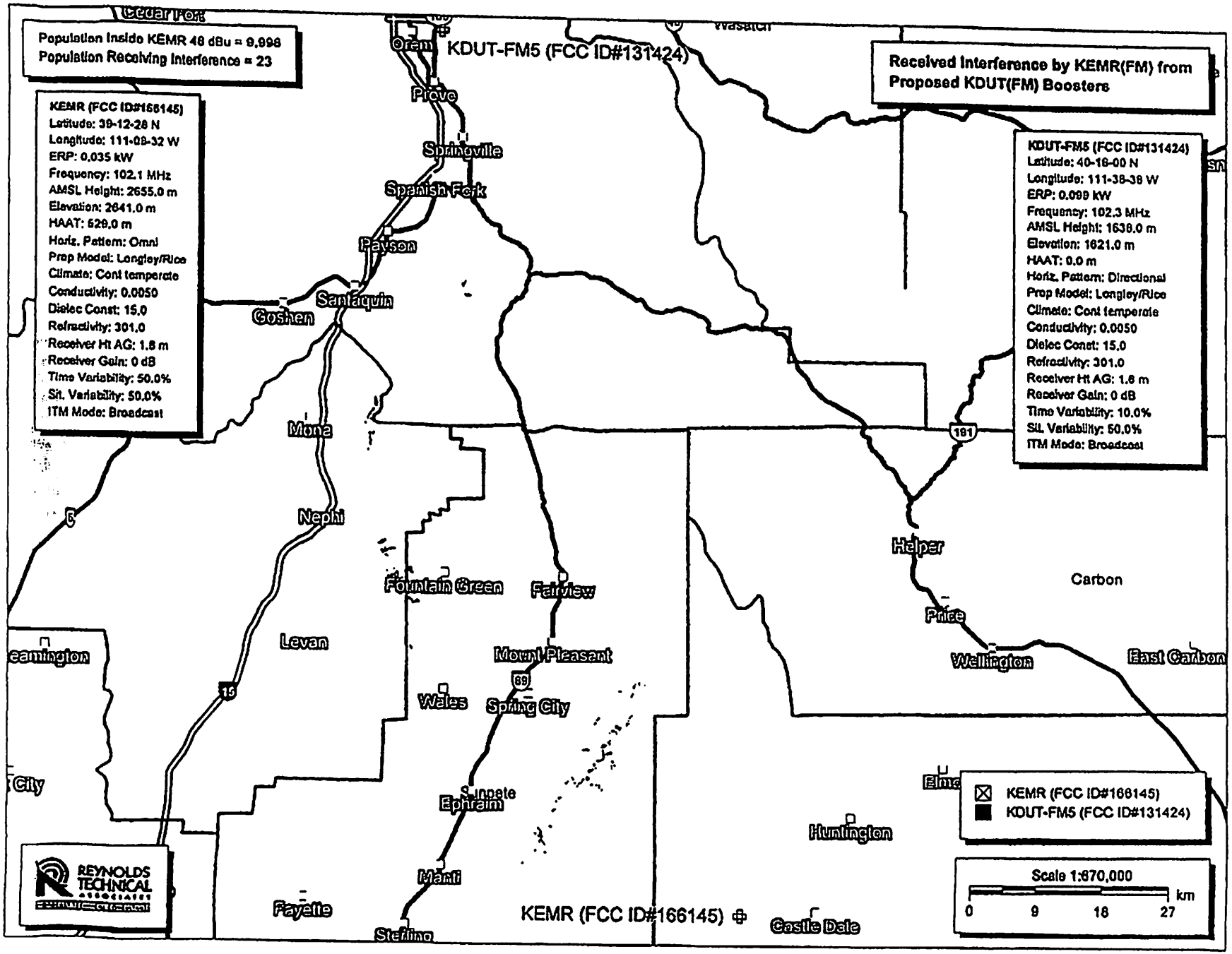

Population Inside KEMR 46 dBu = 9,998
Population Receiving Interference = 23
KEMR (FCC ID#166145)
Latitude: 39-12-28 N
Longitude: 111-08-32 W
ERP: 0.035 kW
Frequency: 102.1 MHz
AMSL Height: 2655.0 m
Elevation: 2641.0 m
HAAT: 529.0 m
Horiz. Pattern: Omni
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 50.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
KDUT-FM5 (FCC ID#131424)
Received Interference by KEMR(FM) from Proposed KDUT(FM) Boosters
KDUT-FM5 (FCC ID#131424)
Latitude: 40-16-00 N
Longitude: 111-38-38 W
ERP: 0.099 kW
Frequency: 102.3 MHz
AMSL Height: 1638.0 m
Elevation: 1621.0 m
HAAT: 0.0 m
Horiz. Pattern: Directional
Prop Model: Longley/Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 301.0
Receiver Ht AG: 1.8 m
Receiver Gain: 0 dB
Time Variability: 10.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Cedar Fort
Orem
Provo
Springville
Spanish Fork
Payson
Santaquin
Goshen
Mona
Nephi
Fountain Green
Fairview
Levan
Mount Pleasant
Wales
Spring City
Ephraim
Manti
Fayette
Sterling
Helper
Carbon
Price
Wellington
East Carbon
Huntington
Castle Dale
Elmo
KEMR (FCC ID#166145)
KDUT-FM5 (FCC ID#131424)
Scale 1:670,000
km
0
9
18
27
REYNOLDS TECHNICAL ASSOCIATES

EXHIBIT B

Population within KDUT-FM3 Contour (Ogden)

Brigham City (18,709)
Mantua (756)
Perry (3,889)
Willard (1,747)
South Willard* (586)
North Ogden (17,682)
Pleasant View (7,052)
Plain City (5,288)
Farr West (5,335)
Marriott-Slaterville (1,537)
Ogden (82,865)
Huntsville (653)
West Haven (8,357)
Riverdale (8,126)
Roy (35,672)
Hooper* (5,665)
South Ogden (15,891)
South Weber (6,167)
Sunset (4,945)
Clinton (19,855)
Clearfield (27,851)
West Point (9,001)
Syracuse (22,195)
Layton (65,514)

(* Denotes CDP)

EXHIBIT C

Population within KDUT-FM2 Contour (Salt Lake City)

Farmington (17,217)
Centerville (15,270)
West Bountiful (5,337)
Bountiful (44,473)
Woods Cross (8,705)
North Salt Lake (13,446)
Salt Lake City (181,698)
Magna* (22,770)
West Valley City (123,447)
Canyon Rim* (10,428)
South Salt Lake (21,607)
Millcreek* (30,377)
East Millcreek* (21,385)
Mount Olympus* (7,103)
Taylorsville (58,785)
Kearns* (33,659)
Murray (46,201)
Oquirrh* (10,390)
Cottonwood West* (18,727)
Holladay (25,676)
Midvale (28,129)
Cottonwood Heights* (35,418)
Little Cottonwood Creek Valley* (7,221)
Sandy (96,660)
West Jordan (104,447)
South Jordan (51,131)
Herriman (17,689)
Riverton (39,751)
Bluffdale (8,016)
Draper (42,317)
Alpine (9,885)
Highland (16,189)
Lehi (46,802)

(* Denotes CDP)

EXHIBIT D

Population within KDUT-FM52 Contour (Provo)

American Fork (27,064)
Pleasant Grove (33,798)
Lindon (10,466)
Vineyard (148)
Orem (93,250)
Provo (118,581)
Palmyra* (485)
Lake Shore* (755)
Springville (28,520)
Spanish Fork (31,538)

(* Denotes CDP)

EXHIBIT E

Ogden booster

Total Population: 257,686

White:	214,675
Black:	3,673
Hispanic:	29,965
Native American:	1,602
Asian:	3,578
Pacific Islander:	407
Mixed Race:	3,579
Other:	207

Salt Lake City booster

Total Population: 983,981

White:	807,523
Black:	8,730
Hispanic:	109,569
Native American:	6,780
Asian:	23,510
Pacific Islander:	11,145
Mixed Race:	15,751
Other:	973

Provo booster

Total Population: 308,005

White:	272,198
Black:	943
Hispanic:	22,989
Native American:	1,695
Asian:	3,669
Pacific Islander:	1,965
Mixed Race:	4,253
Other:	293

ATTACHMENT E

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

March 29, 2010

Francisco R. Montero, Esq.
Fletcher, Heald & Hildreth, P.L.C.
1300 North 17th Street, 11th Floor
Arlington, Virginia 22209-3801

In re: Bustos Media of Utah License, LLC
KDUT (FM), Randolph, Utah
Facility Identification Number: 88272
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed March 9, 2010, on behalf of Bustos Media of Utah License, LLC ("BMU"), licensee of Station KDUT(FM), Randolph, Utah[1], and several associated FM Booster Stations[2]. BMU proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on the FM Booster stations. BMU proposes to simultaneously broadcast different noncommercial announcements, targeted to specific, diverse audiences, on each of the booster stations. BMU proposes to use proprietary technology provided by GEO Spots, LLC, which will allow different announcements to be placed on each of the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. BMU states that the experimental broadcasts will be conducted over a 30-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that BMU will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing in addition to the proposed 30-day experimentation, a term of 60 days is appropriate.

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[1] KDUT is licensed for operation on Channel 272C (102.3 MHz), with effective radiated power of 89 kilowatts (H only) and antenna height above average terrain of 647 meters.

[2] KDUT-FM1, Bountiful, UT; KDUT-FM2, Salt Lake City, UT; KDUT-FM3, Ogden, UT; KDUT-FM5, Provo, UT.

Accordingly, the request for Experimental Authorization IS GRANTED. Station KDUT may transmit independent, noncommercial announcements on its associated FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted, only to the extent necessary for the proposed experimentation. BMU shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, BMU shall file a full report of the research, experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Any construction undertaken pursuant to this authority is entirely at BMU's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **May 29, 2010.**

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Bustos Media of Utah License, LLC
Aaron P. Shainis, Esq. (Counsel for GEO Spots, LLC)

ATTACHMENT E

Shainis & Peltzman, Chartered

Aaron P. Shainis
aaron@s-plaw.com

Lee J. Peltzman
lee@s-plaw.com

Counselors at Law
Suite 240
1850 M Street, NW
Washington, D.C. 20036

Tel (202) 293-0011
Fax (202) 293-0810
e-mail: shainispeltzman@s-plaw.com

Special Counsel
Stephen C. Leckar
steve@s-plaw.com

Of Counsel
William H. DuRoss, III
bill@s-plaw.com

Robert J. Keller
bob@s-plaw.com

September 22, 2011

FILED/ACCEPTED

SEP 22 2011

Federal Communications Commission
Office of the Secretary

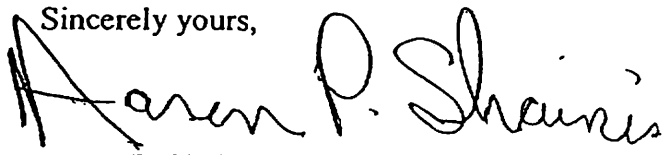
VIA HAND DELIVERY
Marlene H. Dortch
Office of the Secretary
Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Re: Cohan Radio Group, Inc.
WWOJ(FM)
Avon Park, Florida
Facility ID No. 27199

Dear Ms. Dortch:

On July 19, 2011, Cohan Radio Group, Inc. ("Cohan"), the licensee of WWOJ(FM), Facility ID No. 27199, Avon Park, Florida, pursuant to Section 73.15110 of the Commission's rules, requested an experimental authorization. Associated with that submission were engineering portions of FCC Form 349 (Attachments A, B and C). The engineering attached to the instant submission should replace the previously filed engineering showings. If you have any questions with respect to this matter, please communicate with the undersigned.

Sincerely yours,



Aaron P. Shainis
Counsel for
Cohan Radio Group, Inc.

Enclosures

cc (via email): Norm Miller

J:\# #CLIENT MATTERS\DEVINE ENTITIES\GOOD BULLET\2011.064-jns 09-22-11.doc

ATTACHMENT A

Federal Communications Commission
Washington, D.C. 20554

Approved by OMB
3060-0405 (October 2009)

FOR FCC USE ONLY

FCC 349

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION

Read INSTRUCTIONS Before Filling Out Form

FOR COMMISSION USE ONLY
FILE NO
-

Section I - General Information

1. Legal Name of the Applicant
COHAN RADIO GROUP, INC

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

FCC Registration Number:	Call Sign	Facility Identifier
		189896

2. Contact Representative (if other than Applicant)
COHAN RADIO GROUP, INC

Firm or Company Name

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):
○ Governmental Entity ○ Noncommercial Educational Licensee/Permittee ○ Other
○ N/A (Fee Required)

4. Facility information:
a. ○ FM Translator ◉ FM Booster
b. Community or communities to which the proposed facility will be licensed:

Community(ies)	State
ZOLFO SPRINGS	FL

5. Application Purpose
◉ New station
○ Major Change in licensed facility
○ Minor Change in licensed facility
○ Major Modification of construction permit
○ Minor Modification of construction permit
○ Major Amendment to pending application
○ Minor Amendment to pending application

a. File number of original construction permit:

If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised. [Exhibit 1]

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. See General Instruction J.

Section II - Legal

1.	**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.	○ Yes ○ No

2.	Applicant is:		
	○ an individual	○ a general partnership	○ a for-profit corporation
	○ a limited partnership	○ a not-for-profit corporation	○ a limited liability company (LLC/LC)
	○ other		
	a. If "other", describe nature of applicant in an Exhibit.		[Exhibit 2]

3.	a.	Applicant certifies that it is not the licensee or permittee of the commercial primary station being rebroadcast and that neither it nor any parties to the application have any interest in or connection with the commercial primary station being rebroadcast. See 47 C.F.R. Section 74.1232(d).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 3]
	b.	Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 4]

NOTE: **If No to a. and b., and no waiver has been requested in an Exhibit, this application is unacceptable for filing.** See 47 C.F.R. Section 74.1232(d).

If Yes to (a) and No to (b) applicant is prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).

4.	The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest in or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 5]
5.	For applicants proposing translator rebroadcasts that are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. **If No, this application is unacceptable for filing.**	○ Yes ○ No ○ N/A
6.	**Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: 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; or b. any pending broadcast application in which character issues have been raised.	○ Yes ○ No See Explanation in [Exhibit 6]

7.	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 the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of 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 date of filing; and (ii) the disposition of the previously reported matter.	○ Yes ○ No See Explanation in [Exhibit 7]
8.	**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.	○ Yes ○ No See Explanation in [Exhibit 8]
9.	**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.	○ Yes ○ No
10.	**Local Public Notice.** Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	○ Yes ○ No
11.	**Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. An exhibit is required unless this question is inapplicable.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 9]
12.	**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.	○ Yes ○ No
13.	**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.	○ Yes ○ No ○ N/A

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (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.

Name	Relationship to Applicant (e.g., Consulting Engineer)

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 9/14/2011

Mailing Address
DU TREIL, LUNDIN & RACKLEY, INC.
201 FLETCHER AVENUE

City SARASOTA	State or Country (if foreign address) FL	Zip Code 34237 - 6019
Telephone Number (include area code) 9413296000	E-Mail Address (if available) JEFF@DLR.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).

Unable to find table

Section III-A - 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: 256
2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
○ Off-air ○ Microwave ○ Satellite ○ Via ◉ Other
4. Antenna Location Coordinates: (NAD 27)

Latitude:
Degrees 27 Minutes 21 Seconds 59 ◉ North ○ South

Longitude:
Degrees 81 Minutes 47 Seconds 52 ◉ West ○ East
5. Antenna Structure Registration Number: 1028566
☐ Not Applicable ☐ Notification filed with FAA
6. Antenna Location Site Elevation Above Mean Sea Level: 17 meters
7. Overall Tower Height Above Ground Level: 115 meters
8. Height of Radiation Center Above Ground Level: meters(H) 64 meters(V)
9. Effective Radiated Power: kW(H) 5 kW(V)
10. Transmitting Antenna:

Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search.

○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

Manufacturer ALD Model ALP.08.02.712

Rotation:degrees ☑ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
60	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11. **For FM Boosters and Fill-in translators only.**

a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.

○ Yes ○ No ◉ N/A

See Explanation in [Exhibit 10]

b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.

◉ Yes ○ No ○ N/A

See Explanation in [Exhibit 11]

12. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply:

◉ Yes ○ No

See Explanation in [Exhibit 12]

Overlap Requirements.

☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** [Exhibit 13]

Television Channel 6 Protection.

☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.** [Exhibit 14]

13. **Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.

◉ Yes ○ No

See Explanation in [Exhibit 15]

14. **Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.

◉ Yes ○ No

See Explanation in [Exhibit 16]

15. **Environmental Protection Act.** Applicant certifies that 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 Appendix A, an **Exhibit is required.**

◉ Yes ○ No

See Explanation in [Exhibit 17]

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.

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?	○ Yes ○ No
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.	○ Yes ○ No
2. **Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4. **Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
New (increased) area served in square kilometers (excluding areas of water):	
Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers	
5. **Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6. **Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL AND WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

FIGURE 3, ATTACHED, PROVIDES ANTENNA SYSTEM INFORMATION.

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 64 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 5 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE PAGE 5 OF FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.00043 MW/CM2. THIS IS 0.22% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

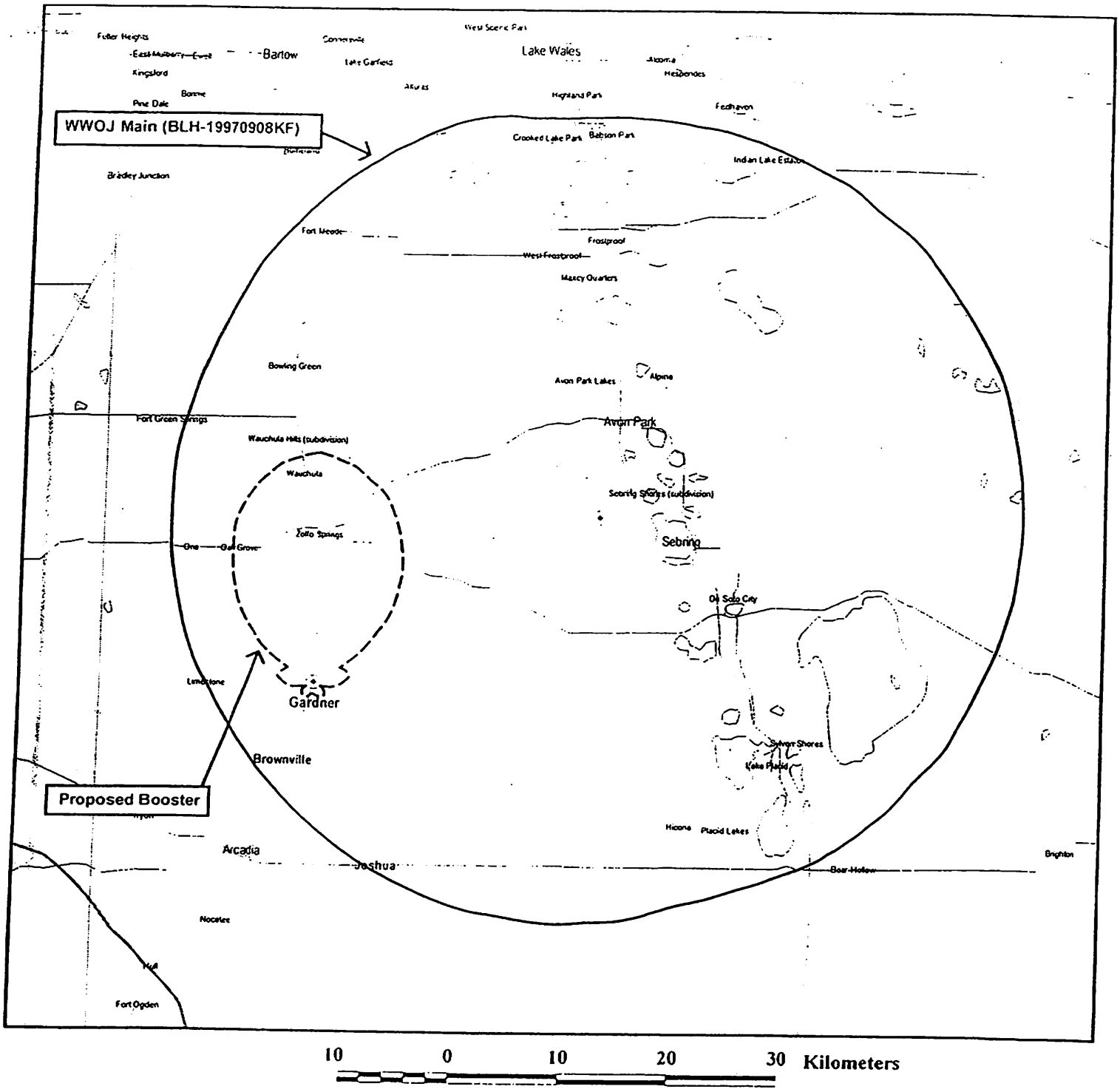
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME, WEARING ACCEPTED RFR PROTECTIVE

CLOTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY ADDRESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - ZOLFO SPRINGS BOOSTER

Figure 1

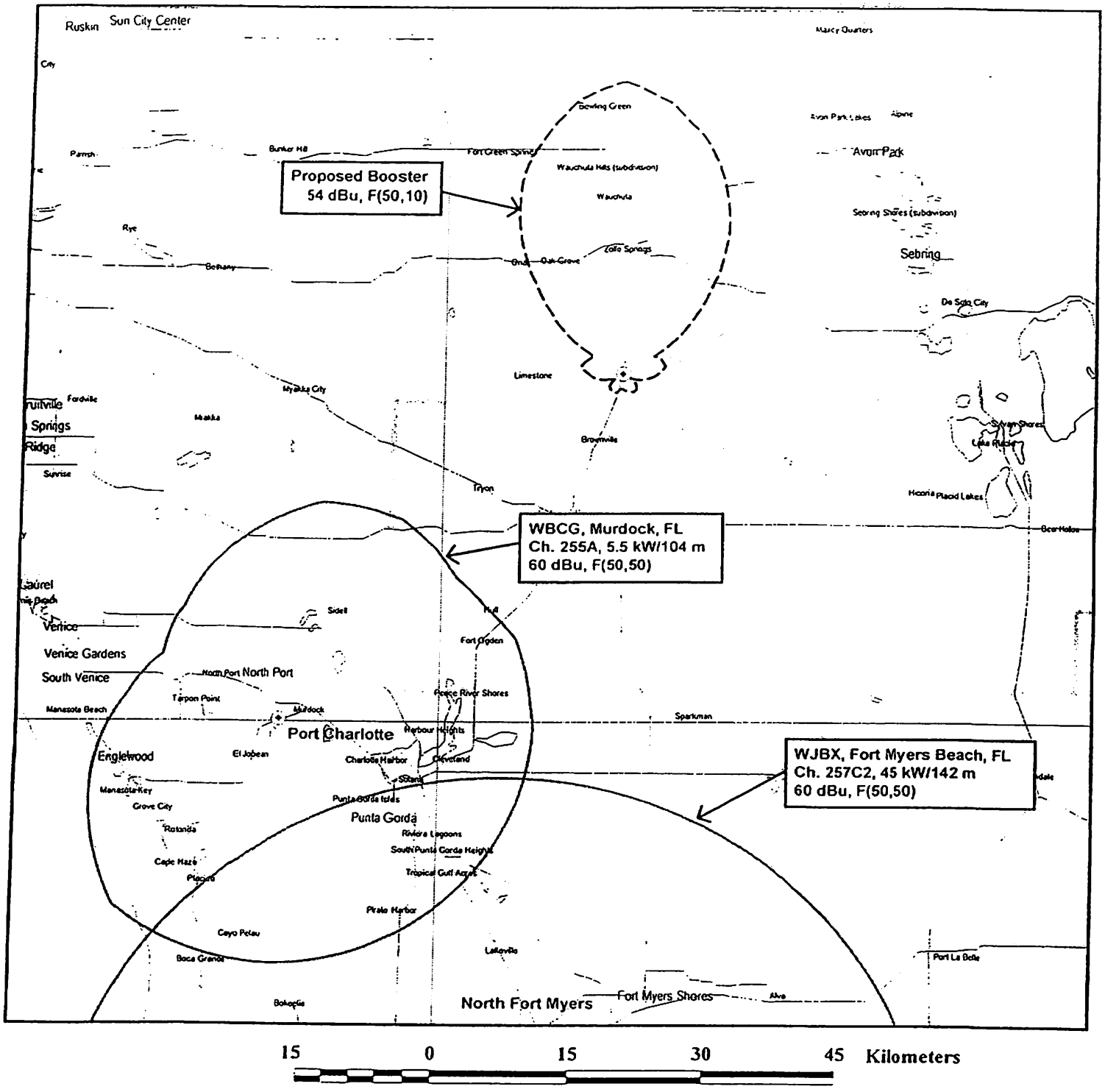


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
ZOLFO SPRINGS, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
ZOLFO SPRINGS, FLORIDA
CH 256 5 KW (MAX-DA)

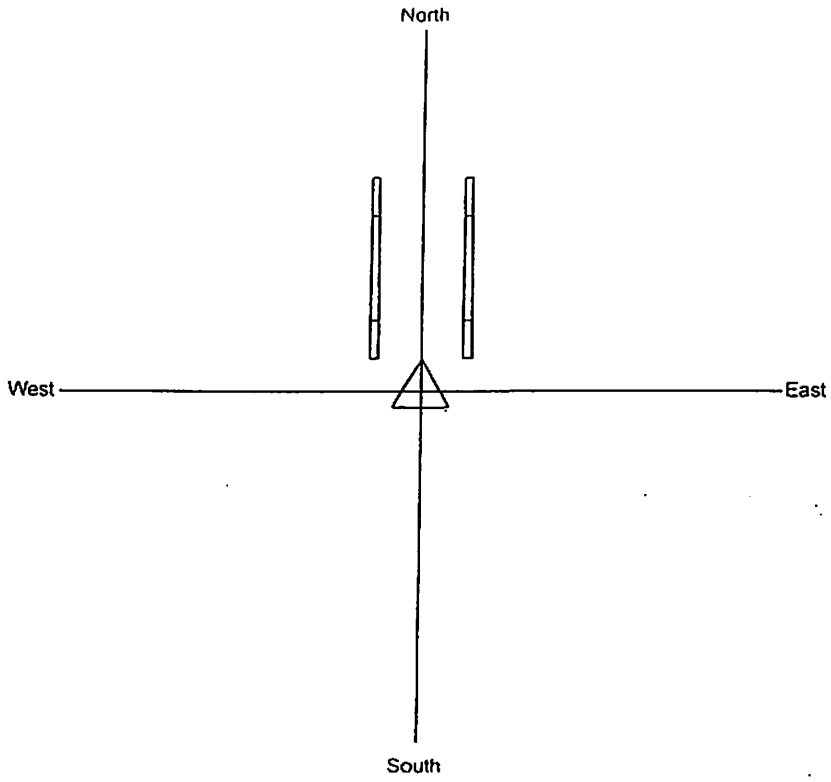
du Treil, Lundin & Rackley, Inc. Sarasota, Florida

TX Station: 050V2011 Lazer Spots Project

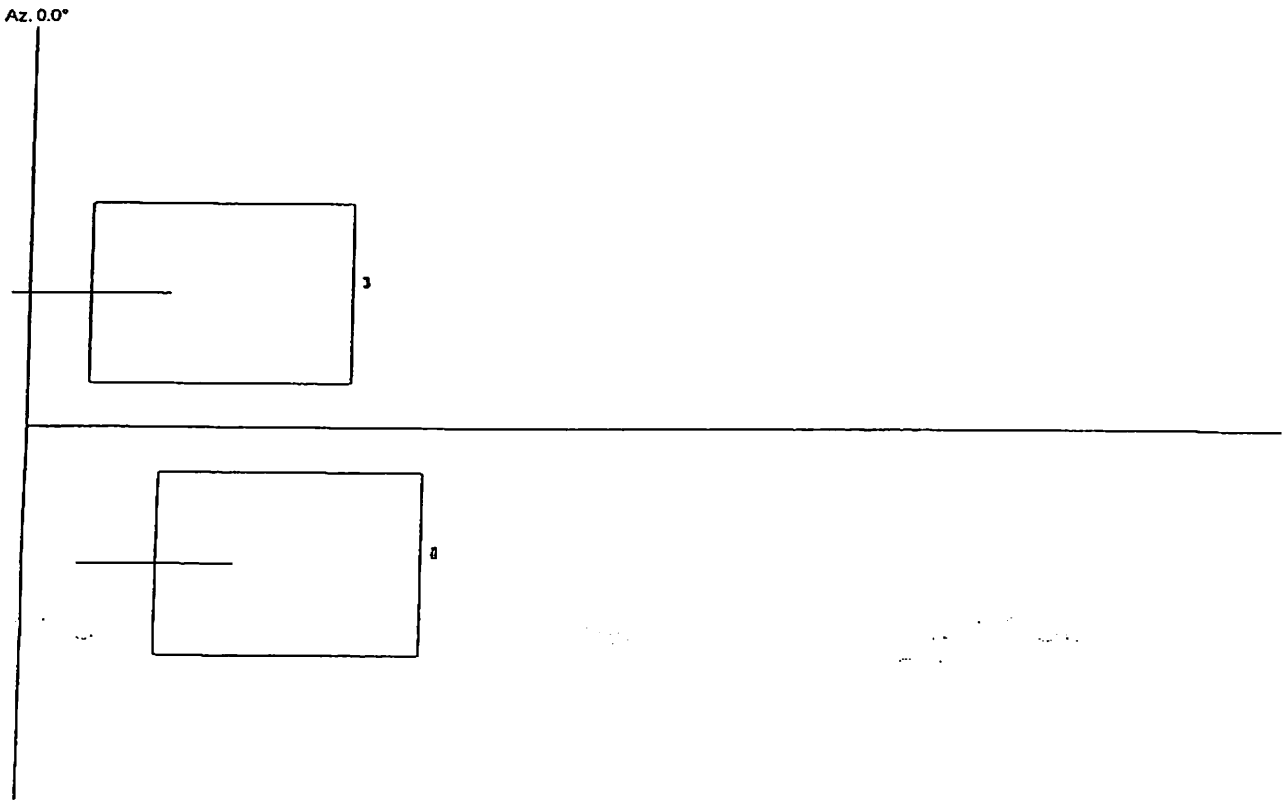
Frequency: 99.10 MHz
Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Plan of antenna system



Side of antenna system



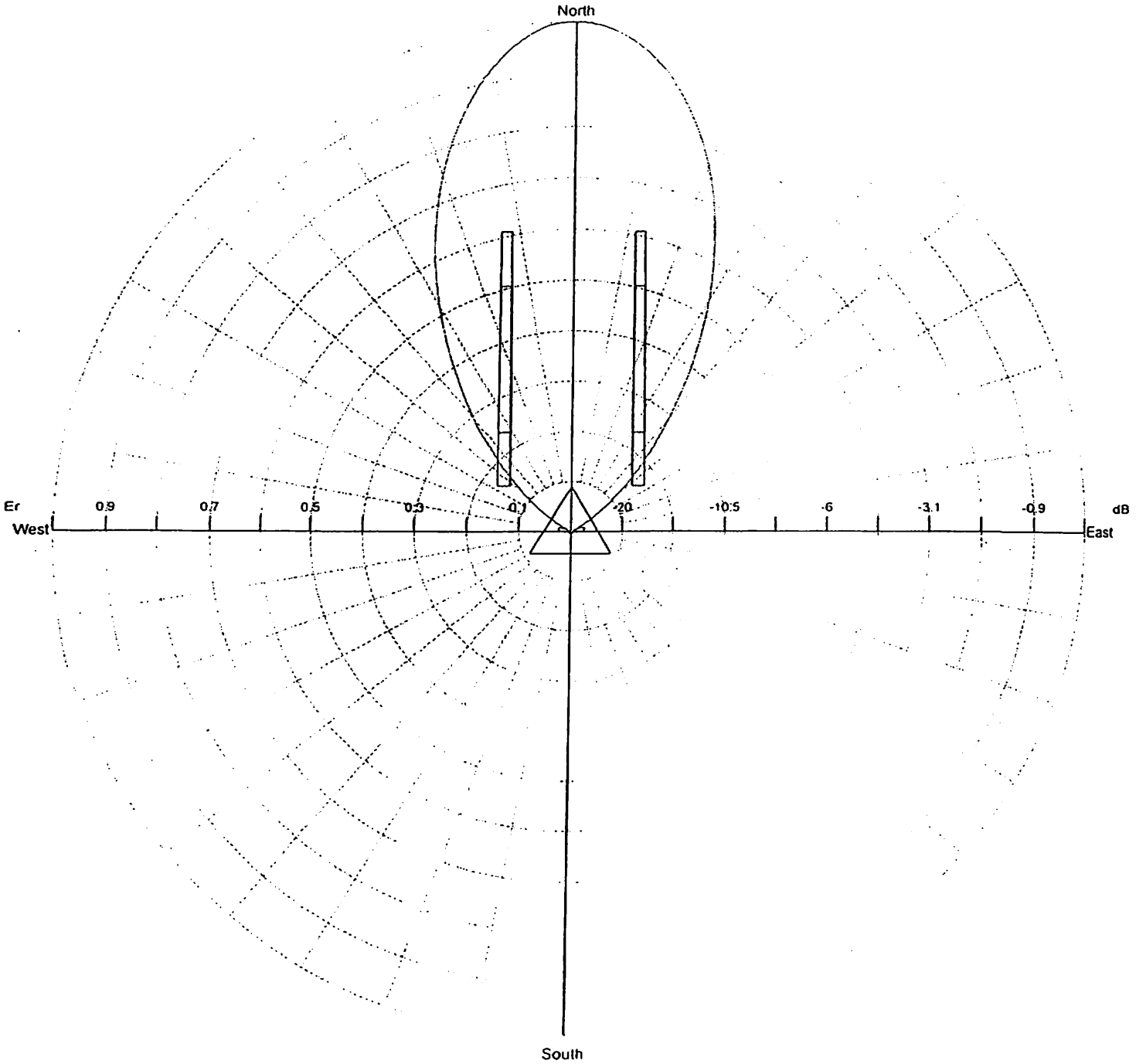
TX station: 050V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration enabled

Horizontal diagram at 0.3° depres. (Total Antenna)



——— 0.3° depres (Total Antenna), Gain (dBd): 12.4

ERP T Max(KW) 4.7772 ERP E Max(KW) 3.2883

TX station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz
Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
0.0	100 0	3.288	60.0	1 7	0.001	120.0	0 1	0.001
1.0	99.9	3.282	61.0	1.0	0.001	121.0	0.2	0.001
2.0	99.7	3.268	62.0	0 5	0.001	122.0	0.2	0.001
3.0	99.4	3.249	63.0	0 1	0.001	123.0	0.2	0.001
4.0	98.9	3.217	64 0	0 5	0.001	124.0	0.3	0.001
5.0	98.3	3.180	65 0	0.9	0.001	125.0	0.3	0.001
6.0	97.7	3.137	66.0	1.3	0.001	126.0	0.3	0.001
7.0	96.8	3.084	67.0	1.6	0.001	127.0	0.3	0.001
8.0	95.9	3.026	68.0	1.9	0.001	128.0	0.4	0.001
9.0	94.9	2.963	69.0	2.1	0.001	129.0	0.4	0.001
10.0	93.8	2.892	70.0	2.3	0.002	130.0	0.4	0.001
11.0	92.6	2.817	71.0	2.4	0.002	131.0	0.4	0.001
12.0	91.3	2.739	72.0	2.6	0.002	132.0	0.4	0.001
13.0	89.7	2.646	73.0	2.7	0.002	133.0	0.5	0.001
14.0	88.1	2.552	74.0	2.7	0.002	134.0	0.5	0.001
15.0	86.4	2.456	75.0	2.8	0.003	135.0	0.5	0.001
16.0	84.6	2.356	76.0	2.8	0.003	136.0	0.5	0.001
17.0	82.8	2.255	77.0	2.8	0.003	137.0	0.5	0.001
18.0	80.9	2.154	78.0	2.8	0.003	138.0	0.5	0.001
19.0	78.8	2.042	79.0	2.8	0.003	139.0	0.6	0.001
20.0	76.6	1.931	80.0	2.7	0.002	140.0	0.6	0.001
21.0	74.4	1.823	81 0	2.7	0.002	141.0	0.6	0.001
22.0	72.2	1.712	82.0	2.6	0.002	142.0	0.6	0.001
23.0	69.8	1.604	83.0	2.5	0.002	143.0	0.6	0.001
24.0	67.5	1.499	84.0	2.4	0.002	144.0	0.6	0.001
25.0	65.1	1.392	85.0	2.3	0.002	145.0	0.6	0.001
26.0	62.6	1.289	86.0	2.2	0.002	146.0	0.6	0.001
27.0	60.2	1.191	87.0	2.1	0.001	147.0	0.6	0.001
28.0	57.7	1.096	88.0	2.0	0.001	148.0	0.6	0.001
29.0	55.3	1.006	89.0	1.9	0.001	149.0	0.6	0.001
30.0	52.9	0.920	90.0	1.8	0.001	150.0	0.6	0.001
31.0	50.4	0.837	91.0	1.8	0.001	151.0	0.5	0.001
32.0	48.0	0.758	92.0	1.7	0.001	152.0	0.5	0.001
33.0	45.6	0.685	93.0	1.6	0.001	153.0	0.5	0.001
34.0	43.3	0.615	94.0	1.5	0.001	154.0	0.5	0.001
35.0	40.9	0.551	95.0	1.4	0.001	155.0	0.5	0.001
36.0	38.6	0.491	96.0	1.3	0.001	156.0	0.5	0.001
37.0	36.3	0.433	97.0	1.3	0.001	157.0	0.5	0.001
38.0	34.0	0.380	98.0	1.2	0.001	158.0	0.5	0.001
39.0	31.8	0.332	99.0	1.1	0.001	159.0	0.5	0.001
40.0	29.6	0.288	100.0	1.0	0.001	160.0	0.5	0.001
41.0	27.5	0.249	101.0	1.0	0.001	161.0	0.4	0.001
42.0	25.5	0.213	102.0	0.9	0.001	162.0	0.4	0.001
43.0	23.5	0.181	103.0	0.8	0.001	163.0	0.4	0.001
44.0	21.6	0.153	104.0	0.7	0.001	164.0	0.4	0.001
45.0	19.7	0.128	105.0	0.7	0.001	165.0	0.4	0.001
46.0	18.0	0.107	106.0	0.6	0.001	166.0	0.4	0.001
47.0	16.4	0.088	107.0	0.5	0.001	167.0	0.4	0.001
48.0	14.8	0.072	108.0	0.5	0.001	168.0	0.4	0.001
49.0	13.3	0.058	109.0	0.4	0.001	169.0	0.4	0.001
50.0	11.9	0 046	110.0	0.4	0.001	170.0	0.4	0.001
51.0	10.5	0.036	111.0	0.3	0.001	171.0	0.4	0.001
52.0	9.3	0 028	112 0	0.2	0.001	172.0	0.4	0.001
53.0	8.0	0.021	113.0	0.2	0.001	173.0	0.4	0.001
54.0	6 9	0.016	114 0	0 1	0.001	174.0	0 4	0.001
55.0	5 8	0 011	115 0	0 1	0.001	175.0	0.4	0 001
56.0	4 9	0 008	116 0	0 1	0.001	176.0	0.4	0.001
57.0	4.0	0 005	117 0	0 1	0.001	177.0	0 4	0.001
58.0	3 1	0 003	118 0	0 1	0 001	178.0	0 3	0 001
59.0	2 4	0 002	119 0	0.1	0.001	179.0	0 3	0 001

TX Station: 06/07/2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
180.0	0.3	0.001	240.0	0.1	0.001	300.0	1.6	0.001
181.0	0.3	0.001	241.0	0.1	0.001	301.0	2.3	0.002
182.0	0.3	0.001	242.0	0.1	0.001	302.0	3.1	0.003
183.0	0.3	0.001	243.0	0.1	0.001	303.0	3.9	0.005
184.0	0.3	0.001	244.0	0.1	0.001	304.0	4.8	0.008
185.0	0.3	0.001	245.0	0.1	0.001	305.0	5.8	0.011
186.0	0.3	0.001	246.0	0.2	0.001	306.0	6.8	0.015
187.0	0.3	0.001	247.0	0.2	0.001	307.0	7.9	0.020
188.0	0.3	0.001	248.0	0.2	0.001	308.0	9.0	0.027
189.0	0.3	0.001	249.0	0.3	0.001	309.0	10.2	0.034
190.0	0.3	0.001	250.0	0.3	0.001	310.0	11.6	0.044
191.0	0.3	0.001	251.0	0.4	0.001	311.0	13.0	0.056
192.0	0.4	0.001	252.0	0.5	0.001	312.0	14.5	0.069
193.0	0.4	0.001	253.0	0.5	0.001	313.0	16.1	0.085
194.0	0.4	0.001	254.0	0.6	0.001	314.0	17.7	0.103
195.0	0.4	0.001	255.0	0.6	0.001	315.0	19.5	0.125
196.0	0.4	0.001	256.0	0.7	0.001	316.0	21.3	0.150
197.0	0.4	0.001	257.0	0.8	0.001	317.0	23.3	0.178
198.0	0.4	0.001	258.0	0.9	0.001	318.0	25.3	0.211
199.0	0.4	0.001	259.0	0.9	0.001	319.0	27.3	0.246
200.0	0.5	0.001	260.0	1.0	0.001	320.0	29.4	0.285
201.0	0.5	0.001	261.0	1.1	0.001	321.0	31.6	0.328
202.0	0.5	0.001	262.0	1.2	0.001	322.0	33.6	0.371
203.0	0.5	0.001	263.0	1.2	0.001	323.0	35.7	0.418
204.0	0.5	0.001	264.0	1.3	0.001	324.0	37.8	0.469
205.0	0.5	0.001	265.0	1.4	0.001	325.0	40.0	0.527
206.0	0.5	0.001	266.0	1.4	0.001	326.0	42.3	0.589
207.0	0.5	0.001	267.0	1.5	0.001	327.0	44.7	0.656
208.0	0.5	0.001	268.0	1.6	0.001	328.0	47.0	0.726
209.0	0.5	0.001	269.0	1.6	0.001	329.0	49.3	0.800
210.0	0.5	0.001	270.0	1.7	0.001	330.0	51.7	0.879
211.0	0.5	0.001	271.0	1.8	0.001	331.0	54.1	0.963
212.0	0.5	0.001	272.0	1.9	0.001	332.0	56.6	1.052
213.0	0.5	0.001	273.0	2.0	0.001	333.0	59.0	1.146
214.0	0.5	0.001	274.0	2.1	0.001	334.0	61.4	1.238
215.0	0.5	0.001	275.0	2.2	0.002	335.0	63.7	1.333
216.0	0.5	0.001	276.0	2.2	0.002	336.0	66.0	1.432
217.0	0.5	0.001	277.0	2.3	0.002	337.0	68.3	1.532
218.0	0.5	0.001	278.0	2.4	0.002	338.0	70.5	1.634
219.0	0.5	0.001	279.0	2.5	0.002	339.0	72.7	1.739
220.0	0.5	0.001	280.0	2.5	0.002	340.0	74.9	1.846
221.0	0.5	0.001	281.0	2.5	0.002	341.0	77.1	1.954
222.0	0.5	0.001	282.0	2.5	0.002	342.0	79.2	2.065
223.0	0.5	0.001	283.0	2.5	0.002	343.0	81.2	2.167
224.0	0.5	0.001	284.0	2.5	0.002	344.0	83.1	2.270
225.0	0.5	0.001	285.0	2.5	0.002	345.0	84.9	2.373
226.0	0.4	0.001	286.0	2.4	0.002	346.0	86.7	2.470
227.0	0.4	0.001	287.0	2.4	0.002	347.0	88.3	2.566
228.0	0.4	0.001	288.0	2.3	0.002	348.0	89.9	2.660
229.0	0.4	0.001	289.0	2.2	0.002	349.0	91.4	2.749
230.0	0.4	0.001	290.0	2.1	0.001	350.0	92.8	2.835
231.0	0.4	0.001	291.0	2.0	0.001	351.0	94.2	2.917
232.0	0.4	0.001	292.0	1.8	0.001	352.0	95.3	2.988
233.0	0.3	0.001	293.0	1.5	0.001	353.0	96.4	3.055
234.0	0.3	0.001	294.0	1.2	0.001	354.0	97.4	3.118
235.0	0.3	0.001	295.0	0.9	0.001	355.0	98.2	3.171
236.0	0.3	0.001	296.0	0.5	0.001	356.0	98.9	3.218
237.0	0.2	0.001	297.0	0.0	0.001	357.0	99.6	3.260
238.0	0.2	0.001	298.0	0.5	0.001	358.0	99.8	3.276
239.0	0.2	0.001	299.0	1.0	0.001	359.0	100.0	3.285

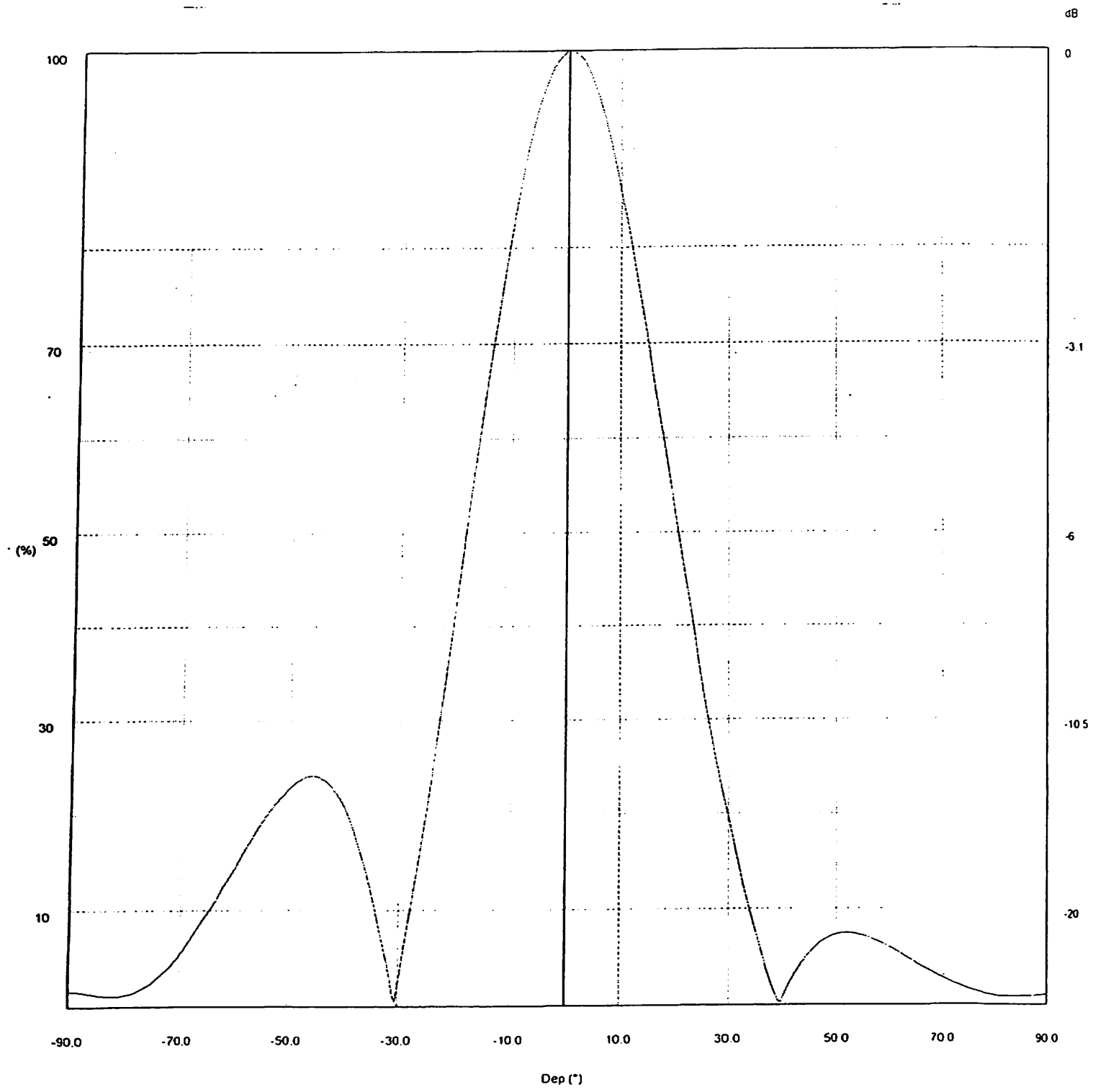
TX Station: 050V20111 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna). Gain (dBd): 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW) 3.2894

TX station: 000v2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
-90.0	1.6	0.001	-60.0	14.5	0.069	-30.0	2.1	0.002
-89.5	1.6	0.001	-59.5	15.0	0.074	-29.5	3.9	0.005
-89.0	1.6	0.001	-59.0	15.6	0.080	-29.0	5.7	0.011
-88.5	1.5	0.001	-58.5	16.0	0.085	-28.5	7.5	0.019
-88.0	1.5	0.001	-58.0	16.5	0.090	-28.0	9.4	0.029
-87.5	1.5	0.001	-57.5	17.0	0.095	-27.5	11.3	0.042
-87.0	1.5	0.001	-57.0	17.4	0.100	-27.0	13.3	0.058
-86.5	1.4	0.001	-56.5	17.9	0.106	-26.5	15.3	0.077
-86.0	1.4	0.001	-56.0	18.4	0.112	-26.0	17.3	0.098
-85.5	1.3	0.001	-55.5	18.9	0.117	-25.5	19.3	0.122
-85.0	1.2	0.001	-55.0	19.3	0.123	-25.0	21.3	0.150
-84.5	1.2	0.001	-54.5	19.8	0.128	-24.5	23.4	0.181
-84.0	1.1	0.001	-54.0	20.2	0.134	-24.0	25.5	0.215
-83.5	1.1	0.001	-53.5	20.6	0.139	-23.5	27.7	0.252
-83.0	1.1	0.001	-53.0	20.9	0.144	-23.0	29.8	0.292
-82.5	1.1	0.001	-52.5	21.3	0.149	-22.5	32.0	0.336
-82.0	1.1	0.001	-52.0	21.6	0.154	-22.0	34.1	0.384
-81.5	1.1	0.001	-51.5	21.9	0.158	-21.5	36.3	0.434
-81.0	1.1	0.001	-51.0	22.2	0.162	-21.0	38.5	0.489
-80.5	1.1	0.001	-50.5	22.6	0.167	-20.5	40.7	0.546
-80.0	1.2	0.001	-50.0	22.9	0.172	-20.0	42.9	0.607
-79.5	1.2	0.001	-49.5	23.1	0.176	-19.5	45.2	0.671
-79.0	1.3	0.001	-49.0	23.4	0.180	-19.0	47.4	0.738
-78.5	1.4	0.001	-48.5	23.6	0.183	-18.5	49.6	0.809
-78.0	1.4	0.001	-48.0	23.8	0.186	-18.0	51.8	0.883
-77.5	1.6	0.001	-47.5	23.9	0.188	-17.5	53.9	0.957
-77.0	1.8	0.001	-47.0	24.0	0.190	-17.0	56.1	1.034
-76.5	1.9	0.001	-46.5	24.1	0.191	-16.5	58.2	1.114
-76.0	2.1	0.001	-46.0	24.1	0.192	-16.0	60.3	1.196
-75.5	2.2	0.002	-45.5	24.1	0.192	-15.5	62.4	1.281
-75.0	2.4	0.002	-45.0	24.1	0.191	-15.0	64.5	1.367
-74.5	2.6	0.002	-44.5	24.0	0.189	-14.5	66.5	1.453
-74.0	2.9	0.003	-44.0	23.8	0.186	-14.0	68.5	1.541
-73.5	3.2	0.003	-43.5	23.6	0.183	-13.5	70.4	1.631
-73.0	3.4	0.004	-43.0	23.3	0.179	-13.0	72.3	1.721
-72.5	3.7	0.005	-42.5	23.0	0.174	-12.5	74.2	1.813
-72.0	4.0	0.005	-42.0	22.7	0.169	-12.0	76.1	1.905
-71.5	4.3	0.006	-41.5	22.3	0.163	-11.5	77.8	1.993
-71.0	4.7	0.007	-41.0	21.9	0.157	-11.0	79.5	2.081
-70.5	5.0	0.008	-40.5	21.4	0.150	-10.5	81.2	2.168
-70.0	5.4	0.010	-40.0	20.8	0.143	-10.0	82.8	2.256
-69.5	5.8	0.011	-39.5	20.2	0.134	-9.5	84.4	2.342
-69.0	6.1	0.012	-39.0	19.6	0.126	-9.0	85.9	2.428
-68.5	6.6	0.014	-38.5	18.8	0.117	-8.5	87.3	2.507
-68.0	7.0	0.016	-38.0	18.0	0.107	-8.0	88.6	2.584
-67.5	7.4	0.018	-37.5	17.2	0.097	-7.5	89.9	2.660
-67.0	7.8	0.020	-37.0	16.3	0.087	-7.0	91.2	2.733
-66.5	8.3	0.022	-36.5	15.3	0.077	-6.5	92.3	2.805
-66.0	8.7	0.025	-36.0	14.3	0.068	-6.0	93.5	2.874
-65.5	9.2	0.028	-35.5	13.3	0.058	-5.5	94.4	2.931
-65.0	9.6	0.031	-35.0	12.2	0.049	-5.0	95.3	2.986
-64.5	10.1	0.034	-34.5	11.1	0.040	-4.5	96.1	3.038
-64.0	10.6	0.037	-34.0	9.8	0.032	-4.0	96.9	3.086
-63.5	11.0	0.040	-33.5	8.6	0.024	-3.5	97.6	3.131
-63.0	11.5	0.043	-33.0	7.2	0.017	-3.0	98.2	3.172
-62.5	12.0	0.047	-32.5	5.8	0.011	-2.5	98.7	3.201
-62.0	12.5	0.052	-32.0	4.3	0.006	-2.0	99.0	3.227
-61.5	13.0	0.056	-31.5	2.8	0.003	-1.5	99.4	3.248
-61.0	13.5	0.060	-31.0	1.2	0.001	-1.0	99.6	3.266
-60.5	14.0	0.065	-30.5	0.5	0.001	-0.5	99.9	3.280

TX station: 0000201 Lazer Spots Project

Frequency: 99.10 MHz
Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	3.289	30.0	19.7	0.128	60.0	5.9	0.011
0.5	100.0	3.287	30.5	18.3	0.110	60.5	5.8	0.011
1.0	99.9	3.280	31.0	16.9	0.094	61.0	5.6	0.010
1.5	99.7	3.270	31.5	15.6	0.080	61.5	5.5	0.010
2.0	99.5	3.256	32.0	14.3	0.068	62.0	5.3	0.009
2.5	99.2	3.238	32.5	13.1	0.056	62.5	5.1	0.009
3.0	98.9	3.216	33.0	11.9	0.047	63.0	4.9	0.008
3.5	98.3	3.182	33.5	10.7	0.038	63.5	4.8	0.008
4.0	97.8	3.144	34.0	9.6	0.030	64.0	4.6	0.007
4.5	97.1	3.103	34.5	8.5	0.024	64.5	4.5	0.007
5.0	96.4	3.059	35.0	7.5	0.018	65.0	4.3	0.006
5.5	95.7	3.012	35.5	6.5	0.014	65.5	4.1	0.006
6.0	94.9	2.962	36.0	5.5	0.010	66.0	4.0	0.005
6.5	93.9	2.903	36.5	4.6	0.007	66.5	3.8	0.005
7.0	92.9	2.841	37.0	3.7	0.004	67.0	3.7	0.004
7.5	91.9	2.778	37.5	2.8	0.003	67.5	3.5	0.004
8.0	90.8	2.712	38.0	2.0	0.001	68.0	3.4	0.004
8.5	89.7	2.645	38.5	1.2	0.000	68.5	3.2	0.003
9.0	88.5	2.577	39.0	0.5	0.000	69.0	3.0	0.003
9.5	87.2	2.500	39.5	0.2	0.000	69.5	2.9	0.003
10.0	85.8	2.422	40.0	0.8	0.000	70.0	2.8	0.003
10.5	84.4	2.344	40.5	1.4	0.001	70.5	2.7	0.002
11.0	83.0	2.266	41.0	2.0	0.001	71.0	2.5	0.002
11.5	81.5	2.187	41.5	2.6	0.002	71.5	2.4	0.002
12.0	80.1	2.108	42.0	3.1	0.003	72.0	2.3	0.002
12.5	78.5	2.026	42.5	3.5	0.004	72.5	2.2	0.002
13.0	76.9	1.945	43.0	4.0	0.005	73.0	2.0	0.001
13.5	75.3	1.864	43.5	4.4	0.006	73.5	1.9	0.001
14.0	73.7	1.785	44.0	4.8	0.008	74.0	1.8	0.001
14.5	72.0	1.706	44.5	5.2	0.009	74.5	1.7	0.001
15.0	70.4	1.628	45.0	5.5	0.010	75.0	1.6	0.001
15.5	68.6	1.549	45.5	5.8	0.011	75.5	1.5	0.001
16.0	66.9	1.471	46.0	6.1	0.012	76.0	1.5	0.001
16.5	65.1	1.395	46.5	6.3	0.013	76.5	1.4	0.001
17.0	63.4	1.321	47.0	6.5	0.014	77.0	1.3	0.001
17.5	61.6	1.249	47.5	6.7	0.015	77.5	1.2	0.001
18.0	59.9	1.178	48.0	6.9	0.015	78.0	1.1	0.001
18.5	58.0	1.108	48.5	7.0	0.016	78.5	1.1	0.001
19.0	56.2	1.039	49.0	7.1	0.017	79.0	1.1	0.001
19.5	54.4	0.973	49.5	7.2	0.017	79.5	1.0	0.001
20.0	52.6	0.910	50.0	7.3	0.018	80.0	1.0	0.001
20.5	50.8	0.848	50.5	7.4	0.018	80.5	0.9	0.001
21.0	49.0	0.790	51.0	7.4	0.018	81.0	0.9	0.001
21.5	47.2	0.732	51.5	7.4	0.018	81.5	0.9	0.001
22.0	45.4	0.677	52.0	7.4	0.018	82.0	0.9	0.001
22.5	43.6	0.625	52.5	7.4	0.018	82.5	0.9	0.001
23.0	41.8	0.575	53.0	7.4	0.018	83.0	0.9	0.001
23.5	40.1	0.528	53.5	7.3	0.018	83.5	0.8	0.001
24.0	38.4	0.484	54.0	7.3	0.017	84.0	0.8	0.001
24.5	36.6	0.440	54.5	7.2	0.017	84.5	0.9	0.001
25.0	34.8	0.399	55.0	7.1	0.017	85.0	0.9	0.001
25.5	33.1	0.361	55.5	7.1	0.016	85.5	0.9	0.001
26.0	31.5	0.326	56.0	7.0	0.016	86.0	0.9	0.001
26.5	29.8	0.292	56.5	6.8	0.015	86.5	0.9	0.001
27.0	28.2	0.262	57.0	6.7	0.015	87.0	0.9	0.001
27.5	26.7	0.235	57.5	6.6	0.014	87.5	1.0	0.001
28.0	25.3	0.210	58.0	6.5	0.014	88.0	1.0	0.001
28.5	23.8	0.187	58.5	6.4	0.013	88.5	1.0	0.001
29.0	22.4	0.165	59.0	6.2	0.013	89.0	1.0	0.001
29.5	21.0	0.146	59.5	6.1	0.012	89.5	1.0	0.001

TX station: 050V2011 Eazer Spots Project

Frequency: 99.10 MHz

Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Geometr. and electrical data of Antenna System

	Power (%)	Tilt (°)	Az (°/N)	Phase (°)	V dist. (m)	E.C. (cm)	N.C. (cm)	Rot (1÷4)	Type (1÷2)	L cables (cm)	Car. phase (°)
1	25.000	0	0	0 +0.0	1.35	-85.0	60.0	1	1	420.0	0.0
2	25.000	0	0	0 -88.0	-1.35	-85.0	130.0	1	1	485.9	-88.0
3	25.000	0	0	0 +0.0	1.35	85.0	60.0	1	1	420.0	0.0
4	25.000	0	0	0 -88.0	-1.35	85.0	130.0	1	1	485.9	-88.0

ATTACHMENT B

Federal Communications Commission
Washington D C 20554

Approved by OMB
3060-0405 (October 2009)

FOR FCC USE ONLY

FCC 349

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION

Read INSTRUCTIONS Before Filling Out Form

FOR COMMISSION USE ONLY
FILE NO
-

Section I - General Information

1. Legal Name of the Applicant
COHAN RADIO GROUP, INC

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

FCC Registration Number:	Call Sign	Facility Identifier
		189909

2. Contact Representative (if other than Applicant)
COHAN RADIO GROUP, INC

Firm or Company Name

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):
○ Governmental Entity ○ Noncommercial Educational Licensee/Permittee ○ Other
○ N/A (Fee Required)

4. Facility information:
a. ○ FM Translator ◉ FM Booster
b. Community or communities to which the proposed facility will be licensed:

Community(ies)	State
WAUCHULA	FL

5. **Application Purpose**

◉ New station
○ Major Change in licensed facility
○ Minor Change in licensed facility
○ Major Modification of construction permit
○ Minor Modification of construction permit
○ Major Amendment to pending application
○ Minor Amendment to pending application

a. File number of original construction permit:

If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised. [Exhibit 1]

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. See General Instruction J.

Section II - Legal

1.	**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.	○ Yes ○ No

2.	Applicant is:		
	○ an individual	○ a general partnership	○ a for-profit corporation
	○ a limited partnership	○ a not-for-profit corporation	○ a limited liability company (LLC/LC)
	○ other		
	a. If "other", describe nature of applicant in an Exhibit.		[Exhibit 2]

3.	a. Applicant certifies that it is not the licensee or permittee of the commercial primary station being rebroadcast and that neither it nor any parties to the application have any interest in or connection with the commercial primary station being rebroadcast. See 47 C.F.R. Section 74.1232(d).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 3]
	b. Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 4]

NOTE: **If No to a. and b., and no waiver has been requested in an Exhibit, this application is unacceptable for filing.** See 47 C.F.R. Section 74.1232(d).

If Yes to (a) and No to (b) applicant is prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).

4.	The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest in or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 5]
5.	For applicants proposing translator rebroadcasts that are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. **If No, this application is unacceptable for filing.**	○ Yes ○ No ○ N/A
6.	**Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: 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; or b. any pending broadcast application in which character issues have been raised.	○ Yes ○ No See Explanation in [Exhibit 6]

7.	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 proceding brought under the provisions of any law related to the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of 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 date of filing; and (ii) the disposition of the previously reported matter.	○ Yes ○ No See Explanation in [Exhibit 7]
8.	**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.	○ Yes ○ No See Explanation in [Exhibit 8]
9.	**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.	○ Yes ○ No
10.	**Local Public Notice.** Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	○ Yes ○ No
11.	**Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. An exhibit is required unless this question is inapplicable.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 9]
12.	**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.	○ Yes ○ No
13.	**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.	○ Yes ○ No ○ N/A

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (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.

Name	Relationship to Applicant (e.g., Consulting Engineer)

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 9/19/2011

Mailing Address
DU TREIL, LUNDIN & RACKLEY, INC.
201 FLETCHER AVENUE

City	State or Country (if foreign address)	Zip Code
SARASOTA	FL	34237 - 6019

Telephone Number (include area code)	E-Mail Address (if available)
9413296000	JEFF@DLR.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).

Unable to find table

Section III-A - 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: 256
2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
○ Off-air ○ Microwave ○ Satellite ○ Via ◉ Other
4. Antenna Location Coordinates: (NAD 27)

Latitude:
Degrees 27 Minutes 29 Seconds 24 ◉ North ○ South

Longitude:
Degrees 81 Minutes 50 Seconds 29 ◉ West ○ East
5. Antenna Structure Registration Number: 1229128
☐ Not Applicable ☐ Notification filed with FAA
6. Antenna Location Site Elevation Above Mean Sea Level: 24 meters
7. Overall Tower Height Above Ground Level: 79 meters
8. Height of Radiation Center Above Ground Level: meters(H) 72 meters(V)
9. Effective Radiated Power: kW(H) 5 kW(V)
10. Transmitting Antenna:

Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search

○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

Manufacturer ALD Model ALP.08.02.712

Rotation: 12degrees ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
60	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11. **For FM Boosters and Fill-in translators only.**

a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.

○ Yes ○ No ◉ N/A

See Explanation in [Exhibit 10]

b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.

◉ Yes ○ No ○ N/A

See Explanation in [Exhibit 11]

12. **Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply:

◉ Yes ○ No

See Explanation in [Exhibit 12]

Overlap Requirements.

☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** [Exhibit 13]

Television Channel 6 Protection.

☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.** [Exhibit 14]

13. **Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.

◉ Yes ○ No

See Explanation in [Exhibit 15]

14. **Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.

◉ Yes ○ No

See Explanation in [Exhibit 16]

15. **Environmental Protection Act.** Applicant certifies that 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 Appendix A, an Exhibit is required.

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.

◉ Yes ○ No

See Explanation in [Exhibit 17]

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?	○ Yes ○ No
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.	○ Yes ○ No
2. **Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4. **Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
New (increased) area served in square kilometers (excluding areas of water):	
Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers	
5. **Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6. **Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHIBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHIBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHIBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL AND WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

THE PROPOSED ALDENA MODEL ALP.08.02.712 DIRECTIONAL ANTENNA WILL HAVE A MAIN LOBE ORIENTATION OF 12 DEGREES TRUE AND WILL INCORPORATE 5 DEGREES OF MECHANICAL BEAM TILT TOWARDS THE MAIN LOBE AZIMUTH OF 12 DEGREES TRUE. FIGURE 3, ATTACHED, PROVIDES ANTENNA SYSTEM INFORMATION, INCLUDING INFORMATION REQUIRED BY SECTION 73.316(C)(2)(III).

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 72.5 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 5 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE PAGE 5 OF FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.00034 MW/CM2. THIS IS 0.17% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

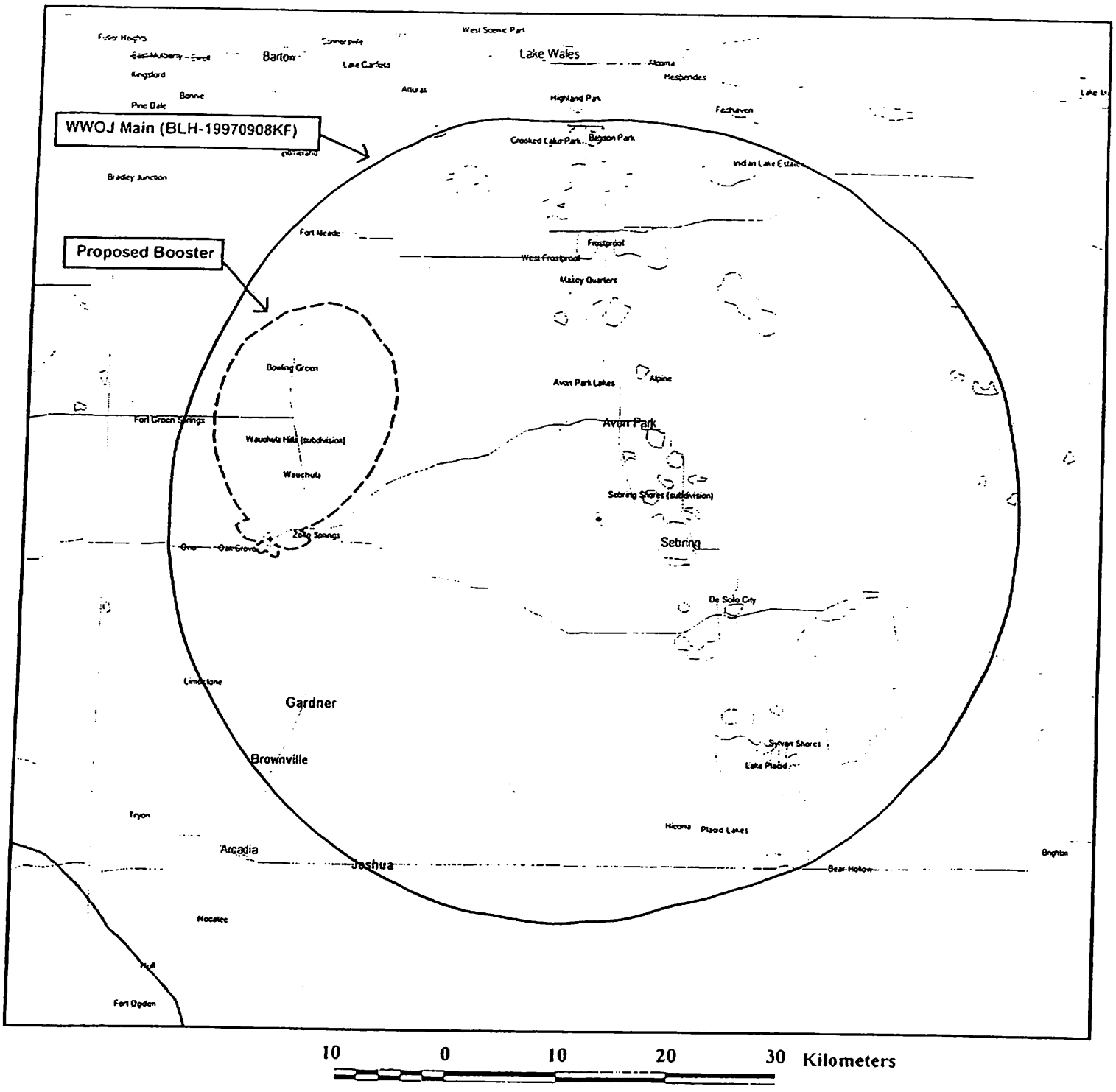
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE

TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME, WEARING ACCEPTED RFR PROTECTIVE CLOTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY ADDRESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - WAUCHULA BOOSTER

Figure 1

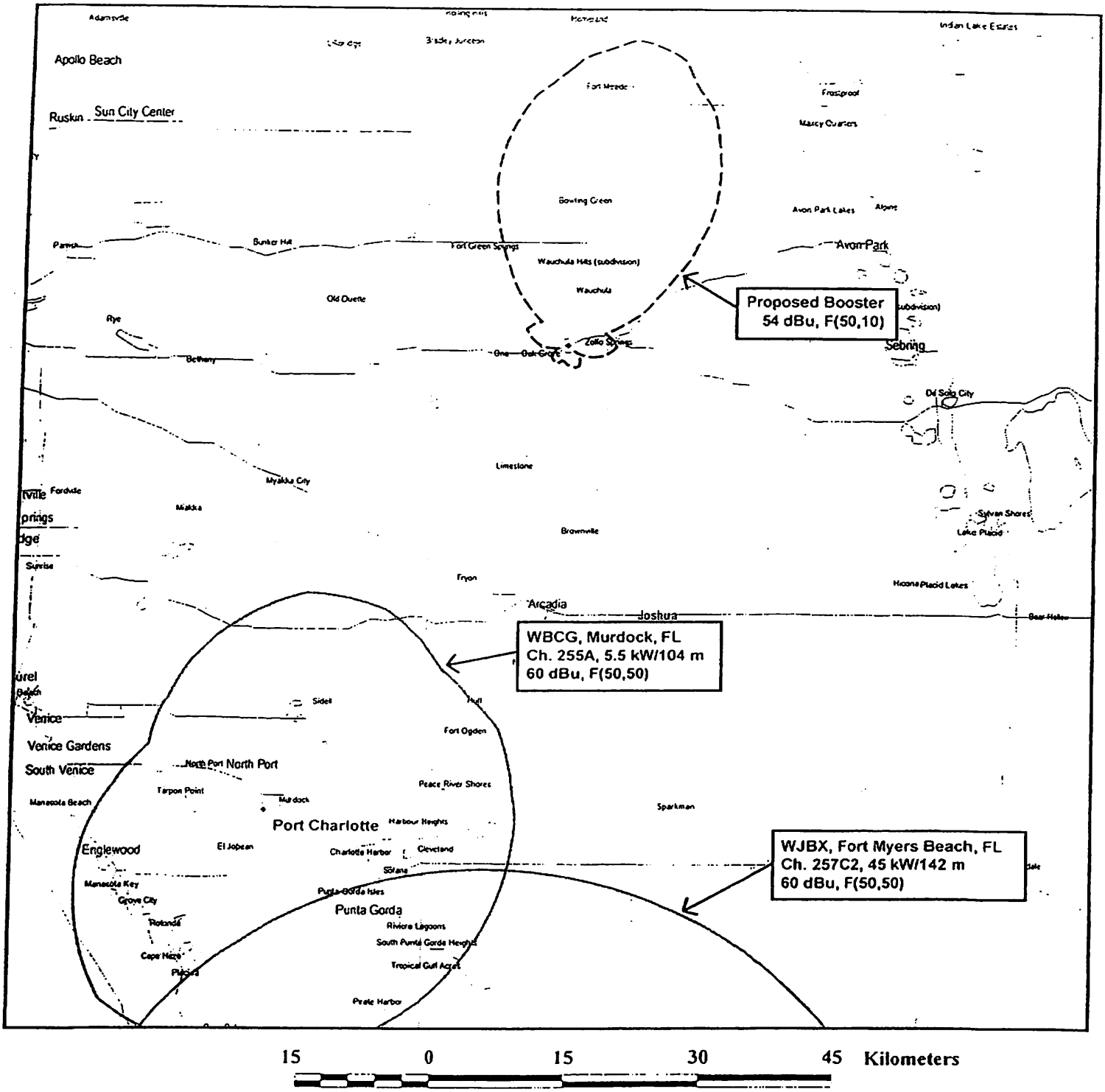


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
WAUCHULA, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
WAUCHULA, FLORIDA
CH 256 5 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

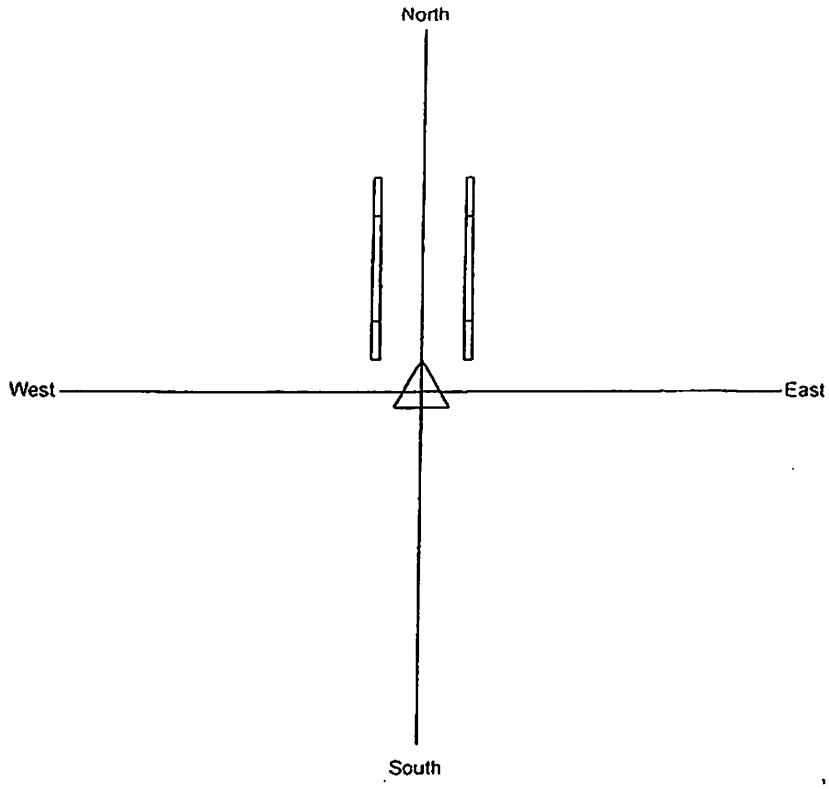
TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

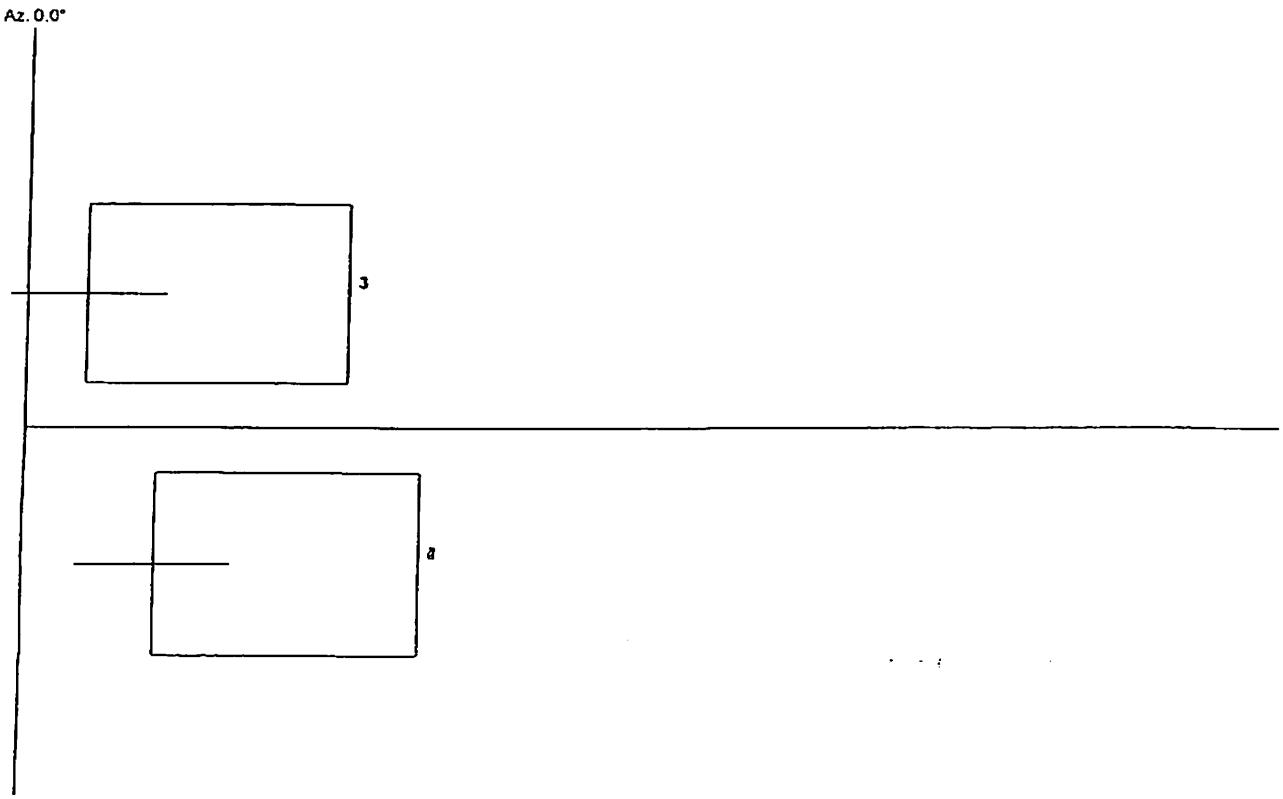
Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Plan of antenna system



Side of antenna system

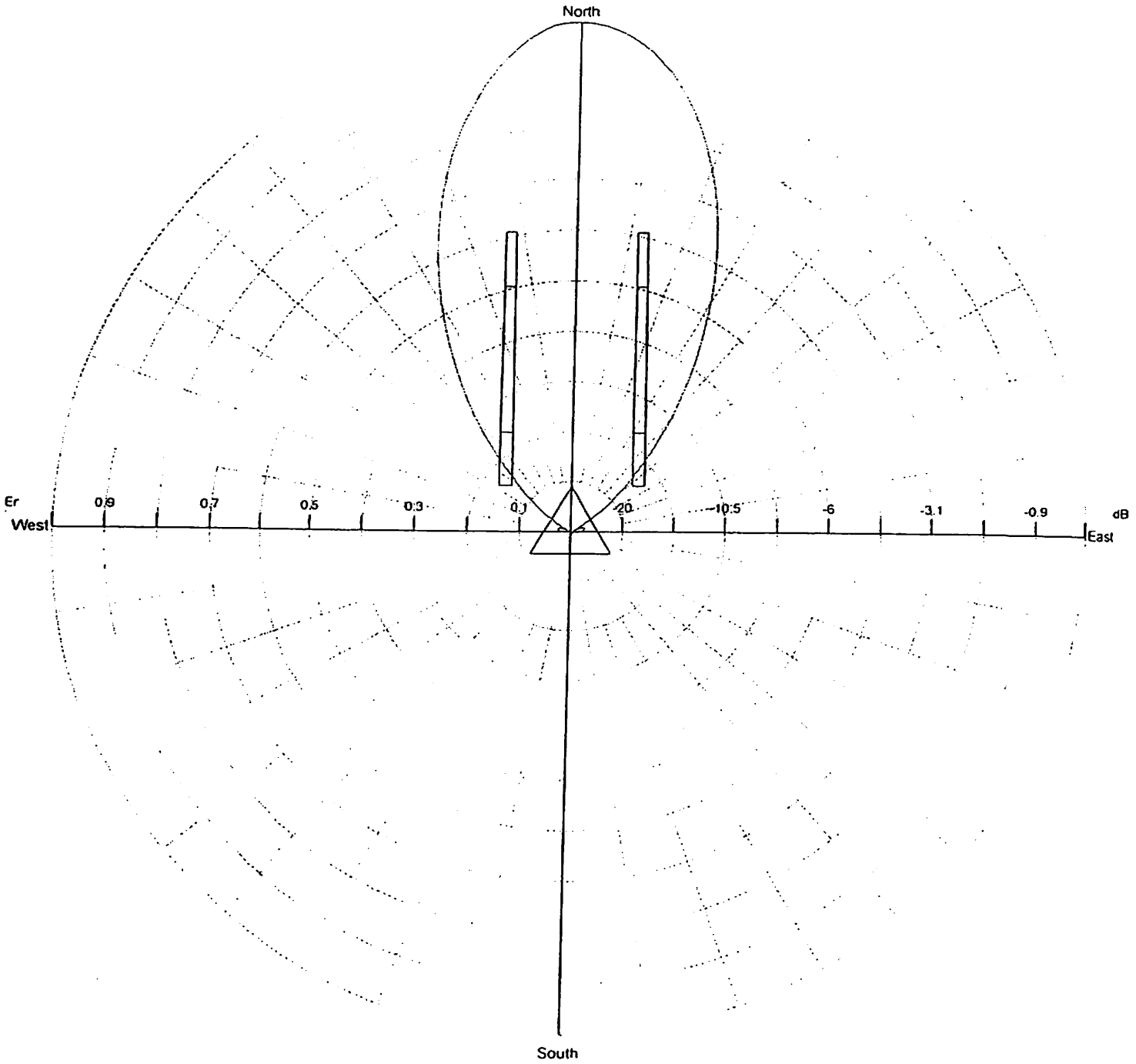


TX Station: 06072011 Lazer Spots Project

Frequency: 99.10 MHz
Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Horizontal diagram at 0.3° depres. (Total Antenna)



0.3° depres. (Total Antenna). Gain (dBd): 12.4

ERP T.Max(KW): 4.7772 ERP E.Max(KW) 3.2883

TX station: 05/05/2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration enabled

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
0 0	100.0	3.288	60.0	1.7	0.001	120.0	0.1	0.001
1 0	99.9	3.282	61.0	1.0	0.001	121.0	0.2	0.001
2.0	99.7	3.268	62.0	0.5	0.001	122.0	0.2	0.001
3 0	99.4	3.249	63.0	0.1	0.001	123.0	0.2	0.001
4 0	98.9	3.217	64.0	0.5	0.001	124.0	0.3	0.001
5 0	98.3	3.180	65.0	0.9	0.001	125.0	0.3	0.001
6.0	97.7	3.137	66.0	1.3	0.001	126.0	0.3	0.001
7.0	96.8	3.084	67.0	1.6	0.001	127.0	0.3	0.001
8 0	95.9	3.026	68.0	1.9	0.001	128.0	0.4	0.001
9.0	94.9	2.963	69.0	2.1	0.001	129.0	0.4	0.001
10.0	93.8	2.892	70.0	2.3	0.002	130.0	0.4	0.001
11.0	92.6	2.817	71.0	2.4	0.002	131.0	0.4	0.001
12.0	91.3	2.739	72.0	2.6	0.002	132.0	0.4	0.001
13.0	89.7	2.646	73.0	2.7	0.002	133.0	0.5	0.001
14.0	88.1	2.552	74.0	2.7	0.002	134.0	0.5	0.001
15.0	86.4	2.456	75.0	2.8	0.003	135.0	0.5	0.001
16.0	84.6	2.356	76.0	2.8	0.003	136.0	0.5	0.001
17.0	82.8	2.255	77.0	2.8	0.003	137 0	0.5	0.001
18.0	80.9	2.154	78.0	2.8	0.003	138.0	0.5	0.001
19.0	78.8	2.042	79.0	2.8	0.003	139.0	0.6	0.001
20.0	76.6	1.931	80.0	2.7	0.002	140.0	0.6	0.001
21.0	74.4	1.823	81.0	2.7	0.002	141.0	0.6	0.001
22.0	72.2	1.712	82.0	2.6	0.002	142.0	0.6	0.001
23.0	69.8	1.604	83.0	2.5	0.002	143.0	0.6	0.001
24.0	67.5	1.499	84.0	2.4	0.002	144.0	0.6	0.001
25.0	65.1	1.392	85.0	2.3	0.002	145.0	0.6	0.001
26.0	62.6	1.289	86.0	2.2	0.002	146.0	0.6	0.001
27.0	60.2	1.191	87.0	2.1	0.001	147.0	0.6	0.001
28.0	57.7	1.096	88.0	2.0	0.001	148.0	0.6	0.001
29.0	55.3	1.006	89.0	1.9	0.001	149.0	0.6	0.001
30.0	52.9	0.920	90.0	1.8	0.001	150.0	0.6	0.001
31.0	50.4	0.837	91.0	1.8	0.001	151.0	0.5	0.001
32.0	48.0	0.758	92.0	1.7	0.001	152.0	0.5	0.001
33.0	45.6	0.685	93.0	1.6	0.001	153.0	0.5	0.001
34.0	43.3	0.615	94.0	1.5	0.001	154.0	0.5	0.001
35.0	40.9	0.551	95.0	1.4	0.001	155.0	0.5	0.001
36.0	38.6	0.491	96.0	1.3	0.001	156.0	0.5	0.001
37.0	36.3	0.433	97.0	1.3	0.001	157.0	0.5	0.001
38.0	34.0	0.380	98.0	1.2	0.001	158.0	0.5	0.001
39.0	31.8	0.332	99.0	1.1	0.001	159.0	0.5	0.001
40.0	29.6	0.288	100.0	1.0	0.001	160.0	0.5	0.001
41.0	27.5	0.249	101.0	1.0	0.001	161.0	0.4	0.001
42.0	25.5	0.213	102.0	0.9	0.001	162.0	0.4	0.001
43.0	23.5	0.181	103.0	0.8	0.001	163.0	0.4	0.001
44.0	21.6	0.153	104.0	0.7	0.001	164.0	0.4	0.001
45.0	19.7	0.128	105.0	0.7	0.001	165.0	0.4	0.001
46.0	18.0	0.107	106.0	0.6	0.001	166.0	0.4	0.001
47.0	16.4	0.088	107.0	0.5	0.001	167.0	0.4	0.001
48.0	14.8	0.072	108.0	0.5	0.001	168.0	0 4	0.001
49.0	13.3	0.058	109.0	0.4	0.001	169.0	0 4	0.001
50 0	11 9	0.046	110.0	0.4	0 001	170.0	0.4	0.001
51 0	10.5	0.036	111.0	0.3	0.001	171.0	0 4	0.001
52.0	9.3	0.028	112.0	0.2	0.001	172.0	0 4	0.001
53 0	8.0	0.021	113.0	0.2	0.001	173.0	0.4	0.001
54.0	6 9	0.016	114.0	0 1	0 001	174 0	0 4	0.001
55 0	5 8	0.011	115 0	0 1	0.001	175 0	0 4	0.001
56 0	4.9	0.008	116.0	0 1	0 001	176 0	0 4	0.001
57 0	4 0	0.005	117 0	0 1	0 001	177 0	0 4	0.001
58 0	3 1	0.003	118 0	0 1	0 001	178 0	0 3	0 001
59 0	2.4	0.002	119.0	0 1	0 001	179 0	0 3	0 001

TX Station: 0000211 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
180.0	0.3	0.001	240.0	0.1	0.001	300.0	1.6	0.001
181.0	0.3	0.001	241.0	0.1	0.001	301.0	2.3	0.002
182.0	0.3	0.001	242.0	0.1	0.001	302.0	3.1	0.003
183.0	0.3	0.001	243.0	0.1	0.001	303.0	3.9	0.005
184.0	0.3	0.001	244.0	0.1	0.001	304.0	4.8	0.008
185.0	0.3	0.001	245.0	0.1	0.001	305.0	5.8	0.011
186.0	0.3	0.001	246.0	0.2	0.001	306.0	6.8	0.015
187.0	0.3	0.001	247.0	0.2	0.001	307.0	7.9	0.020
188.0	0.3	0.001	248.0	0.2	0.001	308.0	9.0	0.027
189.0	0.3	0.001	249.0	0.3	0.001	309.0	10.2	0.034
190.0	0.3	0.001	250.0	0.3	0.001	310.0	11.6	0.044
191.0	0.3	0.001	251.0	0.4	0.001	311.0	13.0	0.056
192.0	0.4	0.001	252.0	0.5	0.001	312.0	14.5	0.069
193.0	0.4	0.001	253.0	0.5	0.001	313.0	16.1	0.085
194.0	0.4	0.001	254.0	0.6	0.001	314.0	17.7	0.103
195.0	0.4	0.001	255.0	0.6	0.001	315.0	19.5	0.125
196.0	0.4	0.001	256.0	0.7	0.001	316.0	21.3	0.150
197.0	0.4	0.001	257.0	0.8	0.001	317.0	23.3	0.178
198.0	0.4	0.001	258.0	0.9	0.001	318.0	25.3	0.211
199.0	0.4	0.001	259.0	0.9	0.001	319.0	27.3	0.246
200.0	0.5	0.001	260.0	1.0	0.001	320.0	29.4	0.285
201.0	0.5	0.001	261.0	1.1	0.001	321.0	31.6	0.328
202.0	0.5	0.001	262.0	1.2	0.001	322.0	33.6	0.371
203.0	0.5	0.001	263.0	1.2	0.001	323.0	35.7	0.418
204.0	0.5	0.001	264.0	1.3	0.001	324.0	37.8	0.469
205.0	0.5	0.001	265.0	1.4	0.001	325.0	40.0	0.527
206.0	0.5	0.001	266.0	1.4	0.001	326.0	42.3	0.589
207.0	0.5	0.001	267.0	1.5	0.001	327.0	44.7	0.656
208.0	0.5	0.001	268.0	1.6	0.001	328.0	47.0	0.726
209.0	0.5	0.001	269.0	1.6	0.001	329.0	49.3	0.800
210.0	0.5	0.001	270.0	1.7	0.001	330.0	51.7	0.879
211.0	0.5	0.001	271.0	1.8	0.001	331.0	54.1	0.963
212.0	0.5	0.001	272.0	1.9	0.001	332.0	56.6	1.052
213.0	0.5	0.001	273.0	2.0	0.001	333.0	59.0	1.146
214.0	0.5	0.001	274.0	2.1	0.001	334.0	61.4	1.238
215.0	0.5	0.001	275.0	2.2	0.002	335.0	63.7	1.333
216.0	0.5	0.001	276.0	2.2	0.002	336.0	66.0	1.432
217.0	0.5	0.001	277.0	2.3	0.002	337.0	68.3	1.532
218.0	0.5	0.001	278.0	2.4	0.002	338.0	70.5	1.634
219.0	0.5	0.001	279.0	2.5	0.002	339.0	72.7	1.739
220.0	0.5	0.001	280.0	2.5	0.002	340.0	74.9	1.846
221.0	0.5	0.001	281.0	2.5	0.002	341.0	77.1	1.954
222.0	0.5	0.001	282.0	2.5	0.002	342.0	79.2	2.065
223.0	0.5	0.001	283.0	2.5	0.002	343.0	81.2	2.167
224.0	0.5	0.001	284.0	2.5	0.002	344.0	83.1	2.270
225.0	0.5	0.001	285.0	2.5	0.002	345.0	84.9	2.373
226.0	0.4	0.001	286.0	2.4	0.002	346.0	86.7	2.470
227.0	0.4	0.001	287.0	2.4	0.002	347.0	88.3	2.566
228.0	0.4	0.001	288.0	2.3	0.002	348.0	89.9	2.660
229.0	0.4	0.001	289.0	2.2	0.002	349.0	91.4	2.749
230.0	0.4	0.001	290.0	2.1	0.001	350.0	92.8	2.835
231.0	0.4	0.001	291.0	2.0	0.001	351.0	94.2	2.917
232.0	0.4	0.001	292.0	1.8	0.001	352.0	95.3	2.988
233.0	0.3	0.001	293.0	1.5	0.001	353.0	96.4	3.055
234.0	0.3	0.001	294.0	1.2	0.001	354.0	97.4	3.118
235.0	0.3	0.001	295.0	0.9	0.001	355.0	98.2	3.171
236.0	0.3	0.001	296.0	0.5	0.001	356.0	98.9	3.218
237.0	0.2	0.001	297.0	0.0	0.001	357.0	99.6	3.260
238.0	0.2	0.001	298.0	0.5	0.001	358.0	99.8	3.276
239.0	0.2	0.001	299.0	1.0	0.001	359.0	100.0	3.285

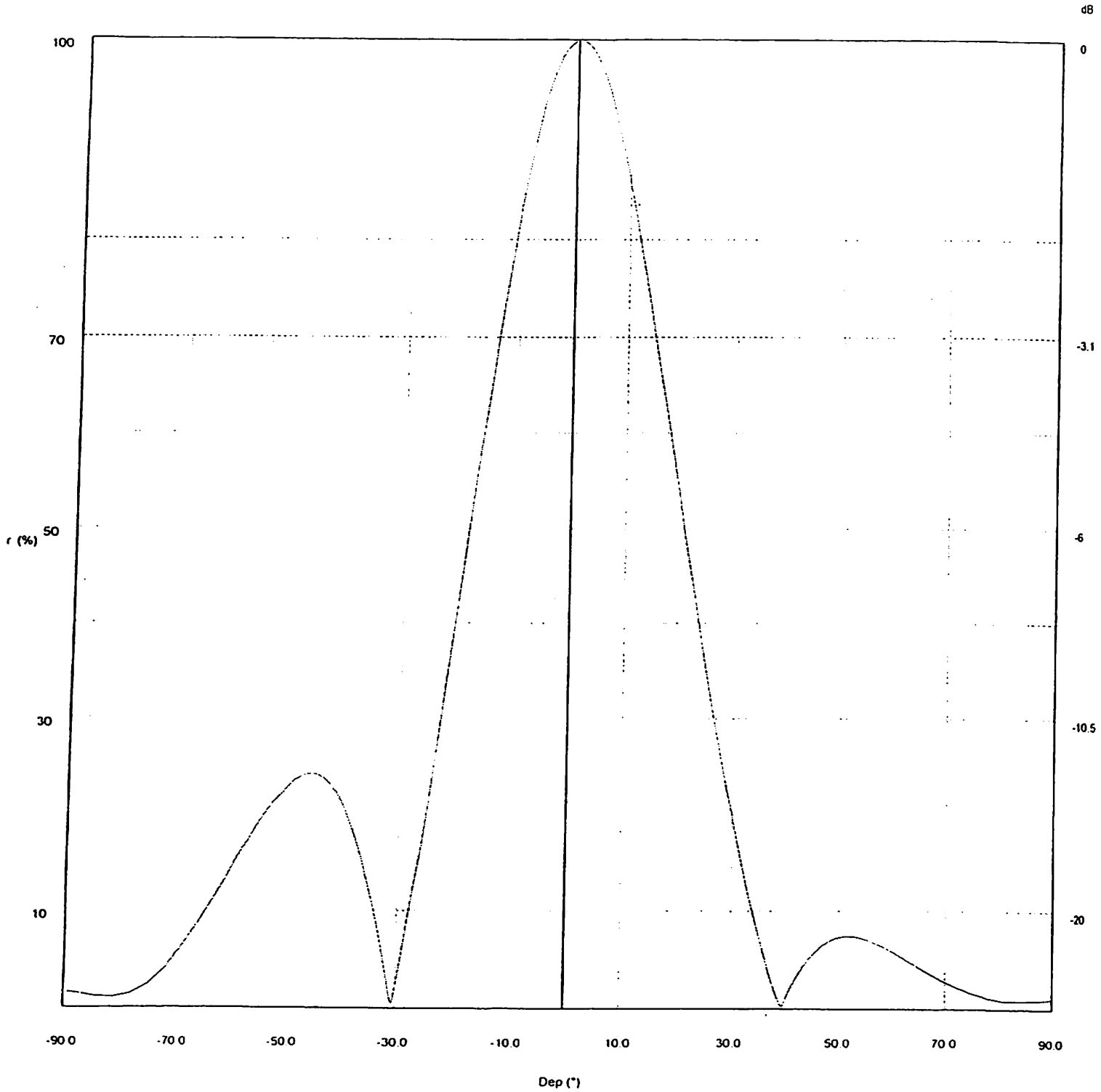
TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna). Gain (dBd): 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW) 3.2894

TX Station: 06062011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
-90.0	1.6	0.001	-60.0	14.5	0.069	-30.0	2.1	0.002
-89.5	1.6	0.001	-59.5	15.0	0.074	-29.5	3.9	0.005
-89.0	1.6	0.001	-59.0	15.6	0.080	-29.0	5.7	0.011
-88.5	1.5	0.001	-58.5	16.0	0.085	-28.5	7.5	0.019
-88.0	1.5	0.001	-58.0	16.5	0.090	-28.0	9.4	0.029
-87.5	1.5	0.001	-57.5	17.0	0.095	-27.5	11.3	0.042
-87.0	1.5	0.001	-57.0	17.4	0.100	-27.0	13.3	0.058
-86.5	1.4	0.001	-56.5	17.9	0.106	-26.5	15.3	0.077
-86.0	1.4	0.001	-56.0	18.4	0.112	-26.0	17.3	0.098
-85.5	1.3	0.001	-55.5	18.9	0.117	-25.5	19.3	0.122
-85.0	1.2	0.001	-55.0	19.3	0.123	-25.0	21.3	0.150
-84.5	1.2	0.001	-54.5	19.8	0.128	-24.5	23.4	0.181
-84.0	1.1	0.001	-54.0	20.2	0.134	-24.0	25.5	0.215
-83.5	1.1	0.001	-53.5	20.6	0.139	-23.5	27.7	0.252
-83.0	1.1	0.001	-53.0	20.9	0.144	-23.0	29.8	0.292
-82.5	1.1	0.001	-52.5	21.3	0.149	-22.5	32.0	0.336
-82.0	1.1	0.001	-52.0	21.6	0.154	-22.0	34.1	0.384
-81.5	1.1	0.001	-51.5	21.9	0.158	-21.5	36.3	0.434
-81.0	1.1	0.001	-51.0	22.2	0.162	-21.0	38.5	0.489
-80.5	1.1	0.001	-50.5	22.6	0.167	-20.5	40.7	0.546
-80.0	1.2	0.001	-50.0	22.9	0.172	-20.0	42.9	0.607
-79.5	1.2	0.001	-49.5	23.1	0.176	-19.5	45.2	0.671
-79.0	1.3	0.001	-49.0	23.4	0.180	-19.0	47.4	0.738
-78.5	1.4	0.001	-48.5	23.6	0.183	-18.5	49.6	0.809
-78.0	1.4	0.001	-48.0	23.8	0.186	-18.0	51.8	0.883
-77.5	1.6	0.001	-47.5	23.9	0.188	-17.5	53.9	0.957
-77.0	1.8	0.001	-47.0	24.0	0.190	-17.0	56.1	1.034
-76.5	1.9	0.001	-46.5	24.1	0.191	-16.5	58.2	1.114
-76.0	2.1	0.001	-46.0	24.1	0.192	-16.0	60.3	1.196
-75.5	2.2	0.002	-45.5	24.1	0.192	-15.5	62.4	1.281
-75.0	2.4	0.002	-45.0	24.1	0.191	-15.0	64.5	1.367
-74.5	2.6	0.002	-44.5	24.0	0.189	-14.5	66.5	1.453
-74.0	2.9	0.003	-44.0	23.8	0.186	-14.0	68.5	1.541
-73.5	3.2	0.003	-43.5	23.6	0.183	-13.5	70.4	1.631
-73.0	3.4	0.004	-43.0	23.3	0.179	-13.0	72.3	1.721
-72.5	3.7	0.005	-42.5	23.0	0.174	-12.5	74.2	1.813
-72.0	4.0	0.005	-42.0	22.7	0.169	-12.0	76.1	1.905
-71.5	4.3	0.006	-41.5	22.3	0.163	-11.5	77.8	1.993
-71.0	4.7	0.007	-41.0	21.9	0.157	-11.0	79.5	2.081
-70.5	5.0	0.008	-40.5	21.4	0.150	-10.5	81.2	2.168
-70.0	5.4	0.010	-40.0	20.8	0.143	-10.0	82.8	2.256
-69.5	5.8	0.011	-39.5	20.2	0.134	-9.5	84.4	2.342
-69.0	6.1	0.012	-39.0	19.6	0.126	-9.0	85.9	2.428
-68.5	6.6	0.014	-38.5	18.8	0.117	-8.5	87.3	2.507
-68.0	7.0	0.016	-38.0	18.0	0.107	-8.0	88.6	2.584
-67.5	7.4	0.018	-37.5	17.2	0.097	-7.5	89.9	2.660
-67.0	7.8	0.020	-37.0	16.3	0.087	-7.0	91.2	2.733
-66.5	8.3	0.022	-36.5	15.3	0.077	-6.5	92.3	2.805
-66.0	8.7	0.025	-36.0	14.3	0.068	-6.0	93.5	2.874
-65.5	9.2	0.028	-35.5	13.3	0.058	-5.5	94.4	2.931
-65.0	9.6	0.031	-35.0	12.2	0.049	-5.0	95.3	2.986
-64.5	10.1	0.034	-34.5	11.1	0.040	-4.5	96.1	3.038
-64.0	10.6	0.037	-34.0	9.8	0.032	-4.0	96.9	3.086
-63.5	11.0	0.040	-33.5	8.6	0.024	-3.5	97.6	3.131
-63.0	11.5	0.043	-33.0	7.2	0.017	-3.0	98.2	3.172
-62.5	12.0	0.047	-32.5	5.8	0.011	-2.5	98.7	3.201
-62.0	12.5	0.052	-32.0	4.3	0.006	-2.0	99.0	3.227
-61.5	13.0	0.056	-31.5	2.8	0.003	-1.5	99.4	3.248
-61.0	13.5	0.060	-31.0	1.2	0.001	-1.0	99.6	3.266
-60.5	14.0	0.065	-30.5	0.5	0.001	-0.5	99.9	3.280

TX station: 000v2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	3.289	30.0	19.7	0.128	60.0	5.9	0.011
0.5	100.0	3.287	30.5	18.3	0.110	60.5	5.8	0.011
1.0	99.9	3.280	31.0	16.9	0.094	61.0	5.6	0.010
1.5	99.7	3.270	31.5	15.6	0.080	61.5	5.5	0.010
2.0	99.5	3.256	32.0	14.3	0.068	62.0	5.3	0.009
2.5	99.2	3.238	32.5	13.1	0.056	62.5	5.1	0.009
3.0	98.9	3.216	33.0	11.9	0.047	63.0	4.9	0.008
3.5	98.3	3.182	33.5	10.7	0.038	63.5	4.8	0.008
4.0	97.8	3.144	34.0	9.6	0.030	64.0	4.6	0.007
4.5	97.1	3.103	34.5	8.5	0.024	64.5	4.5	0.007
5.0	96.4	3.059	35.0	7.5	0.018	65.0	4.3	0.006
5.5	95.7	3.012	35.5	6.5	0.014	65.5	4.1	0.006
6.0	94.9	2.962	36.0	5.5	0.010	66.0	4.0	0.005
6.5	93.9	2.903	36.5	4.6	0.007	66.5	3.8	0.005
7.0	92.9	2.841	37.0	3.7	0.004	67.0	3.7	0.004
7.5	91.9	2.778	37.5	2.8	0.003	67.5	3.5	0.004
8.0	90.8	2.712	38.0	2.0	0.001	68.0	3.4	0.004
8.5	89.7	2.645	38.5	1.2	0.000	68.5	3.2	0.003
9.0	88.5	2.577	39.0	0.5	0.000	69.0	3.0	0.003
9.5	87.2	2.500	39.5	0.2	0.000	69.5	2.9	0.003
10.0	85.8	2.422	40.0	0.8	0.000	70.0	2.8	0.003
10.5	84.4	2.344	40.5	1.4	0.001	70.5	2.7	0.002
11.0	83.0	2.266	41.0	2.0	0.001	71.0	2.5	0.002
11.5	81.5	2.187	41.5	2.6	0.002	71.5	2.4	0.002
12.0	80.1	2.108	42.0	3.1	0.003	72.0	2.3	0.002
12.5	78.5	2.026	42.5	3.5	0.004	72.5	2.2	0.002
13.0	76.9	1.945	43.0	4.0	0.005	73.0	2.0	0.001
13.5	75.3	1.864	43.5	4.4	0.006	73.5	1.9	0.001
14.0	73.7	1.785	44.0	4.8	0.008	74.0	1.8	0.001
14.5	72.0	1.706	44.5	5.2	0.009	74.5	1.7	0.001
15.0	70.4	1.628	45.0	5.5	0.010	75.0	1.6	0.001
15.5	68.6	1.549	45.5	5.8	0.011	75.5	1.5	0.001
16.0	66.9	1.471	46.0	6.1	0.012	76.0	1.5	0.001
16.5	65.1	1.395	46.5	6.3	0.013	76.5	1.4	0.001
17.0	63.4	1.321	47.0	6.5	0.014	77.0	1.3	0.001
17.5	61.6	1.249	47.5	6.7	0.015	77.5	1.2	0.001
18.0	59.9	1.178	48.0	6.9	0.015	78.0	1.1	0.001
18.5	58.0	1.108	48.5	7.0	0.016	78.5	1.1	0.001
19.0	56.2	1.039	49.0	7.1	0.017	79.0	1.1	0.001
19.5	54.4	0.973	49.5	7.2	0.017	79.5	1.0	0.001
20.0	52.6	0.910	50.0	7.3	0.018	80.0	1.0	0.001
20.5	50.8	0.848	50.5	7.4	0.018	80.5	0.9	0.001
21.0	49.0	0.790	51.0	7.4	0.018	81.0	0.9	0.001
21.5	47.2	0.732	51.5	7.4	0.018	81.5	0.9	0.001
22.0	45.4	0.677	52.0	7.4	0.018	82.0	0.9	0.001
22.5	43.6	0.625	52.5	7.4	0.018	82.5	0.9	0.001
23.0	41.8	0.575	53.0	7.4	0.018	83.0	0.9	0.001
23.5	40.1	0.528	53.5	7.3	0.018	83.5	0.8	0.001
24.0	38.4	0.484	54.0	7.3	0.017	84.0	0.8	0.001
24.5	36.6	0.440	54.5	7.2	0.017	84.5	0.9	0.001
25.0	34.8	0.399	55.0	7.1	0.017	85.0	0.9	0.001
25.5	33.1	0.361	55.5	7.1	0.016	85.5	0.9	0.001
26.0	31.5	0.326	56.0	7.0	0.016	86.0	0.9	0.001
26.5	29.8	0.292	56.5	6.8	0.015	86.5	0.9	0.001
27.0	28.2	0.262	57.0	6.7	0.015	87.0	0.9	0.001
27.5	26.7	0.235	57.5	6.6	0.014	87.5	1.0	0.001
28.0	25.3	0.210	58.0	6.5	0.014	88.0	1.0	0.001
28.5	23.8	0.187	58.5	6.4	0.013	88.5	1.0	0.001
29.0	22.4	0.165	59.0	6.2	0.013	89.0	1.0	0.001
29.5	21.0	0.146	59.5	6.1	0.012	89.5	1.0	0.001

TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Geometr. and electrical data of Antenna System

	Power (%)	Tilt (°)	Az. (°/N)	Phase (°)	V dist (m)	E.C. (cm)	N.C (cm)	Rot. (1÷4)	Type (1÷2)	L cables (cm)	Car. phase (°)
1	25.000	0	0	0 +0.0	1.35	-85.0	60.0	1	1	420.0	0.0
2	25.000	0	0	0 -88.0	-1.35	-85.0	130.0	1	1	485.9	-88.0
3	25.000	0	0	0 +0.0	1.35	85.0	60.0	1	1	420.0	0.0
4	25.000	0	0	0 -88.0	-1.35	85.0	130.0	1	1	485.9	-88.0

ATTACHMENT C

Federal Communications Commission
Washington, D C 20554

Approved by OMB
3060-0405 (October 2009)

FOR FCC USE ONLY

FCC 349

APPLICATION FOR AUTHORITY TO CONSTRUCT OR MAKE CHANGES IN AN FM TRANSLATOR OR FM BOOSTER STATION

Read INSTRUCTIONS Before Filling Out Form

FOR COMMISSION USE ONLY
FILE NO.
-

Section I - General Information

1. Legal Name of the Applicant
COHAN RADIO GROUP, INC

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

FCC Registration Number:	Call Sign	Facility Identifier
		189950

2. Contact Representative (if other than Applicant)
COHAN RADIO GROUP, INC

Firm or Company Name

Mailing Address
3750 US HWY 27 NORTH
SUITE 1

City	State or Country (if foreign address)	ZIP Code
SEBRING	FL	33870 -

Telephone Number (include area code)	E-Mail Address (if available)
8633829999	COHANRADIOGROUP@HTN.NET

3. If this application has been submitted without a fee, indicate reason for fee exemption (see 47 C.F.R. Section 1.1114):
○ Governmental Entity ○ Noncommercial Educational Licensee/Permittee ○ Other
○ N/A (Fee Required)

4. Facility information:
a. ○ FM Translator ◉ FM Booster
b. Community or communities to which the proposed facility will be licensed:

Community(ies)	State
FROSTPROOF	FL

5. Application Purpose
◉ New station
○ Major Change in licensed facility
○ Minor Change in licensed facility
○ Major Modification of construction permit
○ Minor Modification of construction permit
○ Major Amendment to pending application
○ Minor Amendment to pending application

a. File number of original construction permit:

If an amendment, submit as an Exhibit a listing by Section and Question Number the portions of the pending application that are being revised. [Exhibit 1]

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. See General Instruction J.

Section II - Legal

1.	**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.	○ Yes ○ No

2.	Applicant is:		
	○ an individual	○ a general partnership	○ a for-profit corporation
	○ a limited partnership	○ a not-for-profit corporation	○ a limited liability company (LLC/LC)
	○ other		
	a. If "other", describe nature of applicant in an Exhibit.		[Exhibit 2]

3.	a.	Applicant certifies that it is not the licensee or permittee of the commercial primary station being rebroadcast and that neither it nor any parties to the application have any interest in or connection with the commercial primary station being rebroadcast. See 47 C.F.R. Section 74.1232(d).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 3]
	b.	Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 4]

NOTE: **If No to a. and b., and no waiver has been requested in an Exhibit, this application is unacceptable for filing.** See 47 C.F.R. Section 74.1232(d).

If Yes to (a) and No to (b) applicant is prohibited from receiving any support, before or after construction, either directly or indirectly from the commercial primary station being rebroadcast or from any person or entity having any interest whatsoever, or any connection with the primary FM station. Interested and connected parties include group owners, corporate parents, shareholders, officers, directors, employees, general and limited partners, family members and business associates. See 47 C.F.R. Section 74.1232(e).

4.	The applicant, if for a commercial FM translator station with a coverage contour extending beyond the protected contour of the commercial primary station being rebroadcast, certifies that it has not received any support, before or after constructing, directly or indirectly, from the licensee/permittee of the primary station or any person with an interest in or connection with the licensee or permittee of the primary station, except for technical assistance as provided for under 47 C.F.R. Section 74.1232(e).	○ Yes ○ No ○ N/A See Explanation in [Exhibit 5]
5.	For applicants proposing translator rebroadcasts that are not the licensee of the primary station, the applicant certifies that written authority has been obtained from the licensee of the station whose programs are to be retransmitted. **If No, this application is unacceptable for filing.**	○ Yes ○ No ○ N/A
6.	**Character Issues.** Applicant certifies that neither applicant nor any party to the application has or has had any interest in or connection with: 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; or b. any pending broadcast application in which character issues have been raised.	○ Yes ○ No See Explanation in [Exhibit 6]

7.	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 the following: any felony; mass media-related antitrust or unfair competition; fraudulent statements to another governmental unit; or discrimination. If the answer is "No," attach as an Exhibit a full disclosure concerning the persons and matters involved, including an identification of 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 date of filing; and (ii) the disposition of the previously reported matter.	○ Yes ○ No See Explanation in [Exhibit 7]
8.	**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.	○ Yes ○ No See Explanation in [Exhibit 8]
9.	**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.	○ Yes ○ No
10.	**Local Public Notice.** Applicant certifies compliance with the public notice requirements of 47 C.F.R. Section 73.3580.	○ Yes ○ No
11.	**Auction Authorization.** If the application is being submitted to obtain a construction permit for which the applicant was the winning bidder in an auction, then the applicant certifies, pursuant to 47 C.F.R. Section 73.5005(a), that it has attached an exhibit containing the information required by 47 C.F.R. Sections 1.2107(d), 1.2110(i), 1.2112(a) and 1.2112(b), if applicable. An exhibit is required unless this question is inapplicable.	○ Yes ○ No ○ N/A See Explanation in [Exhibit 9]
12.	**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.	○ Yes ○ No
13.	**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.	○ Yes ○ No ○ N/A

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

SECTION III - PREPARER'S CERTIFICATION

I certify that I have prepared Section III (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.

Name	Relationship to Applicant (e.g., Consulting Engineer)

W. JEFFREY REYNOLDS	TECHNICAL CONSULTANT
Signature	Date 9/21/2011

Mailing Address
DU TREIL, LUNDIN & RACKLEY, INC.
201 FLETCHER AVENUE

City	State or Country (if foreign address)	Zip Code
SARASOTA	FL	34237 - 6019

Telephone Number (include area code)	E-Mail Address (if available)
9413296000	JEFF@DLR.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).

Unable to find table

Section III-A - 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: 256

2. Primary Station:

Facility ID Number	Call Sign	City	State
27199	WWOJ	AVON PARK	FL

3. Delivery Method (Select One):
○ Off-air ○ Microwave ○ Satellite ○ Via ◉ Other

4. Antenna Location Coordinates: (NAD 27)

Latitude:
Degrees 27 Minutes 42 Seconds 41 ◉ North ○ South

Longitude:
Degrees 81 Minutes 33 Seconds 4 ◉ West ○ East

5. Antenna Structure Registration Number: 1212923
☐ Not Applicable ☐ Notification filed with FAA

6.	Antenna Location Site Elevation Above Mean Sea Level:	37 meters
7.	Overall Tower Height Above Ground Level:	83 meters
8.	Height of Radiation Center Above Ground Level:	meters(H) 38 meters(V)
9.	Effective Radiated Power:	kW(H) 3 kW(V)

10. Transmitting Antenna:

Before selecting Directional "Off-the-Shelf", refer to "Search for Antenna Information" under CDBS Public Access (http://licensing.fcc.gov/prod/cdbs/pubacc/prod/cdbs_pa.htm). Make sure that the Standard Pattern is marked Yes and that the relative field values shown match your values. Enter the Manufacturer (Make) and Model exactly as displayed in the Antenna Search

○ Nondirectional ○ Directional "Off-the-shelf" ◉ Directional composite

Manufacturer ALD Model ALP.08.02.712

Rotation: 13degrees ☐ No Rotation

Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value	Degrees	Value
0	1	10	0.938	20	0.766	30	0.529	40	0.296	50	0.119
60	0.017	70	0.023	80	0.027	90	0.018	100	0.01	110	0.004

120	0.001	130	0.004	140	0.006	150	0.006	160	0.005	170	0.004
180	0.003	190	0.003	200	0.005	210	0.005	220	0.005	230	0.004
240	0.001	250	0.003	260	0.01	270	0.017	280	0.025	290	0.021
300	0.016	310	0.116	320	0.294	330	0.517	340	0.749	350	0.928
Additional Azimuths											

Relative Field Polar Plot

11.	**For FM Boosters and Fill-in translators only.** a. **FM Fill-in translators.** Applicant certifies that the FM translator's (a) coverage contour does not extend beyond the protected contour of the commercial FM primary station to be rebroadcast, or (b) entire 60 dBu contour is contained within the lesser of: (i) the 2 mV/m daytime contour of the AM primary station to be rebroadcast, or (ii) a 25-mile radius centered at the AM primary station's transmitter site. b. **FM Boosters.** Applicant certifies that the FM Booster station's service contour is entirely within the primary station's protected coverage contour.	○ Yes ○ No ◉ N/A See Explanation in [Exhibit 10] ◉ Yes ○ No ○ N/A See Explanation in [Exhibit 11]
12.	**Interference.** The proposed facility complies with all of the following applicable rule sections. Check all that apply: **Overlap Requirements.** ☑ a) 47 C.F.R. Section 74.1204 **Exhibit Required.** **Television Channel 6 Protection.** ☐ b) 47 C.F.R. Section 74.1205 with respect to station(s) **Exhibit Required.**	◉ Yes ○ No See Explanation in [Exhibit 12] [Exhibit 13] [Exhibit 14]
13.	**Unattended operation.** Applicant certifies that unattended operation is not proposed, or if this application proposes unattended operation, the applicant certifies that it will comply with the requirements of 47 C.F.R. Section 74.1234.	◉ Yes ○ No See Explanation in [Exhibit 15]
14.	**Multiple Translators.** Applicant certifies that it does not have any interest in an application or an authorization for an FM translator station that serves substantially the same area and rebroadcasts the same signal as the proposed FM translator station.	◉ Yes ○ No See Explanation in [Exhibit 16]
15.	**Environmental Protection Act.** Applicant certifies that 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 Appendix A, an **Exhibit is required.** 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.	◉ Yes ○ No See Explanation in [Exhibit 17]

PREPARER'S CERTIFICATION ON PAGE 4 MUST BE COMPLETED AND SIGNED.

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

Preliminary Matter: Does this application provide fill-in service only?	○ Yes ○ No
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.	○ Yes ○ No
2. **Diversity of Ownership:** Applicant certifies that the principal community (city grade) contour of the proposed station does not overlap the principal community contour of any other authorized radio station (including AM, FM, and non-fill-in FM translator stations, commercial or noncommercial) 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 qualification in a local public inspection file and has submitted to the Commission copies of the documentation.	○ Yes ○ No
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.	○ Yes ○ No
4. **Technical Parameters:** Applicant certifies that the numbers in the boxes below accurately reflect the new (increased) area and population that its proposal would serve with a 60 dBu signal measured in accordance with the standard predicted contours in 47 C.F.R. Section 73.713(c) 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 the station's existing service area). (Points, if any, will be determined by FCC)	○ Yes ○ No
New (increased) area served in square kilometers (excluding areas of water):	
Population served based on the most recent census block data from the United States Bureau of Census using the centroid method:	
Tie Breakers	
5. **Existing Authorizations.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of relevant broadcast stations. FM translator applicants should count all attributable full service radio stations, AM and FM, commercial and noncommercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial licenses and construction permits) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, existing authorizations for the following number of FM translators.	
6. **Pending Applications.** a. By placing a number in the box, the applicant certifies that it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date filing, pending applications for new or major changes to the following number of relevant broadcast stations, AM and FM, commercial and non-commercial and FM translator stations other than fill-in stations. (number of attributable commercial and non-commercial applications) b. (Fill-in Applicants Only.) By placing a number in the box, the applicant certifies that, in addition to the station identified in 5(a), it and any persons and organizations with attributable interests in the applicant pursuant to 47 C.F.R. Section 73.3555 have, as of the date of filing, existing authorizations for the following number of FM translators.	

Section VI -- Certification

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.)

Typed or Printed Name of Person Signing	Typed or Printed Title of Person Signing
Signature	Date

Exhibits

Exhibit 11
Description: SEE EXHIBIT 17

Attachment 11

Exhibit 12
Description: SEE EXHIBIT 17

Attachment 12

Exhibit 13
Description: SEE EXHIBIT 17

Attachment 13

Exhibit 17
Description: TECHNICAL SUMMARY

BOOSTER COVERAGE COMPLIANCE - FIGURE 1 IS A MAP DEMONSTRATING THAT THE PROPOSED BOOSTER 60 DBU CONTOUR IS WITHIN THE 60 DBU CONTOUR OF FM MAIN STATION WWOJ ON CHANNEL 256A AT AVON PARK, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

SECTION 74.1204 COMPLIANCE THERE ARE NO INTERMEDIATE FREQUENCY (IF) ALLOCATIONS OF CONCERN. FURTHERMORE, AS DEMONSTRATED ON FIGURE 2, CONTOUR PROTECTION IS PROVIDED TO FIRST ADJACENT CHANNEL STATIONS WBCG ON CHANNEL 255A AT MURDOCK, FL, WJBX ON CHANNEL 257C2 AT FORT MEYERS BEACH, FL, WMMO ON CHANNEL 255C2 AT ORLANDO, FL AND WLRQ ON CHANNEL 257C2 AT COCOA, FL. CONTOUR LOCATIONS BASED ON USGS 30-SECOND TERRAIN DATABASE.

FIGURE 3, ATTACHED, PROVIDES ANTENNA SYSTEM INFORMATION.

RFR COMPLIANCE - THE PROPOSED FACILITIES WERE EVALUATED IN TERMS OF POTENTIAL RADIO FREQUENCY (RF) ENERGY EXPOSURE AT GROUND LEVEL TO WORKERS AND THE GENERAL PUBLIC. THE RADIATION CENTER FOR THE PROPOSED BOOSTER ANTENNA IS LOCATED 38 METERS ABOVE GROUND LEVEL ON THE EXISTING TOWER. THE MAXIMUM ERP IS 3 KW (VERTICAL POLARIZATION). A CONSERVATIVE VERTICAL PLANE RELATIVE FIELD VALUE OF 0.1 (FOR ANGLES BELOW 60 DEGREES DOWNWARD) IS PRESUMED FOR THE ANTENNA'S DOWNWARD RADIATION (SEE PAGE 5 OF FIGURE 3 ATTACHED). THE CALCULATED POWER DENSITY AT A POINT 2 METERS ABOVE GROUND LEVEL IS 0.00077 MW/CM2. THIS IS 0.38% OF THE FCC'S RECOMMENDED LIMIT OF 0.2 MW/CM2 FOR FM RADIO STATIONS FOR AN UNCONTROLLED ENVIRONMENT. THEREFORE, BASED ON THE RESPONSIBILITY THRESHOLD OF 5%, THE PROPOSAL WILL COMPLY WITH THE RF EMISSION RULES.

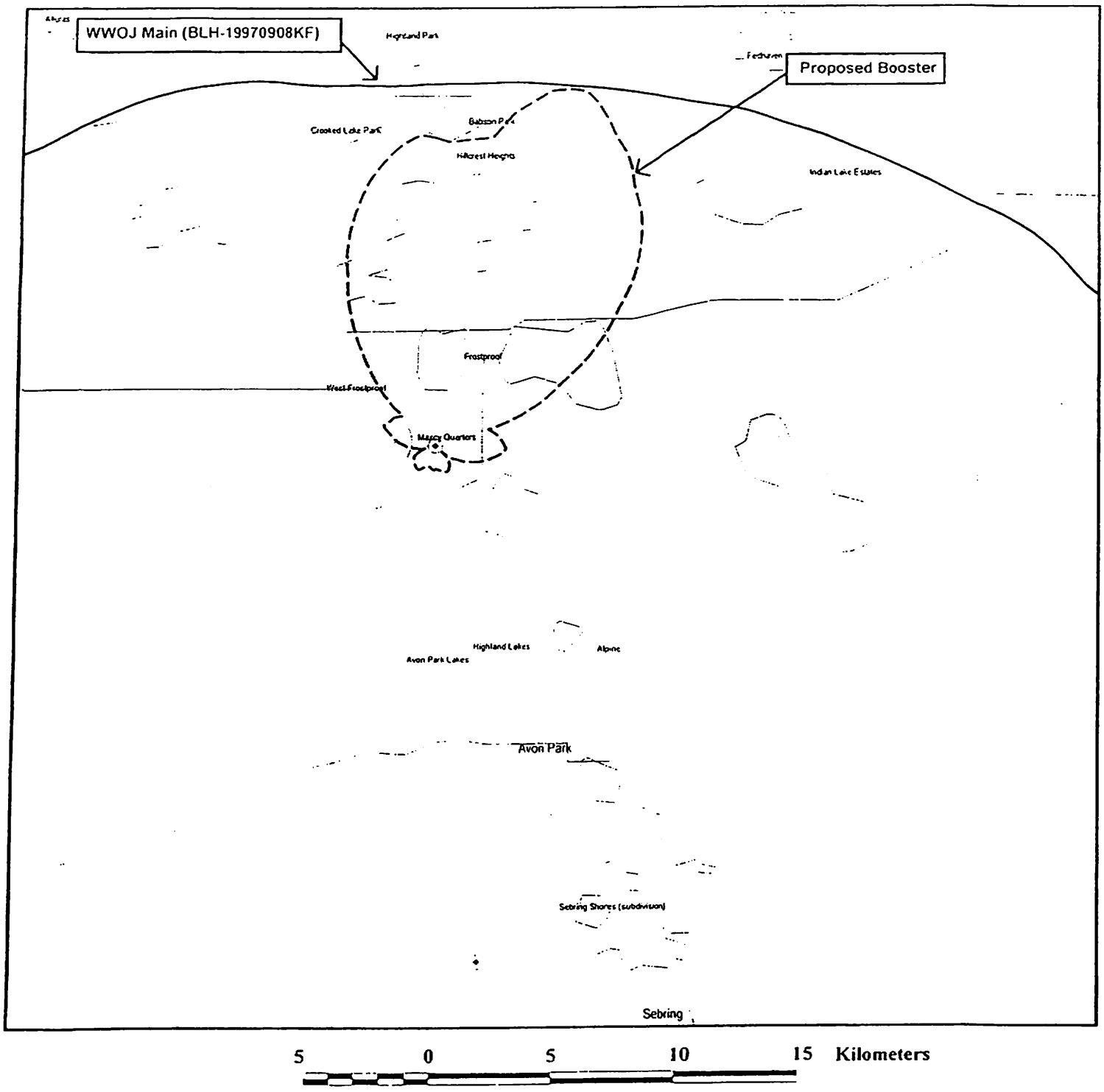
ACCESS TO THE TRANSMITTING SITE IS RESTRICTED AND APPROPRIATELY MARKED WITH RFR WARNING SIGNS. FURTHERMORE, AS THIS IS A MULTI-USER SITE, A PROTOCOL WILL BE IN EFFECT WITH THE OTHER STATIONS IN THE EVENT THAT WORKERS OR OTHER AUTHORIZED PERSONNEL ENTER THE RESTRICTED AREA OR CLIMB THE TOWER TO ENSURE THAT APPROPRIATE MEASURES WILL BE TAKEN TO ASSURE WORKER SAFETY WITH RESPECT TO RADIO FREQUENCY RADIATION EXPOSURE. SUCH MEASURES INCLUDE REDUCING THE AVERAGE EXPOSURE

BY SPREADING OUT THE WORK OVER A LONGER PERIOD OF TIME. WEARING ACCEPTED RFR PROTECTIVE CLOTHING AND/OR RFR EXPOSURE. FURTHERMORE, IT IS NOTED THAT THIS TECHNICAL EXHIBIT ONLY ADDRESSES THE POTENTIAL FOR RADIO FREQUENCY ELECTROMAGNETIC FIELD EXPOSURE. ALL OTHER ASPECTS OF THE ENVIRONMENTAL PROCESSING ANALYSIS WILL BE OR ALREADY HAS BEEN PROVIDED TO THE FCC BY THE TOWER OWNER AS PART OF THE TOWER REGISTRATION PROCESS.

Attachment 17

Description
FIGURES - FROSTPROOF BOOSTER

Figure 1

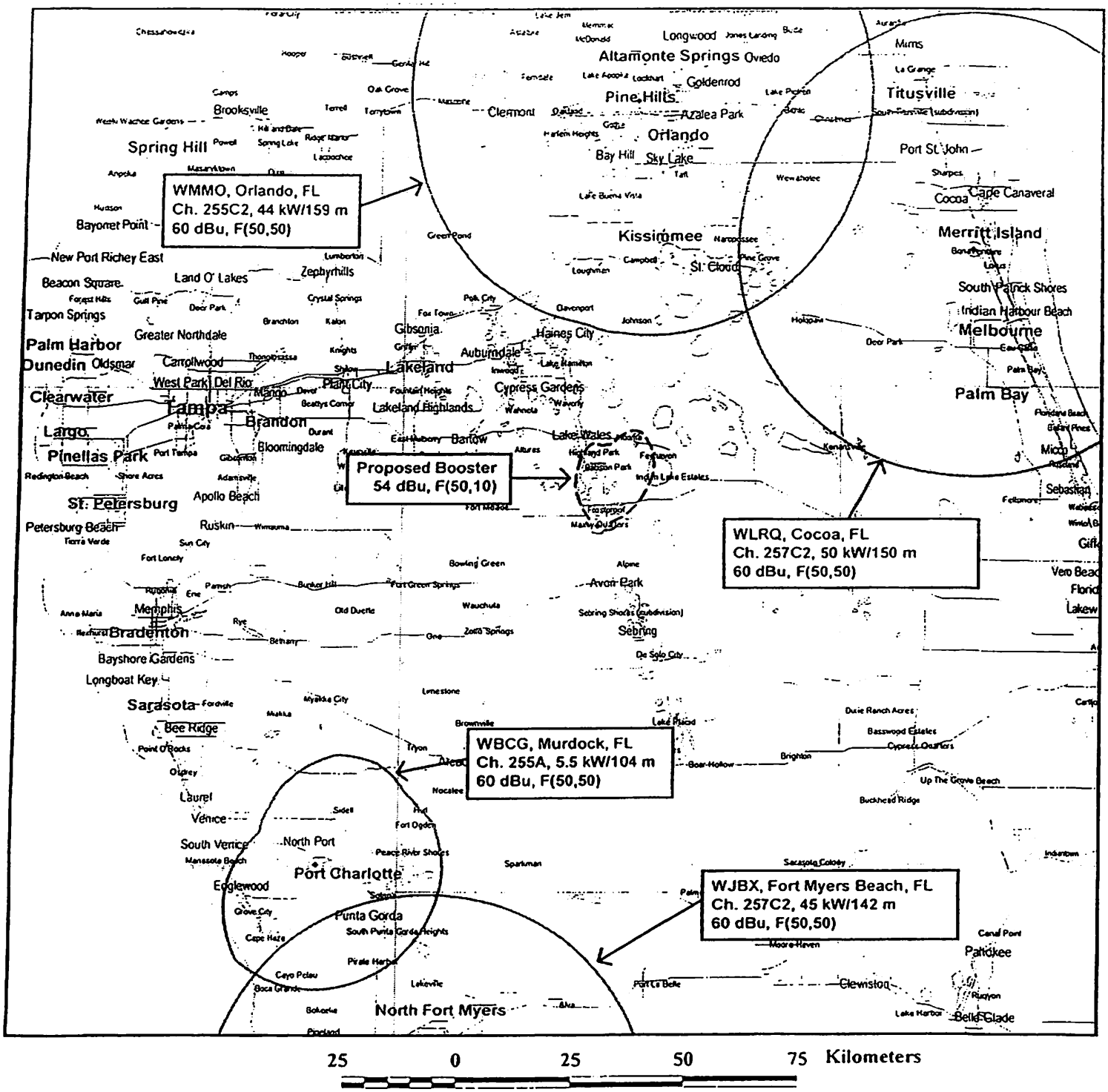


MAIN AND BOOSTER 60 DBU CONTOURS

NEW FM BOOSTER STATION
FROSTPROOF, FLORIDA
CH 256 3 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2



COMPLIANCE WITH SECTION 74.1204

NEW FM BOOSTER STATION
FROSTPROOF, FLORIDA
CH 256 3 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

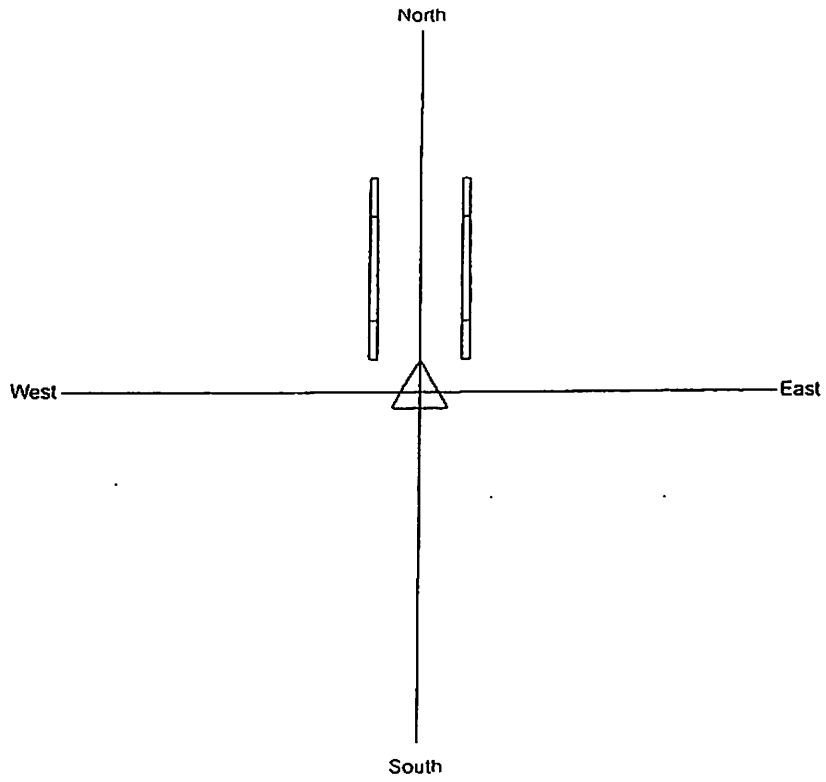
TX Station: 050V2011 Lazer Spots Project

Frequency: 99.10 MHz

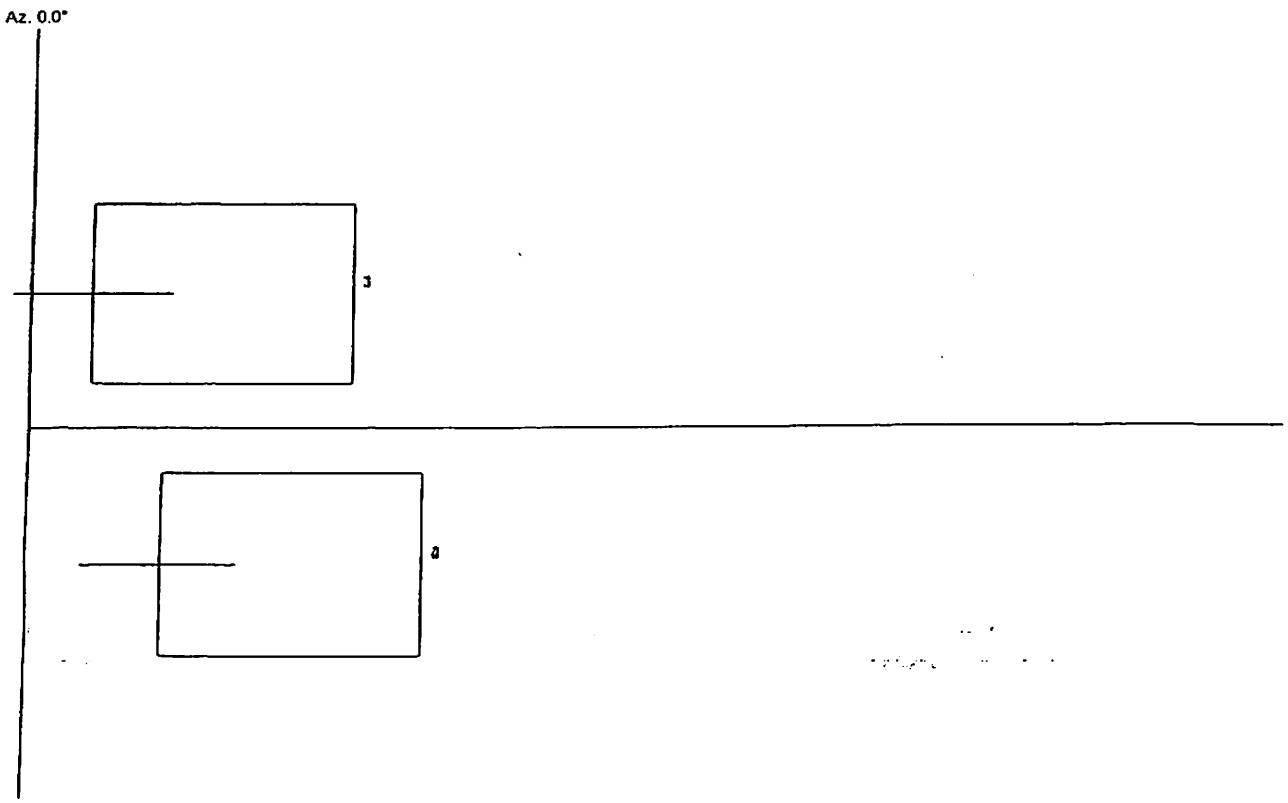
Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Plan of antenna system



Side of antenna system



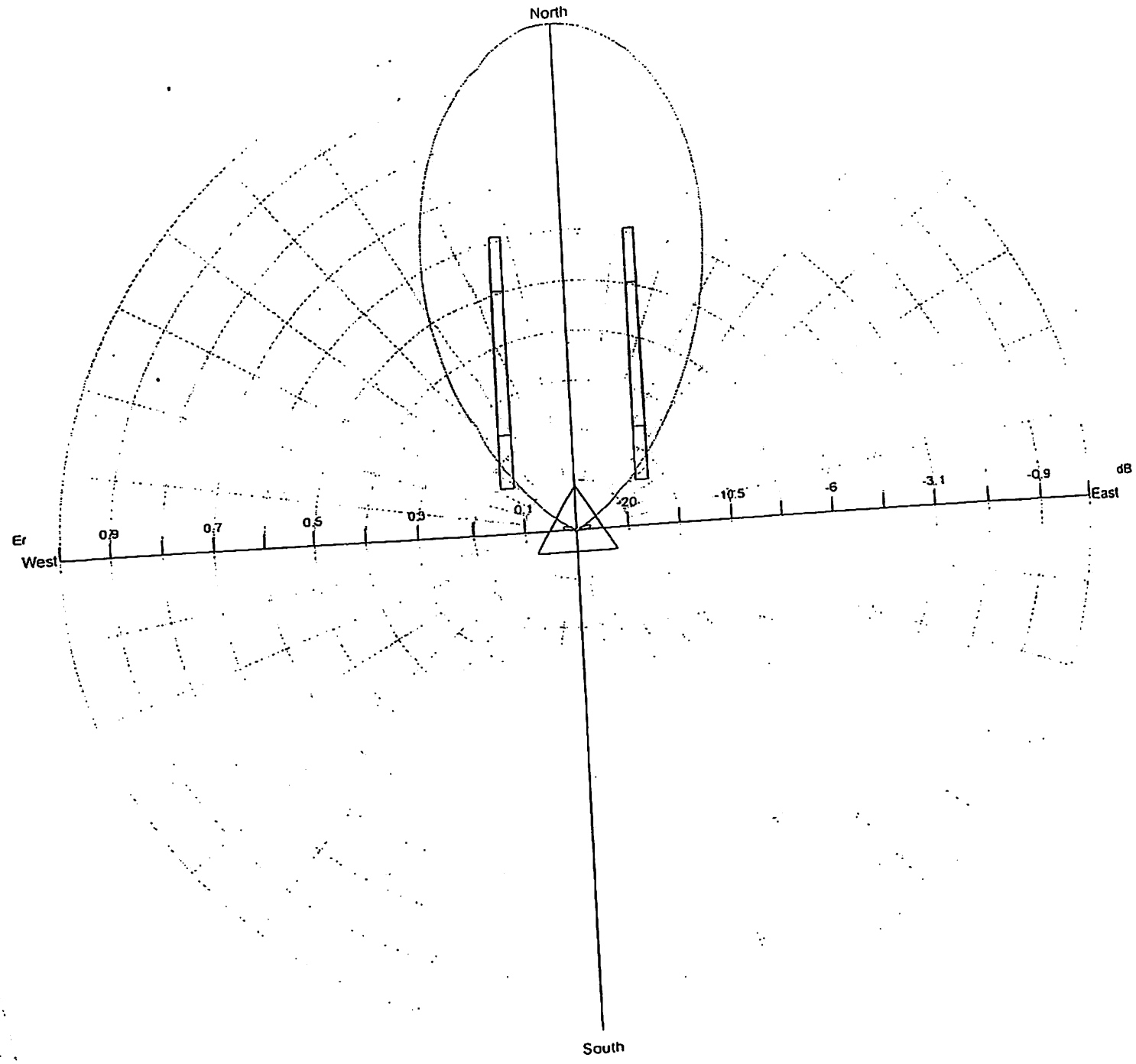
TX station: 0000201? Lazer Spots Project

Site Name: Heartland Broadcasting Corp

Frequency: 99.10 MHz

Gain solid integration : enabled

Horizontal diagram at 0.3° depres. (Total Antenna)



ERP T.Max(KW): 4.7772 ERP E.Max(KW):

—0.3° depres (Total Antenna). Gain (dBd): 12.4

TX Station: 050v2011 Lazer Spots Project

Frequency: 99.10 MHz

Gain solid integration : enabled

Site Name: Heartland Broadcasting Corp

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
0.0	100.0	3.288	60.0	1.7	0.001	120.0	0.1	0.001
1.0	99.9	3.282	61.0	1.0	0.001	121.0	0.2	0.001
2.0	99.7	3.268	62.0	0.5	0.001	122.0	0.2	0.001
3.0	99.4	3.249	63.0	0.1	0.001	123.0	0.2	0.001
4.0	98.9	3.217	64.0	0.5	0.001	124.0	0.3	0.001
5.0	98.3	3.180	65.0	0.9	0.001	125.0	0.3	0.001
6.0	97.7	3.137	66.0	1.3	0.001	126.0	0.3	0.001
7.0	96.8	3.084	67.0	1.6	0.001	127.0	0.3	0.001
8.0	95.9	3.026	68.0	1.9	0.001	128.0	0.4	0.001
9.0	94.9	2.963	69.0	2.1	0.001	129.0	0.4	0.001
10.0	93.8	2.892	70.0	2.3	0.002	130.0	0.4	0.001
11.0	92.6	2.817	71.0	2.4	0.002	131.0	0.4	0.001
12.0	91.3	2.739	72.0	2.6	0.002	132.0	0.4	0.001
13.0	89.7	2.646	73.0	2.7	0.002	133.0	0.5	0.001
14.0	88.1	2.552	74.0	2.7	0.002	134.0	0.5	0.001
15.0	86.4	2.456	75.0	2.8	0.003	135.0	0.5	0.001
16.0	84.6	2.356	76.0	2.8	0.003	136.0	0.5	0.001
17.0	82.8	2.255	77.0	2.8	0.003	137.0	0.5	0.001
18.0	80.9	2.154	78.0	2.8	0.003	138.0	0.5	0.001
19.0	78.8	2.042	79.0	2.8	0.003	139.0	0.6	0.001
20.0	76.6	1.931	80.0	2.7	0.002	140.0	0.6	0.001
21.0	74.4	1.823	81.0	2.7	0.002	141.0	0.6	0.001
22.0	72.2	1.712	82.0	2.6	0.002	142.0	0.6	0.001
23.0	69.8	1.604	83.0	2.5	0.002	143.0	0.6	0.001
24.0	67.5	1.499	84.0	2.4	0.002	144.0	0.6	0.001
25.0	65.1	1.392	85.0	2.3	0.002	145.0	0.6	0.001
26.0	62.6	1.289	86.0	2.2	0.002	146.0	0.6	0.001
27.0	60.2	1.191	87.0	2.1	0.001	147.0	0.6	0.001
28.0	57.7	1.096	88.0	2.0	0.001	148.0	0.6	0.001
29.0	55.3	1.006	89.0	1.9	0.001	149.0	0.6	0.001
30.0	52.9	0.920	90.0	1.8	0.001	150.0	0.6	0.001
31.0	50.4	0.837	91.0	1.8	0.001	151.0	0.5	0.001
32.0	48.0	0.758	92.0	1.7	0.001	152.0	0.5	0.001
33.0	45.6	0.685	93.0	1.6	0.001	153.0	0.5	0.001
34.0	43.3	0.615	94.0	1.5	0.001	154.0	0.5	0.001
35.0	40.9	0.551	95.0	1.4	0.001	155.0	0.5	0.001
36.0	38.6	0.491	96.0	1.3	0.001	156.0	0.5	0.001
37.0	36.3	0.433	97.0	1.3	0.001	157.0	0.5	0.001
38.0	34.0	0.380	98.0	1.2	0.001	158.0	0.5	0.001
39.0	31.8	0.332	99.0	1.1	0.001	159.0	0.5	0.001
40.0	29.6	0.288	100.0	1.0	0.001	160.0	0.5	0.001
41.0	27.5	0.249	101.0	1.0	0.001	161.0	0.4	0.001
42.0	25.5	0.213	102.0	0.9	0.001	162.0	0.4	0.001
43.0	23.5	0.181	103.0	0.8	0.001	163.0	0.4	0.001
44.0	21.6	0.153	104.0	0.7	0.001	164.0	0.4	0.001
45.0	19.7	0.128	105.0	0.7	0.001	165.0	0.4	0.001
46.0	18.0	0.107	106.0	0.6	0.001	166.0	0.4	0.001
47.0	16.4	0.088	107.0	0.5	0.001	167.0	0.4	0.001
48.0	14.8	0.072	108.0	0.5	0.001	168.0	0.4	0.001
49.0	13.3	0.058	109.0	0.4	0.001	169.0	0.4	0.001
50.0	11.9	0.046	110.0	0.4	0.001	170.0	0.4	0.001
51.0	10.5	0.036	111.0	0.3	0.001	171.0	0.4	0.001
52.0	9.3	0.028	112.0	0.2	0.001	172.0	0.4	0.001
53.0	8.0	0.021	113.0	0.2	0.001	173.0	0.4	0.001
54.0	6.9	0.016	114.0	0.1	0.001	174.0	0.4	0.001
55.0	5.8	0.011	115.0	0.1	0.001	175.0	0.4	0.001
56.0	4.9	0.008	116.0	0.1	0.001	176.0	0.4	0.001
57.0	4.0	0.005	117.0	0.1	0.001	177.0	0.4	0.001
58.0	3.1	0.003	118.0	0.1	0.001	178.0	0.3	0.001
59.0	2.4	0.002	119.0	0.1	0.001	179.0	0.3	0.001

TX Station: 050v2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Horizontal diagram at 0.3° depres. (Total Antenna)

Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)	Az (°)	Er (%)	ERP (KW)
180 0	0.3	0.001	240.0	0.1	0.001	300.0	1.6	0.001
181.0	0.3	0.001	241.0	0.1	0.001	301.0	2.3	0.002
182.0	0.3	0.001	242.0	0 1	0.001	302.0	3.1	0.003
183.0	0.3	0.001	243.0	0.1	0.001	303.0	3.9	0.005
184.0	0.3	0.001	244.0	0 1	0.001	304.0	4.8	0.008
185.0	0.3	0.001	245.0	0.1	0.001	305.0	5.8	0.011
186.0	0.3	0.001	246.0	0.2	0.001	306.0	6.8	0.015
187.0	0.3	0.001	247.0	0.2	0.001	307.0	7.9	0.020
188.0	0.3	0.001	248.0	0.2	0.001	308.0	9.0	0.027
189.0	0.3	0.001	249.0	0.3	0.001	309.0	10.2	0.034
190.0	0.3	0.001	250.0	0.3	0.001	310.0	11.6	0.044
191.0	0.3	0.001	251.0	0.4	0.001	311.0	13.0	0.056
192.0	0.4	0.001	252.0	0.5	0.001	312.0	14.5	0.069
193.0	0.4	0.001	253.0	0.5	0.001	313.0	16.1	0.085
194.0	0.4	0.001	254.0	0.6	0.001	314.0	17.7	0.103
195.0	0.4	0.001	255.0	0.6	0.001	315.0	19.5	0.125
196.0	0.4	0.001	256.0	0.7	0.001	316.0	21.3	0.150
197.0	0.4	0.001	257.0	0.8	0.001	317.0	23.3	0.178
198.0	0.4	0.001	258.0	0.9	0.001	318.0	25.3	0.211
199.0	0.4	0.001	259.0	0.9	0.001	319.0	27.3	0.246
200.0	0.5	0.001	260.0	1.0	0.001	320.0	29.4	0.285
201.0	0.5	0.001	261.0	1.1	0.001	321.0	31.6	0.328
202.0	0.5	0.001	262.0	1.2	0.001	322.0	33.6	0.371
203.0	0.5	0.001	263.0	1.2	0.001	323.0	35.7	0.418
204.0	0.5	0.001	264.0	1.3	0.001	324.0	37.8	0.469
205.0	0.5	0.001	265.0	1.4	0.001	325.0	40.0	0.527
206.0	0.5	0.001	266.0	1.4	0.001	326.0	42.3	0.589
207.0	0.5	0.001	267.0	1.5	0.001	327.0	44.7	0.656
208.0	0.5	0.001	268.0	1.6	0.001	328.0	47.0	0.726
209.0	0.5	0.001	269.0	1.6	0.001	329.0	49.3	0.800
210.0	0.5	0.001	270.0	1.7	0.001	330.0	51.7	0.879
211.0	0.5	0.001	271.0	1.8	0.001	331.0	54.1	0.963
212.0	0.5	0.001	272.0	1.9	0.001	332.0	56.6	1.052
213.0	0.5	0.001	273.0	2.0	0.001	333.0	59.0	1.146
214.0	0.5	0.001	274.0	2.1	0.001	334.0	61.4	1.238
215.0	0.5	0.001	275.0	2.2	0.002	335.0	63.7	1.333
216.0	0.5	0.001	276.0	2.2	0.002	336.0	66.0	1.432
217.0	0.5	0.001	277.0	2.3	0.002	337.0	68.3	1.532
218.0	0.5	0.001	278.0	2.4	0.002	338.0	70.5	1.634
219.0	0.5	0.001	279.0	2.5	0.002	339.0	72.7	1.739
220.0	0.5	0.001	280.0	2.5	0.002	340.0	74.9	1.846
221.0	0.5	0.001	281.0	2.5	0.002	341.0	77.1	1.954
222.0	0.5	0.001	282.0	2.5	0.002	342.0	79.2	2.065
223.0	0.5	0.001	283.0	2.5	0.002	343.0	81.2	2.167
224.0	0.5	0.001	284.0	2.5	0.002	344.0	83.1	2.270
225.0	0.5	0.001	285.0	2.5	0.002	345.0	84.9	2.373
226.0	0.4	0.001	286.0	2.4	0.002	346.0	86.7	2.470
227.0	0.4	0.001	287.0	2.4	0.002	347.0	88.3	2.566
228.0	0.4	0.001	288.0	2.3	0.002	348 0	89.9	2.660
229.0	0.4	0.001	289.0	2.2	0.002	349.0	91.4	2.749
230.0	0 4	0.001	290.0	2.1	0.001	350.0	92.8	2.835
231.0	0.4	0.001	291.0	2.0	0.001	351.0	94.2	2.917
232.0	0 4	0.001	292.0	1.8	0.001	352.0	95.3	2.988
233.0	0 3	0.001	293.0	1.5	0.001	353.0	96.4	3.055
234.0	0 3	0.001	294.0	1.2	0 001	354.0	97.4	3.118
235.0	0.3	0.001	295.0	0 9	0.001	355.0	98.2	3.171
236.0	0 3	0.001	296.0	0 5	0 001	356 0	98 9	3.218
237.0	0 2	0 001	297 0	0 0	0 001	357 0	99 6	3.260
238 0	0 2	0 001	298 0	0 5	0 001	358 0	99 8	3.276
239.0	0 2	0.001	299.0	1 0	0.001	359.0	100.0	3.285

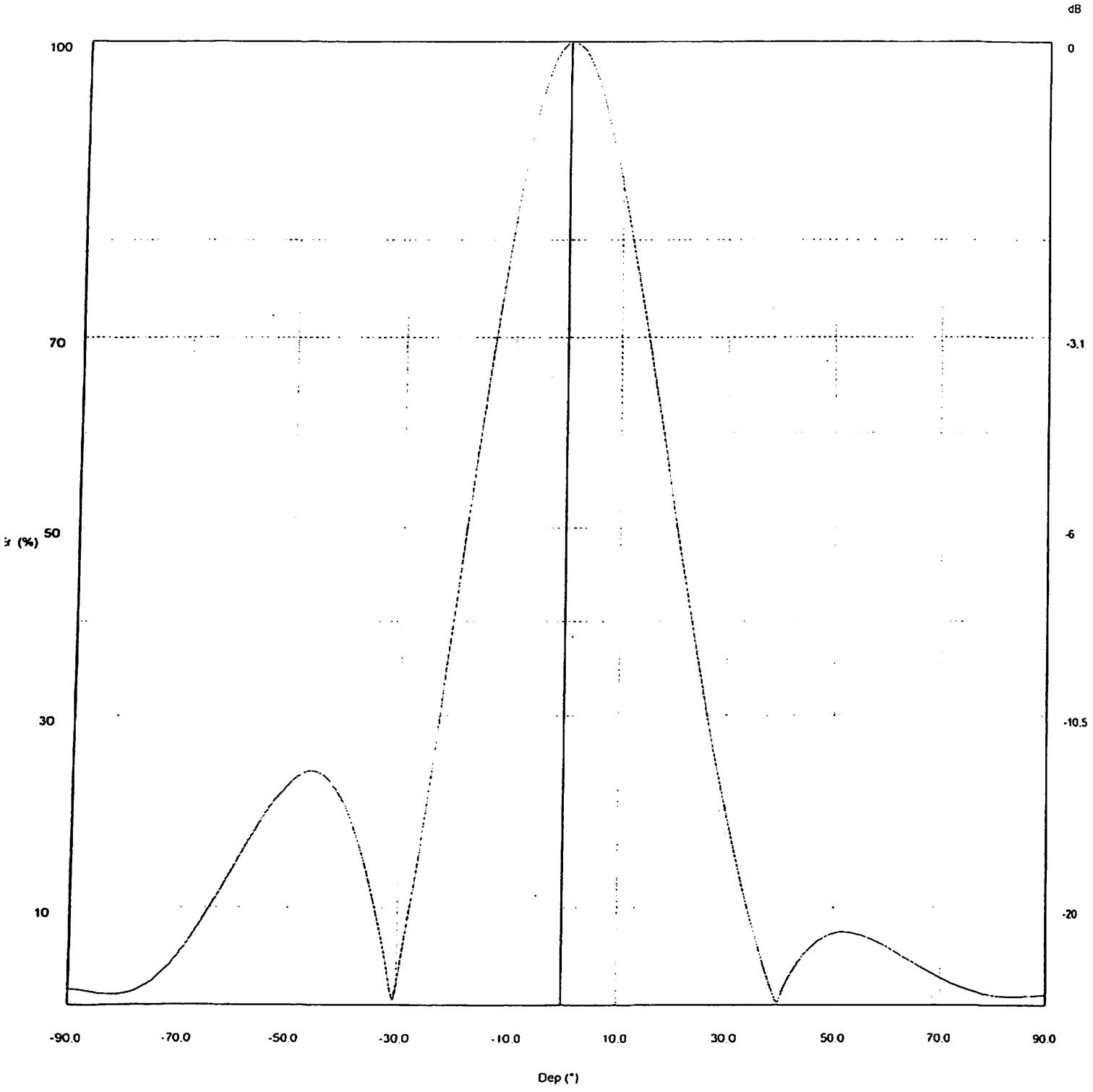
TX Station: 0000201 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration enabled

Vertical diagram at an azimuth of 0.0° degrees



0.0° Az. (Total Antenna), Gain (dBd) 12.4

ERP T.Max(KW): 4.7788 ERP E.Max(KW): 3.2894

TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
-90.0	1.6	0.001	-60.0	14.5	0.069	-30.0	2.1	0.002
-89.5	1.6	0.001	-59.5	15.0	0.074	-29.5	3.9	0.005
-89.0	1.6	0.001	-59.0	15.6	0.080	-29.0	5.7	0.011
-88.5	1.5	0.001	-58.5	16.0	0.085	-28.5	7.5	0.019
-88.0	1.5	0.001	-58.0	16.5	0.090	-28.0	9.4	0.029
-87.5	1.5	0.001	-57.5	17.0	0.095	-27.5	11.3	0.042
-87.0	1.5	0.001	-57.0	17.4	0.100	-27.0	13.3	0.058
-86.5	1.4	0.001	-56.5	17.9	0.106	-26.5	15.3	0.077
-86.0	1.4	0.001	-56.0	18.4	0.112	-26.0	17.3	0.098
-85.5	1.3	0.001	-55.5	18.9	0.117	-25.5	19.3	0.122
-85.0	1.2	0.001	-55.0	19.3	0.123	-25.0	21.3	0.150
-84.5	1.2	0.001	-54.5	19.8	0.128	-24.5	23.4	0.181
-84.0	1.1	0.001	-54.0	20.2	0.134	-24.0	25.5	0.215
-83.5	1.1	0.001	-53.5	20.6	0.139	-23.5	27.7	0.252
-83.0	1.1	0.001	-53.0	20.9	0.144	-23.0	29.8	0.292
-82.5	1.1	0.001	-52.5	21.3	0.149	-22.5	32.0	0.336
-82.0	1.1	0.001	-52.0	21.6	0.154	-22.0	34.1	0.384
-81.5	1.1	0.001	-51.5	21.9	0.158	-21.5	36.3	0.434
-81.0	1.1	0.001	-51.0	22.2	0.162	-21.0	38.5	0.489
-80.5	1.1	0.001	-50.5	22.6	0.167	-20.5	40.7	0.546
-80.0	1.2	0.001	-50.0	22.9	0.172	-20.0	42.9	0.607
-79.5	1.2	0.001	-49.5	23.1	0.176	-19.5	45.2	0.671
-79.0	1.3	0.001	-49.0	23.4	0.180	-19.0	47.4	0.738
-78.5	1.4	0.001	-48.5	23.6	0.183	-18.5	49.6	0.809
-78.0	1.4	0.001	-48.0	23.8	0.186	-18.0	51.8	0.883
-77.5	1.6	0.001	-47.5	23.9	0.188	-17.5	53.9	0.957
-77.0	1.8	0.001	-47.0	24.0	0.190	-17.0	56.1	1.034
-76.5	1.9	0.001	-46.5	24.1	0.191	-16.5	58.2	1.114
-76.0	2.1	0.001	-46.0	24.1	0.192	-16.0	60.3	1.196
-75.5	2.2	0.002	-45.5	24.1	0.192	-15.5	62.4	1.281
-75.0	2.4	0.002	-45.0	24.1	0.191	-15.0	64.5	1.367
-74.5	2.6	0.002	-44.5	24.0	0.189	-14.5	66.5	1.453
-74.0	2.9	0.003	-44.0	23.8	0.186	-14.0	68.5	1.541
-73.5	3.2	0.003	-43.5	23.6	0.183	-13.5	70.4	1.631
-73.0	3.4	0.004	-43.0	23.3	0.179	-13.0	72.3	1.721
-72.5	3.7	0.005	-42.5	23.0	0.174	-12.5	74.2	1.813
-72.0	4.0	0.005	-42.0	22.7	0.169	-12.0	76.1	1.905
-71.5	4.3	0.006	-41.5	22.3	0.163	-11.5	77.8	1.993
-71.0	4.7	0.007	-41.0	21.9	0.157	-11.0	79.5	2.081
-70.5	5.0	0.008	-40.5	21.4	0.150	-10.5	81.2	2.168
-70.0	5.4	0.010	-40.0	20.8	0.143	-10.0	82.8	2.256
-69.5	5.8	0.011	-39.5	20.2	0.134	-9.5	84.4	2.342
-69.0	6.1	0.012	-39.0	19.6	0.126	-9.0	85.9	2.428
-68.5	6.6	0.014	-38.5	18.8	0.117	-8.5	87.3	2.507
-68.0	7.0	0.016	-38.0	18.0	0.107	-8.0	88.6	2.584
-67.5	7.4	0.018	-37.5	17.2	0.097	-7.5	89.9	2.660
-67.0	7.8	0.020	-37.0	16.3	0.087	-7.0	91.2	2.733
-66.5	8.3	0.022	-36.5	15.3	0.077	-6.5	92.3	2.805
-66.0	8.7	0.025	-36.0	14.3	0.068	-6.0	93.5	2.874
-65.5	9.2	0.028	-35.5	13.3	0.058	-5.5	94.4	2.931
-65.0	9.6	0.031	-35.0	12.2	0.049	-5.0	95.3	2.986
-64.5	10.1	0.034	-34.5	11.1	0.040	-4.5	96.1	3.038
-64.0	10.6	0.037	-34.0	9.8	0.032	-4.0	96.9	3.086
-63.5	11.0	0.040	-33.5	8.6	0.024	-3.5	97.6	3.131
-63.0	11.5	0.043	-33.0	7.2	0.017	-3.0	98.2	3.172
-62.5	12.0	0.047	-32.5	5.8	0.011	-2.5	98.7	3.201
-62.0	12.5	0.052	-32.0	4.3	0.006	-2.0	99.0	3.227
-61.5	13.0	0.056	-31.5	2.8	0.003	-1.5	99.4	3.248
-61.0	13.5	0.060	-31.0	1.2	0.001	-1.0	99.6	3.266
-60.5	14.0	0.065	-30.5	0.5	0.001	-0.5	99.9	3.280

TX Station: 000V2011 Lazer Spots Project

Frequency: 99.10 MHz

Gain solid integration enabled

Site Name: Heartland Broadcasting Corp

Vertical diagram at an azimuth of 0.0° degrees

Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)	Dep (°)	Er (%)	ERP (KW)
0.0	100.0	3.289	30.0	19.7	0.128	60.0	5.9	0.011
0.5	100.0	3.287	30.5	18.3	0.110	60.5	5.8	0.011
1.0	99.9	3.280	31.0	16.9	0.094	61.0	5.6	0.010
1.5	99.7	3.270	31.5	15.6	0.080	61.5	5.5	0.010
2.0	99.5	3.256	32.0	14.3	0.068	62.0	5.3	0.009
2.5	99.2	3.238	32.5	13.1	0.056	62.5	5.1	0.009
3.0	98.9	3.216	33.0	11.9	0.047	63.0	4.9	0.008
3.5	98.3	3.182	33.5	10.7	0.038	63.5	4.8	0.008
4.0	97.8	3.144	34.0	9.6	0.030	64.0	4.6	0.007
4.5	97.1	3.103	34.5	8.5	0.024	64.5	4.5	0.007
5.0	96.4	3.059	35.0	7.5	0.018	65.0	4.3	0.006
5.5	95.7	3.012	35.5	6.5	0.014	65.5	4.1	0.006
6.0	94.9	2.962	36.0	5.5	0.010	66.0	4.0	0.005
6.5	93.9	2.903	36.5	4.6	0.007	66.5	3.8	0.005
7.0	92.9	2.841	37.0	3.7	0.004	67.0	3.7	0.004
7.5	91.9	2.778	37.5	2.8	0.003	67.5	3.5	0.004
8.0	90.8	2.712	38.0	2.0	0.001	68.0	3.4	0.004
8.5	89.7	2.645	38.5	1.2	0.000	68.5	3.2	0.003
9.0	88.5	2.577	39.0	0.5	0.000	69.0	3.0	0.003
9.5	87.2	2.500	39.5	0.2	0.000	69.5	2.9	0.003
10.0	85.8	2.422	40.0	0.8	0.000	70.0	2.8	0.003
10.5	84.4	2.344	40.5	1.4	0.001	70.5	2.7	0.002
11.0	83.0	2.266	41.0	2.0	0.001	71.0	2.5	0.002
11.5	81.5	2.187	41.5	2.6	0.002	71.5	2.4	0.002
12.0	80.1	2.108	42.0	3.1	0.003	72.0	2.3	0.002
12.5	78.5	2.026	42.5	3.5	0.004	72.5	2.2	0.002
13.0	76.9	1.945	43.0	4.0	0.005	73.0	2.0	0.001
13.5	75.3	1.864	43.5	4.4	0.006	73.5	1.9	0.001
14.0	73.7	1.785	44.0	4.8	0.008	74.0	1.8	0.001
14.5	72.0	1.706	44.5	5.2	0.009	74.5	1.7	0.001
15.0	70.4	1.628	45.0	5.5	0.010	75.0	1.6	0.001
15.5	68.6	1.549	45.5	5.8	0.011	75.5	1.5	0.001
16.0	66.9	1.471	46.0	6.1	0.012	76.0	1.5	0.001
16.5	65.1	1.395	46.5	6.3	0.013	76.5	1.4	0.001
17.0	63.4	1.321	47.0	6.5	0.014	77.0	1.3	0.001
17.5	61.6	1.249	47.5	6.7	0.015	77.5	1.2	0.001
18.0	59.9	1.178	48.0	6.9	0.015	78.0	1.1	0.001
18.5	58.0	1.108	48.5	7.0	0.016	78.5	1.1	0.001
19.0	56.2	1.039	49.0	7.1	0.017	79.0	1.1	0.001
19.5	54.4	0.973	49.5	7.2	0.017	79.5	1.0	0.001
20.0	52.6	0.910	50.0	7.3	0.018	80.0	1.0	0.001
20.5	50.8	0.848	50.5	7.4	0.018	80.5	0.9	0.001
21.0	49.0	0.790	51.0	7.4	0.018	81.0	0.9	0.001
21.5	47.2	0.732	51.5	7.4	0.018	81.5	0.9	0.001
22.0	45.4	0.677	52.0	7.4	0.018	82.0	0.9	0.001
22.5	43.6	0.625	52.5	7.4	0.018	82.5	0.9	0.001
23.0	41.8	0.575	53.0	7.4	0.018	83.0	0.9	0.001
23.5	40.1	0.528	53.5	7.3	0.018	83.5	0.8	0.001
24.0	38.4	0.484	54.0	7.3	0.017	84.0	0.8	0.001
24.5	36.6	0.440	54.5	7.2	0.017	84.5	0.9	0.001
25.0	34.8	0.399	55.0	7.1	0.017	85.0	0.9	0.001
25.5	33.1	0.361	55.5	7.1	0.016	85.5	0.9	0.001
26.0	31.5	0.326	56.0	7.0	0.016	86.0	0.9	0.001
26.5	29.8	0.292	56.5	6.8	0.015	86.5	0.9	0.001
27.0	28.2	0.262	57.0	6.7	0.015	87.0	0.9	0.001
27.5	26.7	0.235	57.5	6.6	0.014	87.5	1.0	0.001
28.0	25.3	0.210	58.0	6.5	0.014	88.0	1.0	0.001
28.5	23.8	0.187	58.5	6.4	0.013	88.5	1.0	0.001
29.0	22.4	0.165	59.0	6.2	0.013	89.0	1.0	0.001
29.5	21.0	0.146	59.5	6.1	0.012	89.5	1.0	0.001

TX Station: 050V2011 Lazer Spots Project

Frequency: 99.10 MHz

Site Name: Heartland Broadcasting Corp

Gain solid integration : enabled

Geometr. and electrical data of Antenna System

	Power (%)	Tilt (°)	Az. (°/N)	Phase (°)	V dist. (m)	E.C. (cm)	N.C. (cm)	Rot. (1÷4)	Type (1÷2)	L cables (cm)	Car. phase (°)
1	25.000	0	0	0 +0.0	1.35	-85.0	60.0	1	1	420.0	0.0
2	25.000	0	0	0 -88.0	-1.35	-85.0	130.0	1	1	485.9	-88.0
3	25.000	0	0	0 +0.0	1.35	85.0	60.0	1	1	420.0	0.0
4	25.000	0	0	0 -88.0	-1.35	85.0	130.0	1	1	485.9	-88.0

ATTACHMENT F

FEDERAL COMMUNICATIONS COMMISSION
445 TWELFTH STREET SW
WASHINGTON DC 20554

MEDIA BUREAU
AUDIO DIVISION
APPLICATION STATUS: (202) 418-2730
HOME PAGE: www.fcc.gov/mb/audio/

ENGINEER: CHARLES N. (NORM) MILLER
TELEPHONE: (202) 418-2767
FACSIMILE: (202) 418-1410
E-MAIL: charles.miller@fcc.gov

September 28, 2011

Aaron P. Shainis, Esq.
Shainis & Peltzman, Chartered
1850 M Street, NW, Suite 240
Washington, DC 20036

In re: Cohan Radio Group, Inc.
WWOJ (FM), Avon Park, Florida
Facility Identification Number: 27199
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed July 19, 2011, and supplemented on September 22, 2011, on behalf of Cohan Radio Group, Inc. ("Cohan"), licensee of Station WWOJ(FM), Avon Park, Florida.[1] Cohan proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on FM Booster stations. Cohan proposes to construct three temporary FM Booster facilities and to broadcast noncommercial announcements on the booster stations while simultaneously broadcasting different programming on the main station. Cohan proposes to use proprietary technology provided by Lazer Spots, LLC, which will allow different announcements to be placed on the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. Cohan states that the experimental broadcasts will be conducted over a 60-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that Cohan will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing of the booster facilities in addition to the proposed 60-day experimentation, a term of 120 days is appropriate.

Accordingly, the request for Experimental Authorization IS GRANTED. Station WWOJ may construct the following temporary FM Booster facilities:

---

[1] WWOJ is licensed for operation on Channel 256C3 (99.1 MHz), with effective radiated power of 10 kilowatts (H&V) and antenna height above average terrain of 157 meters.

1.	Booster location:	Zolfo Springs, Florida
	Geographic coordinates:	27° 21' 59" N, 81° 47' 52" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	0° True
	Antenna height:	
	above ground:	64 meters
	above mean sea level:	81 meters
	above average terrain:	64 meters
2.	Booster location:	Wauchula, Florida
	Geographic coordinates:	27° 29' 24" N, 81° 50' 29" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	12° True
	Antenna height:	
	above ground:	72 meters
	above mean sea level:	96 meters
	above average terrain:	72 meters
3.	Booster location:	Frostproof, Florida
	Geographic coordinates:	27° 42' 41" N, 81° 33' 04" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	13° True
	Antenna height:	
	above ground:	38 meters
	above mean sea level:	76 meters
	above average terrain:	38 meters

During the 60 day test period, Cohan may transmit independent, noncommercial announcements on the temporary FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted to the extent necessary for the proposed experimentation. Cohan shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, Cohan shall file a full report of the research,

experimentation and results with the Commission, pursuant to Section 73.1510(d). The authority granted herein does not convey or imply any authority for continued operation beyond the expiration date below. Following completion of the proposed experimental operation, the three temporary FM Booster stations shall be dismantled. Any construction undertaken pursuant to this authority is entirely at Cohan's own risk. This authority may be modified or cancelled by the FCC at any time without prior notice or right to hearing.

This authorization expires on **January 28, 2012.**

Sincerely,

Charles N. Miller, Engineer
Audio Division
Media Bureau

cc: Cohan Radio Group, Inc.

ATTACHMENT G

Shainis & Peltzman, Chartered

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Special Counsel
Stephen C. Leckar
steve@s-plaw.com

January 18, 2012

VIA HAND DELIVERY
Marlene H. Dortch
Secretary
Federal Communications Commission
Portals II – 12th Street Lobby
Filing Counter – TW – A325
445 12th Street SW
Washington, DC 20554

Re: Cohan Radio Group, Inc.
WWOJ(FM), Avon Park, Florida
Facility ID No. 27199

Dear Ms. Dortch:

On September 28, 2011, Cohan Radio Group, Inc., the licensee of WWOJ(FM), Avon Park, Florida, was granted its Request for Experimental Authorization, which was filed on July 19, 2011 and supplemented on September 22, 2011. Pursuant to the grant of the Experimental Authorization, testing was conducted. Furthermore, as required by the Experimental Authorization, the licensee is submitting the attached report. If there are any questions with respect to this matter, please communicate with the undersigned.

Sincerely yours,

Aaron P. Shainis

Aaron P. Shainis
Counsel for
Cohan Radio Group, Inc.

Enclosure

cc (w/ enc): Norm Miller (via email)

J:\W #CLIENT MATTERS\DEVINE ENTITIES\GCD.BULLET\Cohan Test Report Cover Letter 011812.doc

STAMP & RETURN

Report to the FCC
Cohan Radio Group
WWOJ (FM) Experimental Test Report

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EXECUTIVE SUMMARY

BACKGROUND FOR TEST AUTHORITY

Cohan Radio Group, Inc. ("Cohan"), requested an Experimental Authorization on July 19, 2011 and supplemented that request on September 22, 2011. Cohan is the licensee of Station WWOJ (FM), Avon Park, Florida. Cohan proposed to conduct experimental tests to determine the feasibility of broadcasting independent, targeted messages on FM Booster stations. Cohan proposed to construct three temporary FM Booster facilities and to broadcast noncommercial announcements on the booster stations while simultaneously broadcasting different programming on the main station. Cohan proposes to use proprietary technology provided by Lazer Spots, LLC, which will allow different announcements to be placed on the boosters in a synchronized time sequence. The implementation of the tests were done by Lazer Spots, LLC under the direction and supervision of Cohen.

On September 28, 2011, the Commission granted the experimental authorization (Attachment B) effective until January 28, 2011. The authorization specified that "within 60 days following completion of the experimental operation authorized herein, BMU shall file a report of the research, experimentation and results with the Commission pursuant to Section 73.1510(d)."

GENERAL DESCRIPTION OF TEST

Conventionally planned FM broadcasting networks consist of transmitters with independent program signals on individual FM radio frequencies as allocated and regulated by the FCC. The allocation of the radio frequency for each transmitter and protected service and interference contours are defined by the FCC in Part 73 of Title 47 and FM Translator and Booster Rules in Part 74. Boosters are defined as transmitters which broadcast within Main station's coverage area (a "fill-in") on the same channel and frequency, and were created to allow FM stations to provide supplementary service to areas in which direct reception of radio service is unsatisfactory due to distance or intervening terrain barriers. Lazer Spots, LLC has developed a system that will allow an FM radio station to divide its signal into segments with the use of proprietary booster system design, audio and control switching, routing, hardware, software and implementation techniques. This new idea would allow the station to run different audio messages, such as Public Service Announcements (PSAs) on different booster transmitters simultaneously, thereby creating additional time capacity for such announcements. Lazer Spots™ holds a patent pending application for "Equipment, System and Methodologies for Segmentation of Listening Area into Sub-Areas Enabling Delivery of Localized Auxiliary Information". The concept of adding FM boosters to an existing FM broadcast station within the protected service area of the main station and specifically designed for targeted messaging is an expertise of Lazer Spots, LLC. It allows the ability to target listeners with more local relevant information as well as free up valuable broadcast messaging time.

In addition to the main WWOJ (FM) broadcast transmitter, 3 booster locations were constructed for the purpose of this test.

MAIN	WWOJ, Avon Park, Florida	27° 30' 39"N, 81° 31' 54" W	10 kW ERP (C3)
BOOSTER #1	Zolfo Springs, Florida	27° 21' 59"N, 81° 47' 52" W	5 kW ERP
BOOSTER #2	Wauchula, Florida	27° 29' 24" N, 81 ° 50' 29" W	5 kW ERP
BOOSTER #3	Frostproof, Florida	27° 42' 41"N, 81° 33' 04" W	3 kW ERP

Table One: Booster Locations

In the WWOJ (FM) FCC defined service contour (60 dBμV/m), the three boosters create two distinct coverage areas, in terms of RF isolation and segregated markets. Distinct Public Service Announcements (PSAs) were tested as each market area was broadcasting a distinct PSA spot at the same time.

The tests as presented in this report were performed in December 2, 2011 to December 20, 2011 of 2011, after construction of the booster transmitters, the booster antenna arrays, the audio microwave distribution network, and modifications to the broadcast playout system were made to implement the targeted messaging concept.

The test market locations covered by the two zones consisted of three boosters, all of which were simulcast together. One zone consisted of two boosters in the Zolfo Springs / Wauchula FL market; the other zone consisted of one booster in the Frostproof, FL market. This test is unique in that it is tested in very flat terrain and used very directional FM antenna arrays. Given the favorable results obtained and presented in this report we believe this is a very significant actuality.

CONCLUSION

The results of the testing, which occurred on December 2, 2011 to December 20, 2011, demonstrate that not only is the concept technically feasible but it is also of great value to the future of terrestrial FM radio broadcasting. Specifically, different announcements were broadcast to separate and discreet listeners concurrently. The quality of the announcements was not impaired to any significant degree. The attached audio clips for each of the measurement locations are provided for subjective verification of these results.

SUMMARY OF TEST RESULTS

Conventionally planned broadcasting networks consist of transmitters with independent program signals and with individual radio frequencies. The allocation of the radio frequency for each transmitter and protected service and interference contours are defined by the FCC in Part 73 of Title 47 and FM Translator and Booster Rules in Part 74. Lazer Spots, LLC has developed a

proprietary (Lazer Spots™) system and technology that will allow a broadcast FM radio station to divide its signal into segments with the use of carefully engineered booster transmission points. This new concept would allow the broadcaster to run different audio messages, such as Public Service Announcements (PSAs) on different booster transmitters simultaneously, thereby creating additional time capacity for such announcements. It allows the ability to target their listeners with more specific (i.e. hyper-local) relevant information, as it increases valuable broadcast messaging time.

The Lazer Spot™ approach is considerably different from the conventional broadcast coverage enhancement-only approach in that the purpose is to broadcast specific Public Service Announcements (PSAs) to a specific geographical area and potentially demographical listening audience, for a limited amount of broadcast time. For example, in this test a 30 second Targeted spot was broadcast, typically 3 times per hour.

It is common for FM analog booster implementations to create some amount of interference. The Lazer Spots™ proprietary system is designed to i) minimize interference in general using its patent pending design technology and software and routing capabilities, and ii) placing the simulcast interference areas that occur where there exists diminutive population counts and demographically determined non-listeners of the specific broadcast station. It is also important to point out that the overall benefit of the targeted messaging approach far outweighs the relatively small interference that occurs with booster implementations, especially when the design is such that it is engineered to minimize this occurrence to the listening public.

In the WWOJ (FM) test, the submitted audio clips were recorded in the field from 12/2/2011 to 12/20/2011. Audio information was collected at 20 geographical locations and described in detail later in this report. At each of the 20 test locations, a measurement of the 'Non-Targeted', normal simulcast audio were made for a single PSA spot. It should be noted that the boosters used in this tested only transmitted RF power during the simulcast PSA spots, targeted and non-targeted, as normal operation of the station did not utilize boosters. For the Non-Targeted simulcast audio, the same PSA audio spot was broadcast that the main station WWOJ (FM) was broadcasting; 21 different PSA spots were broadcast in rotation in this manner. For the targeted simulcast PSA spot, a single reference PSA spot was simulcast on the boosters during the time that the main WWOJ(FM) transmitter was broadcasting a different PSA spot. This is referred to as the reference PSA 'Targeted' spot. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the Non-Targeted PSA spots.

The results in this report indicate an objective 'before and after' analysis of the Non-Targeted and Targeted Audio spots. The audio clips for each of the measurement locations is also provided with this report for subjective analysis, which correlate very well based on listener feedback. In fact, under no case could the Non-Targeted audio be considered imperceptible, as defined in this report under ITU-R definitions. In fact, for the measured tests the average statistical difference between the objective audio quality measurements for the Non-Targeted and Targeted Audio spots are a mere 0.6%. If the guidelines for quality measurements of rounding to the nearest tenth of a decimal were made as suggested by the ITU-R[1], then NO objective

[1] RECOMMENDATION ITU-R BS.1284-1*General methods for the subjective assessment of sound quality

perceptible difference is found on average for the WWOJ (FM) test. This continues on the favorable results of field testing completed by Lazer Spots, LLC.

FIELD TEST PROCEDURE

BOOSTER LOCATIONS

The WWOJ broadcast system has three boosters covering two distinct areas: Zolfo Springs / Wauchula FL and Frostproof, FL. The tests presented in this report were performed occurred on December 2-20 of 2011, after construction of the booster transmitters, the booster antenna arrays, the audio microwave distribution network, and modifications to the broadcast playout system were made to implement the targeted messaging concept.

MAIN	WWOJ, Avon Park, Florida	27° 30' 39"N, 81° 31' 54" W	10 kW ERP (C3)
BOOSTER #1	Zolfo Springs, Florida	27° 21' 59"N, 81° 47' 52" W	5 kW ERP
BOOSTER #2	Wauchula, Florida	27° 29' 24" N, 81 ° 50' 29" W	5 kW ERP
BOOSTER #3	Frostproof, Florida	27° 42' 41"N, 81° 33' 04" W	3 kW ERP

Table Two: Booster Locations

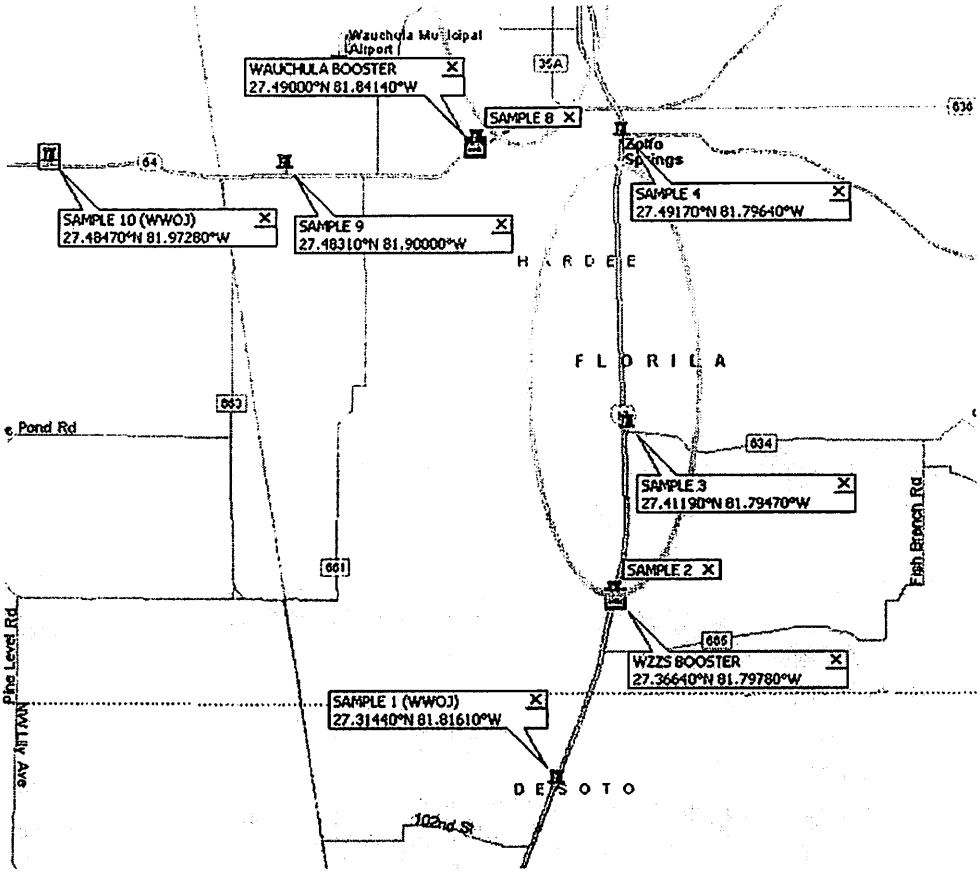

Figure One: Zolfo Spring Booster Test Locations

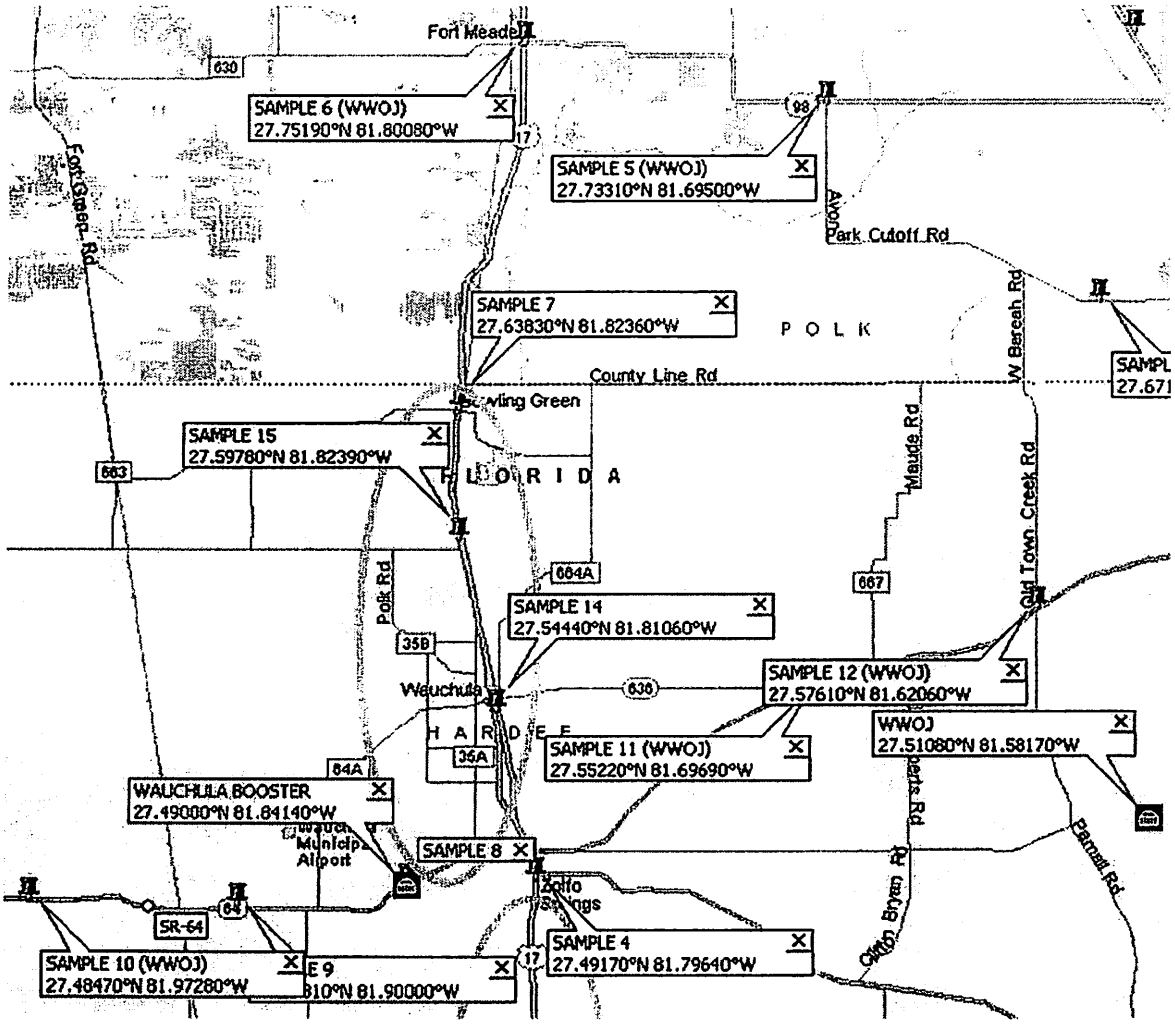

Figure Two: Wauchula Booster Test Locations

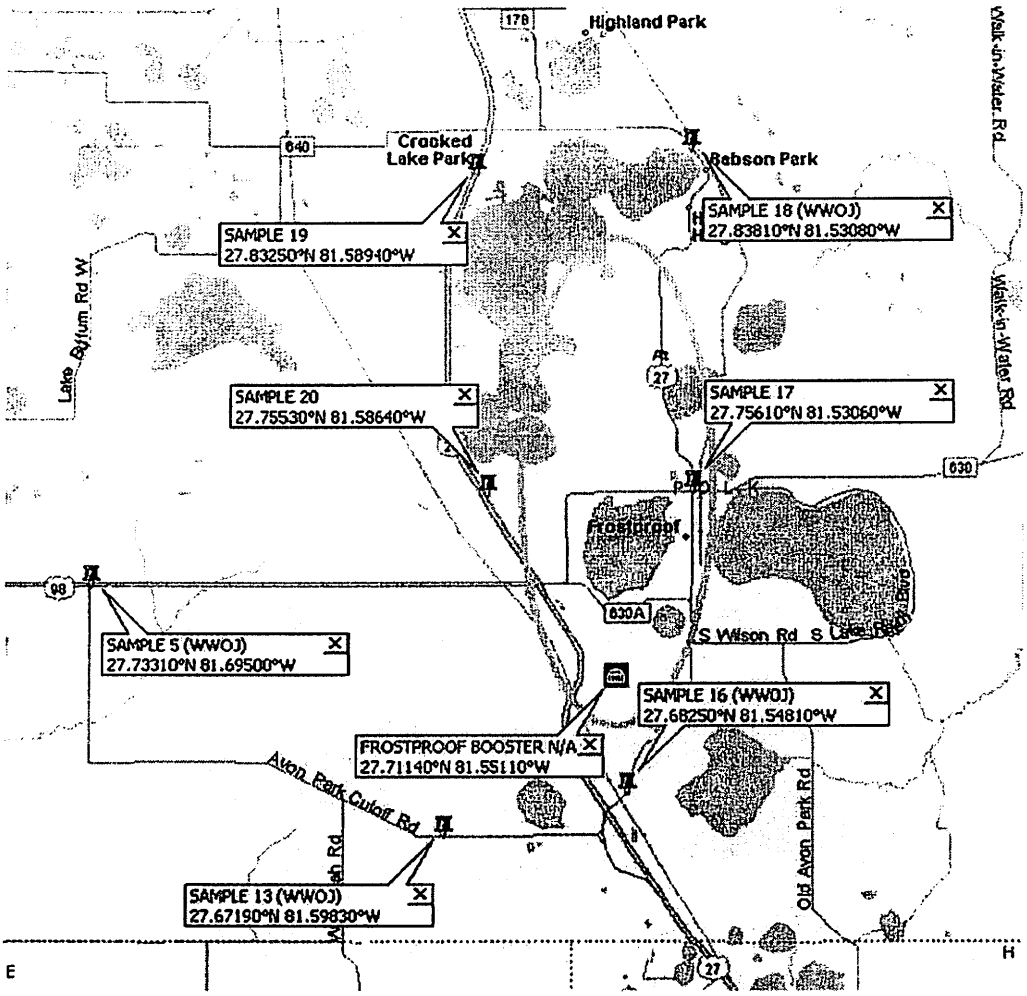

Figure Three: Frostproof Booster Test Locations

DRIVE TEST LOCATIONS

Preliminary testing occurred on 11/15/2011 and 12/01/2011 to determine appropriate test locations and drive distances between test locations. It is important to point out that 10 to 30 minutes elapsed between the PSA spots, so drive distances had to be determined- typically 5-10 miles apart, and compensated by roads, construction delays, and alternate routes for high traffic or accidents. A typical test location was in an empty large parking lot or open field with no close obstructions.

The 20 test locations were made in a stationary vehicle with sophisticated RF receiver and measurement software. Extreme care was taken to measure the Non-Targeted PSA spots and Targeted PSA spot (before and after) while the vehicle was within 1-1.5 meters each time, with the same vehicle orientation, and RF level within 1 dB.

MEASUREMENT LOCATIONS

Each of the 20 test locations was determined both the proximity to the closest booster and the estimated booster coverage zone that it existed. The following table indicates the distances from a test location to the boosters and main (WWOJ) transmitter.

			DISTANCE (MILES) BETWEEN SAMPLE POINTS			
			BOOSTERS			MAIN
	LOCATION		ZOLFO SPRINGS	WAUCHULA	FROSTPROOF	WWOJ
SAMPLE 1	27°18'52"N	81°48'58"W	3.76	12.23	31.88	22.10
SAMPLE 2	27°21'58"N	81°47'53"W	0.00	8.95	28.22	19.13
SAMPLE 3	27°24'42"N	81°47'41"W	3.15	6.11	25.51	17.52
SAMPLE 4	27°29'24"N	81°50'28"W	8.66	2.76	21.35	16.28
SAMPLE 5	27°44'01"N	81°41'42"W	26.11	19.04	8.93	18.33
SAMPLE 6	27°45'07"N	81°48'03"W	26.64	18.27	15.52	23.43
SAMPLE 7	27°38'12"N	81°49'27"W	18.85	10.30	17.42	19.93
SAMPLE 8	27°29'24"N	81°50'28"W	8.95	0.00	23.45	19.04
SAMPLE 9	27°28'59"N	81°54'00"W	10.17	3.63	26.59	22.66
SAMPLE 10	27°29'05"N	81°58'12"W	13.49	8.06	30.20	27.10
SAMPLE 11	27°33'08"N	81°41'49"W	14.25	9.84	14.16	10.52
SAMPLE 12	27°34'34"N	81°37'14"W	18.11	14.78	10.27	7.07
SAMPLE 13	27°38'47"N	81°37'31"W	24.39	19.48	3.97	11.85
SAMPLE 14	27°32'40"N	81°48'38"W	12.32	4.21	19.63	17.25
SAMPLE 15	27°35'52"N	81°49'24"W	16.07	7.52	18.45	18.88
SAMPLE 16	27°40'57"N	81°32'53"W	26.67	22.35	2.00	11.90
SAMPLE 17	27°45'22"N	81°31'50"W	31.51	26.46	3.33	16.95
SAMPLE 18	27°50'17"N	81°31'51"W	36.46	30.65	8.84	22.61
SAMPLE 19	27°49'57"N	81°35'22"W	34.64	28.25	8.69	22.50
SAMPLE 20	27°45'19"N	81°35'11"W	29.83	24.08	3.72	17.22

Table Four: Booster Distance Locations

TEST MEASUREMENT EQUIPMENT AND RESULTS

The Audemat-Aztec FM-MC4™ was used to collect the audio samples in the field. The FM-MC4™ is a professionally calibrated FM receiver with a GPS receiver, and all the measurements are automatically logged. It is an FCC approved calibrated receiver supplied with a calibrated antenna.

GoldenEar™ is a software product which was used with the FM-MC4™ Measurement Receiver. It is intended to evaluate the overall quality of an FM station reception through signal measurements and audio recording.

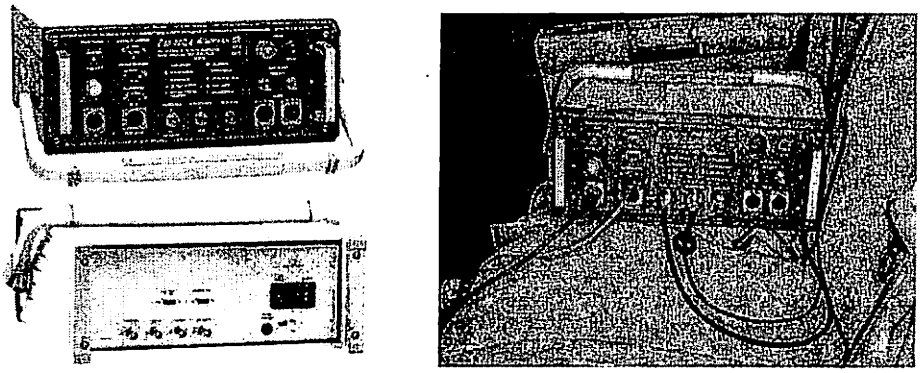

Figure Four and Five: Audemat FM-MC4™

An example of a GoldenEar™ multipath plot is shown for the Sebring WWOJ test locations:

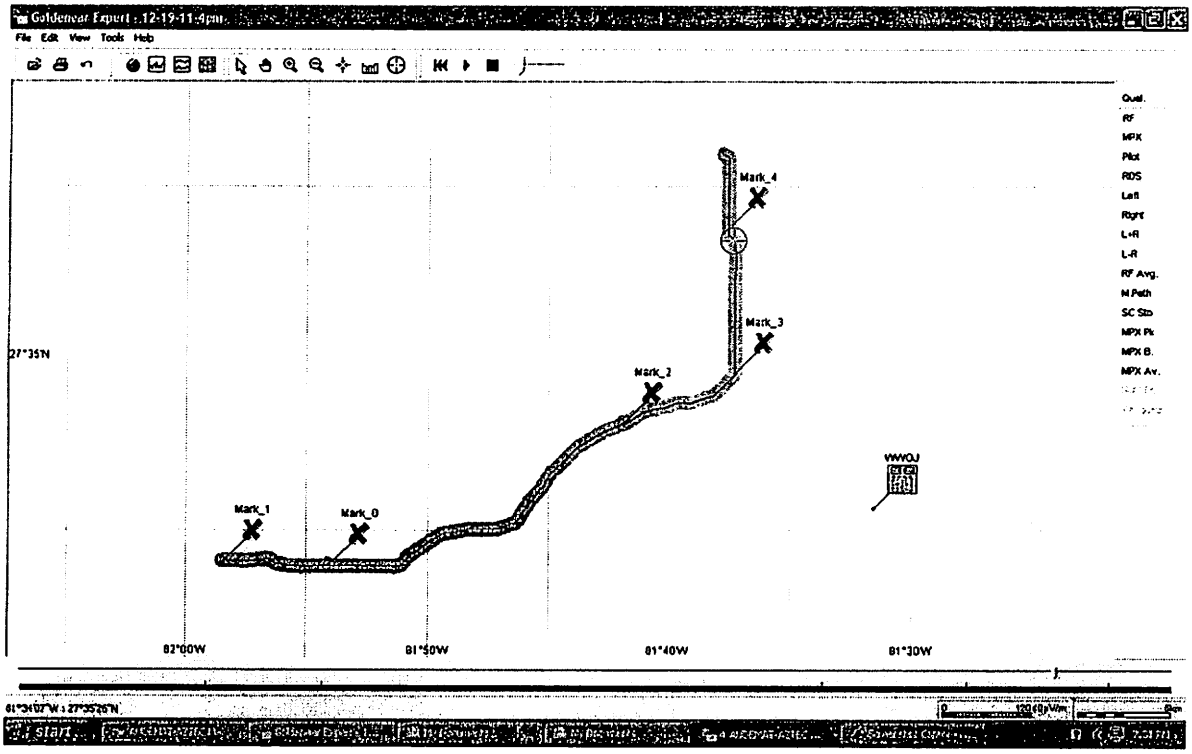

Figure Six: GoldenEar™ SLC Plot

The FM-MC4 enables the following main operations to be carried out on a FM audio signal:

- Quantifying the signal value constituting the Base-band MPX signal
- Quantifying the MPX signal's power value
- Quantifying the demodulated signals' value constituting the audio message
- Ensuring different processing of these quantifications (corrections, averages, statistical calculations, phase, synchronization)
- Ensuring different representations of these quantifications.

The FM-MC4 measurement receiver is also acquires raw data from the FM broadcasting station. These signals are read in digital form through the PC interface. They include:

- RF level
- MPX and sub-carriers (19 kHz Pilot)
- Demodulated audio signals (Left, Right, Left+Right, Left-Right)
- Stereo information.

From these raw signals, several calculated signals are deduced:

- Averaged RF level
- Multipath ratio
- Sub-carrier stability (variation ratio over nominal level)
- MPX exceeding (over nominal level)

The first signal processing is done within the FM-MC4™. The signal concerned by the acquisition is the Multiplex signal whose format is defined by a maximum pass-band of 100 kHz. This analog MPX signal is converted into a digital signal using an A/D converter. Sampling frequency is fixed at 256 kHz, which guarantees quantification of any signal up to theoretical maximum frequency of 128kHz. For subjective listening the audio output of the receiver was recorded digitally in a (CCIT 22.050 kHz, 8-bit, stereo, 43 Kbps sampling rate) WAV file format by the GoldenEar™ software.

In term of RF signal level, the Relative field: dBμV/m, mV/m is presented:

For conversion of the Absolute field (dBμV) into a Relative field (dBμV/m), several calibrated files are supplied with the FM-MC4™, including: K coefficient validation, RF Antenna and

Cable validation, and Loss and Gain validation. Appendix One contains details on these files.

The GoldenEar™ software is meant to provide a numerical method for quantifying a pure subjective concept, which is quality of received FM audio. As the method is a numerical one, it will be applied every time the same way, therefore it is an objective measure, as opposed to having numerous subjects listen and evaluate the audio.

An example graphical output is shown below, indicating RF level (Green), Pilot Stability (Dark Blue), Multipath Ratio (Grey), and L+R (Light Blue), for a portion of a stationary PSA measurement recording.

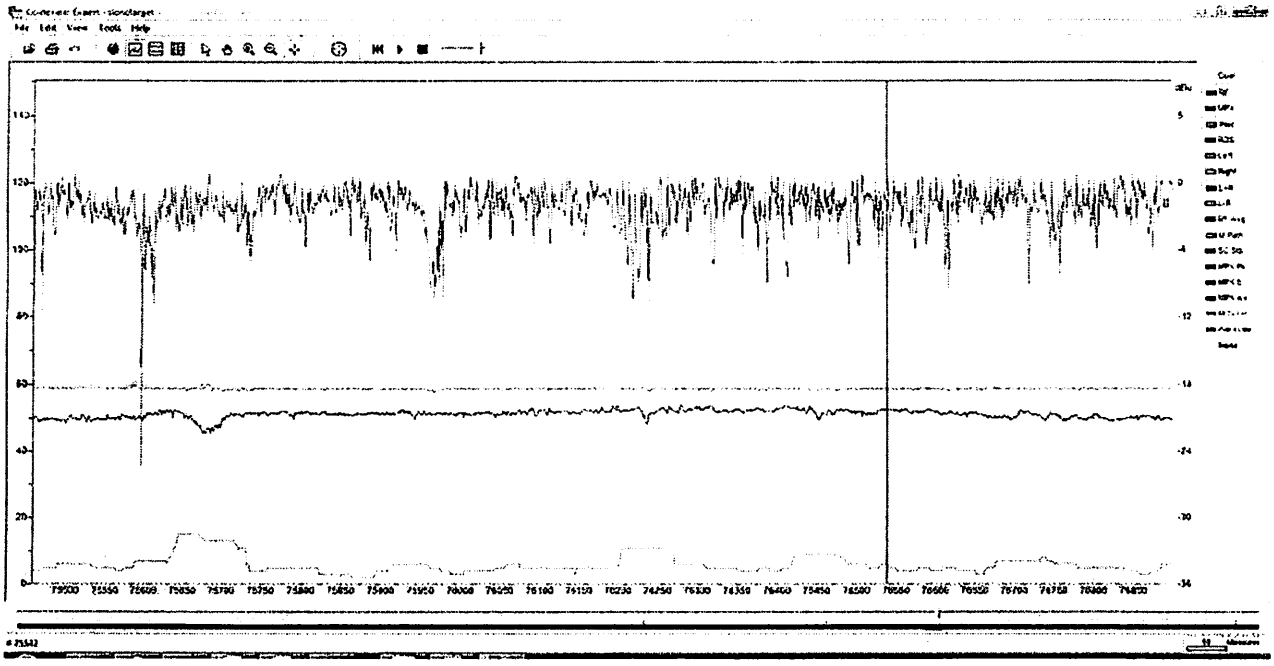

Figure Seven: GoldenEar™ Signal Display

MEASUREMENT VEHICLE

The measurement vehicle used in this test was a 2011 Jeep Liberty AWD. It was chosen because of the very large, flat metal roof with no obstructions, providing a ground plane to minimize pattern disturbances for the magnetic mount whip antenna. It should be noted that the FM-MC4™, antenna and cable were professionally calibrated at Audemat Labs in Paris on 6/18/2010.

Curb Weight (lbs)	4076
City (MPG)	16
Hwy (MPG)	22
Horsepower	210 @ 5200
Torque (lb-ft)	235 @ 4000
Wheelbase	106.1
Length (in)	178.9
Width (in)	72.3
Height (in)	74.0

Figure Eight: Test Vehicle

RF MEASUREMENT RESULTS

The RF propagation of WWOJ (FM) was accurately measured and the data collected was used to tune the RF propagation model. The area of data collection and relative signal strength is indicated in the following figure.

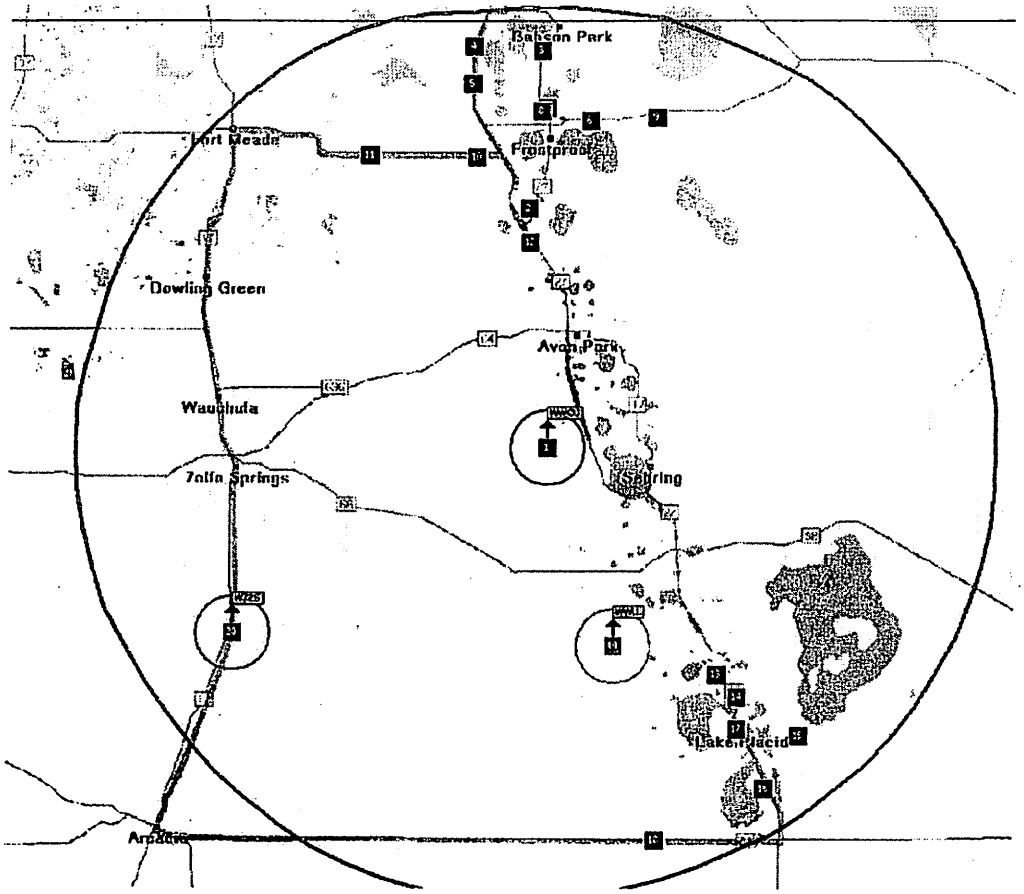

Figure Nine: RF Propagation Measurements for WWOJ

These measurements were imported into the Lazer Spots, LLC propagation model, generally based on the International Standard ITU-R 525/526[2] with sub-path attenuations. Given the flat terrain and minimal amount of obstructions, an accurate model was constructed after only a few correlation analyses which optimized the propagation model parameters:

[2] RECOMMENDATION ITU-R P.525-2 CALCULATION OF FREE-SPACE ATTENUATION (1978-1982-1994), RECOMMENDATION ITU-R P.526-10 Propagation by diffraction (ITU-R 202/3) (1978-1982-1992-1994-1995-1997-1999-2001-2003-2005-2007)

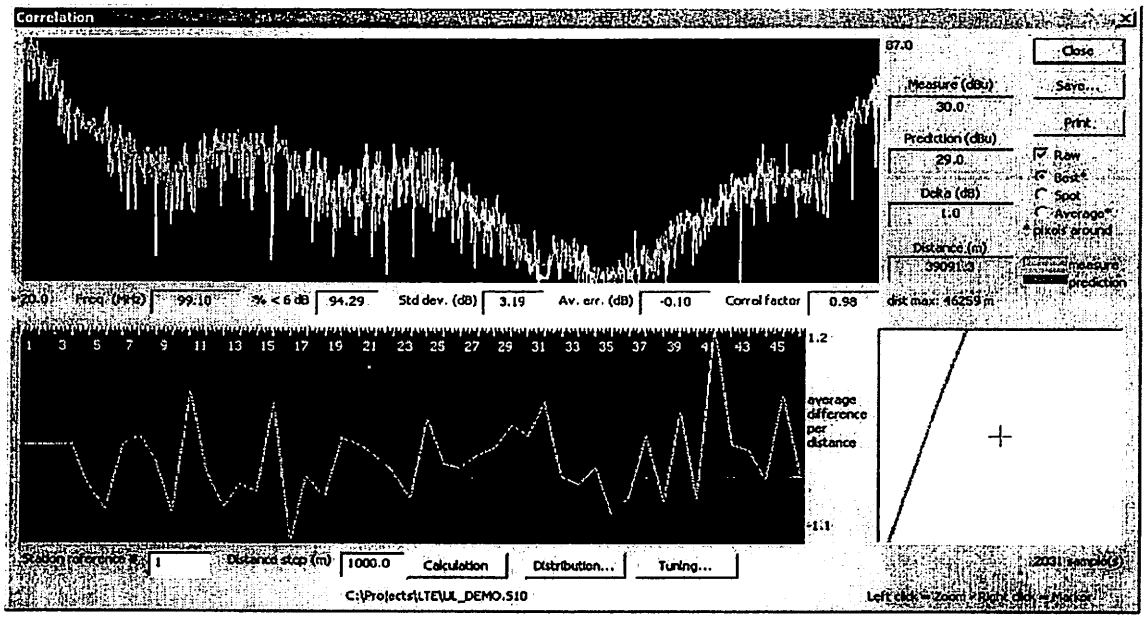

Figure Ten: WWOJ Final Correlation Analysis

The final prediction model had an average error of -0.1 dB and a standard deviation of 3.19 dB, with 94.29% of all samples recorded within a 6 dB window from the mean. This provided a highly accurate model for use in booster design and placement.

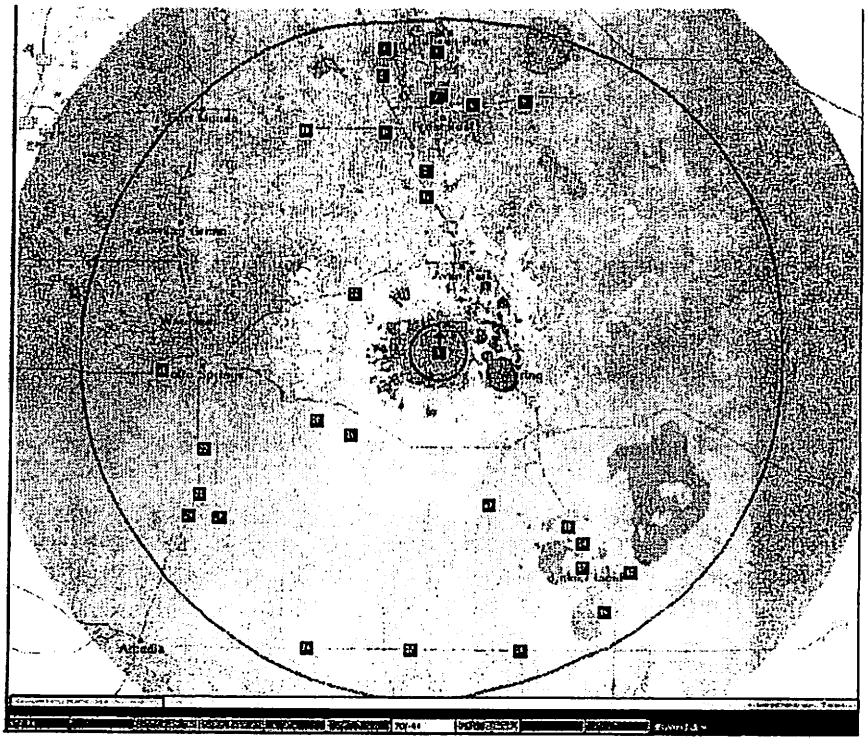

Figure 11: WWOJ Coverage

BOOSTER CONSTRUCTION

Three booster transmitters were constructed for the purposes of this test. All three used Harris ZX TRANSMITTERS™, INTRAPLEX™ and SYNCHROCAST3™ equipment, with a private IP data network for distributing linear uncompressed audio, and GPS for time synchronization and frequency stability.

Figure 12: Outdoor Harris Booster Enclosure

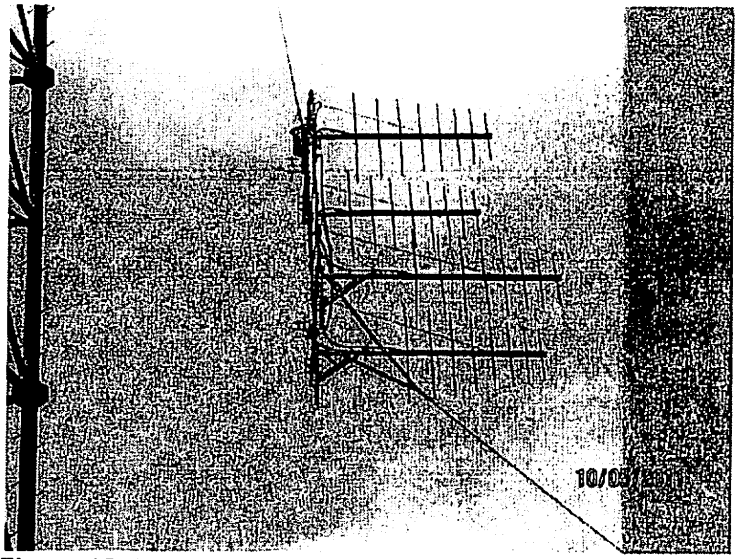

Figure 13: WWOJ FM Booster Antenna Array Being Installed

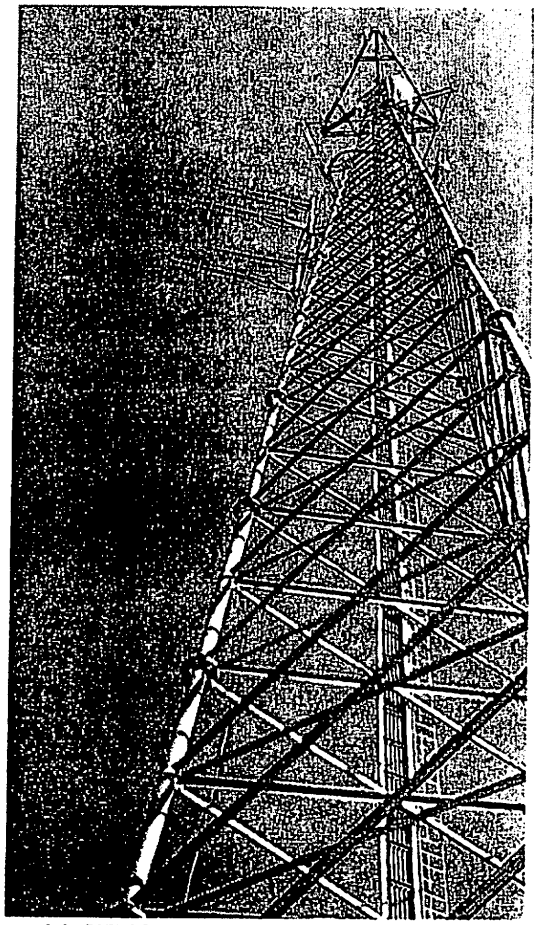

Figure 14: WWOJ Booster Antenna Array on Tower

Figure 15: View from Zolfo Springs Booster Antenna Array

BOOSTER DATA

1.	Booster location:	Zolfo Springs, Florida
	Geographic coordinates:	27° 21' 59" N, 81° 47' 52" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	0° True
	Antenna height:	
	above ground:	64 meters
	above mean sea level:	81 meters
	above average terrain:	64 meters
2.	Booster location:	Wauchula, Florida
	Geographic coordinates:	27° 29' 24" N, 81° 50' 29" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	12° True
	Antenna height:	
	above ground:	72 meters
	above mean sea level:	96 meters
	above average terrain:	72 meters
3.	Booster location:	Frostproof, Florida
	Geographic coordinates:	27° 42' 41" N, 81° 33' 04" W (NAD 1927)
	Channel	256 (99.1 MHz)
	Effective radiated power:	Not to exceed 5 kilowatts (Max-DA, V only)
	Antenna type:	Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
	Antenna orientation:	13° True
	Antenna height:	
	above ground:	38 meters
	above mean sea level:	76 meters
	above average terrain:	38 meters

RF ANALYSIS OF THE TEST AREA

Because of the booster placement, optimized for population coverage and flat terrain, it was desired to see if implementing targeted messaging correlated well with the substantial amount of RF engineering performed on this test, which was accomplished successfully as this report indicates.

60 dBu CONTOURS

The Broadcast (Part 73) propagation models are essentially simplified statistical methods of estimating field strength and coverage based only on a station's effective radiated power (ERP) and height above average terrain (HAAT). Since the terrain information is averaged, the model does not take into account specific individual localized obstructions or shadowing. Also, since the average used for this model only includes the terrain between three and 16 kilometers from the transmitter site, terrain obstructions outside of this range are ignored. This means that identical results will be calculated whether or not a transmitting antenna has clear line of sight or complete blockage by an obstruction in the first three kilometers portion of a path. Likewise, any terrain obstructions beyond 16 kilometers that block the line of sight to a more distant receiving antenna are ignored. The main use of this model is for license applications or other submissions to the FCC which specifically require the use of the methods described in Part 73.

Designated as F(50,50) (Estimated field strength exceeded at 50% of the potential receiver locations for at least 50% of the time at a receiving antenna height of 9.1 meters), the protected service contours for FM stations are the 54 dBμV/m for commercial Class B stations, 57 dBμV/m for commercial Class B1 stations, and 60 dBμV/m (1 mV/m) for commercial Class A, C3, C2, C1, and C stations, as well as 60 dBμV/m for all classes of noncommercial educational stations (including low power FM (LPFM) stations). City coverage for commercial FM stations is defined by the F(50,50) 70 dBμV/m contour, per Part 73.315. Comparatively, TIREM, Okumura, and Longley-Rice are more analytical models that consider a number of other factors, such as individual obstructions (either terrain or manmade), terrain roughness, Land Use Land Clutter (LULC) information, etc.

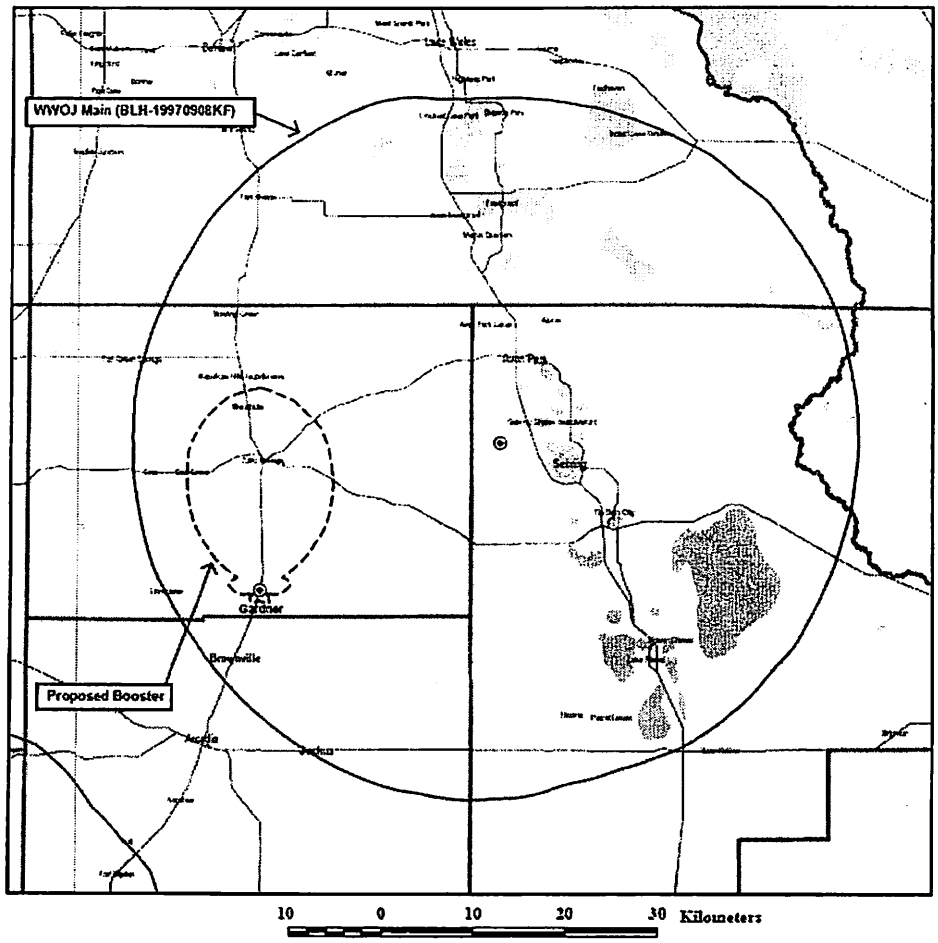

Figure 16: Zolfo Spring Booster 60 dBμV/m Service Contour

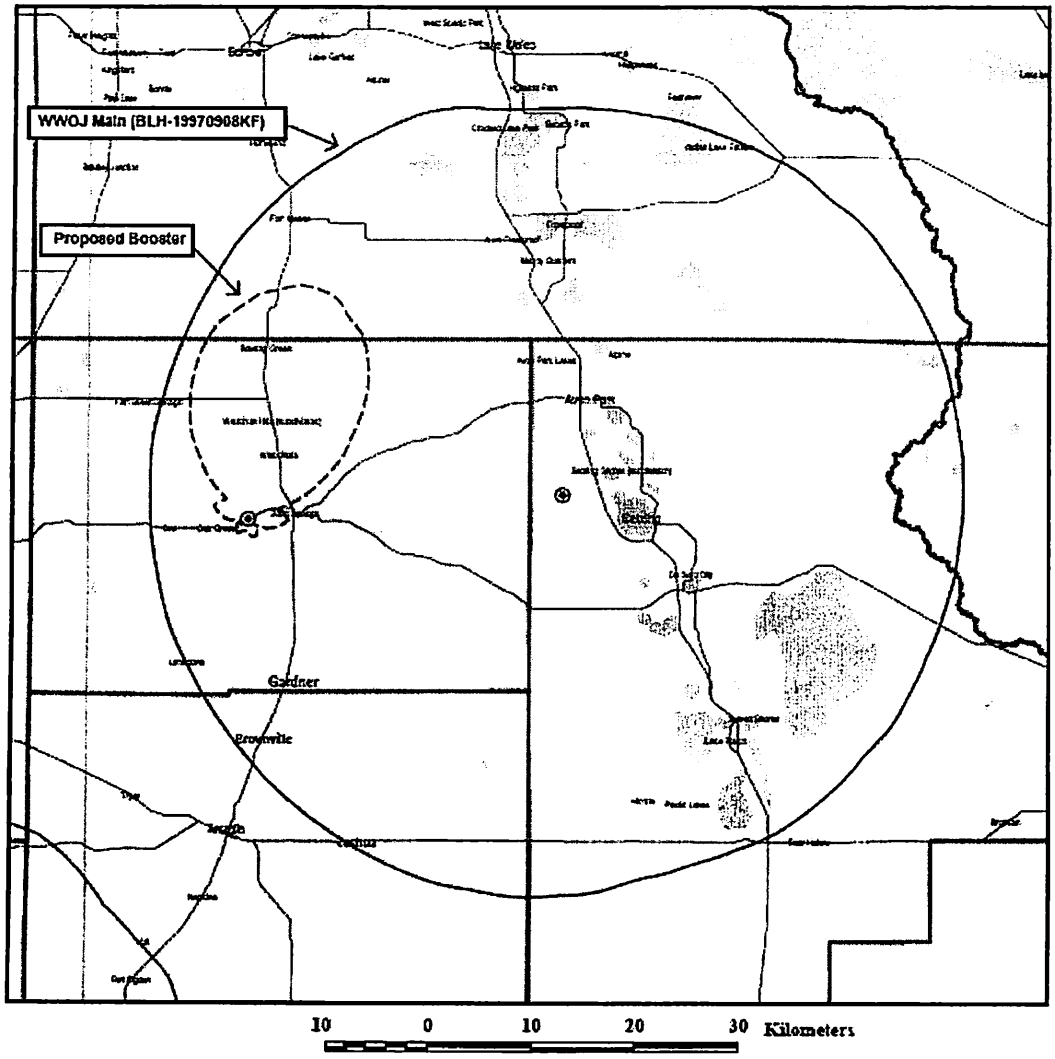

Figure 17: Wauchula Booster 60 dBμV/m Service Contour

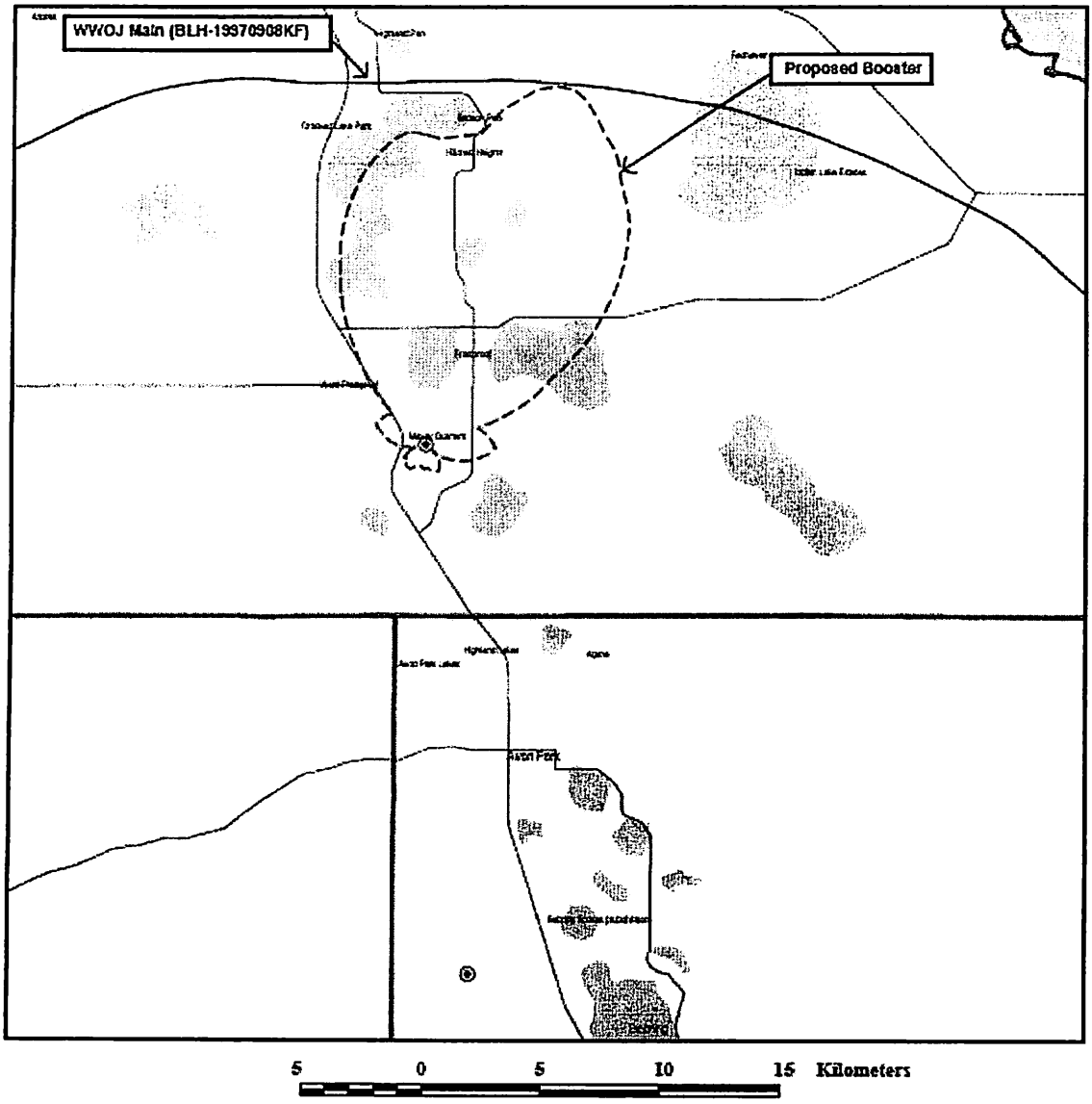

Figure 18: Frostproof Booster 60 dBμV/m Service Contour

NETWORK INFRASTRUCTURE AND TARGETED SPOT INSERTION

AUDIO DISTRIBUTION NETWORK

Because this network was constructed from the ground up, on tower co-locations, a method of sending distinct audio messages to the boosters was needed during both the simulcast Non-Targeted and Targeted PSA spot times. This was accomplished by constructing a separate 5.8 GHz Microwave wireless distribution network from the KZZS (FM) studio in Zolfo Springs to all three boosters. Additionally, implementation of control point infrastructure at the main studio (WWOJ (FM)), distribution of control signals through an IP network to the Lazer Spot control point, and then distribution of stored audio from the Laser Spot control point to the three booster locations over a private IP network occurred for the test. Two modes of operation occurred in regards to PSA spot insertion: One involved simulcasting, on the booster network, the exact same PSA spot as the main (WWOJ (FM)) was broadcasting, the second was to simulcast a different PSA spot than the main was broadcasting. The goal was to determine relevant differences in audio quality between the two methods and this was the main goal of the testing.

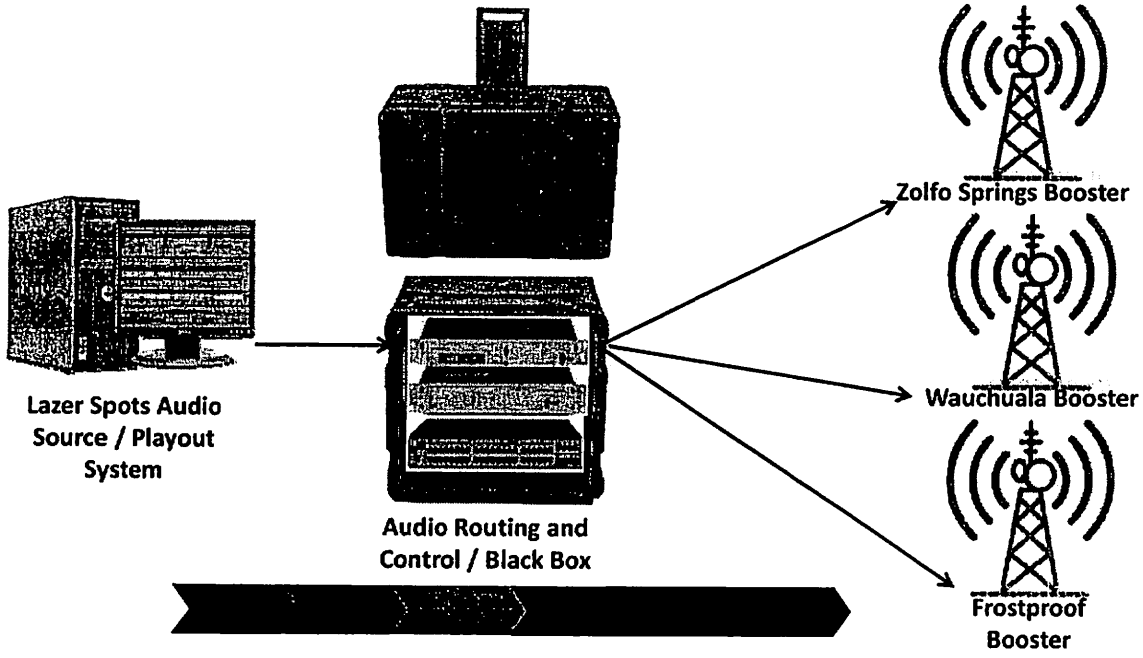

Figure 19: Audio and Microwave Distribution Network

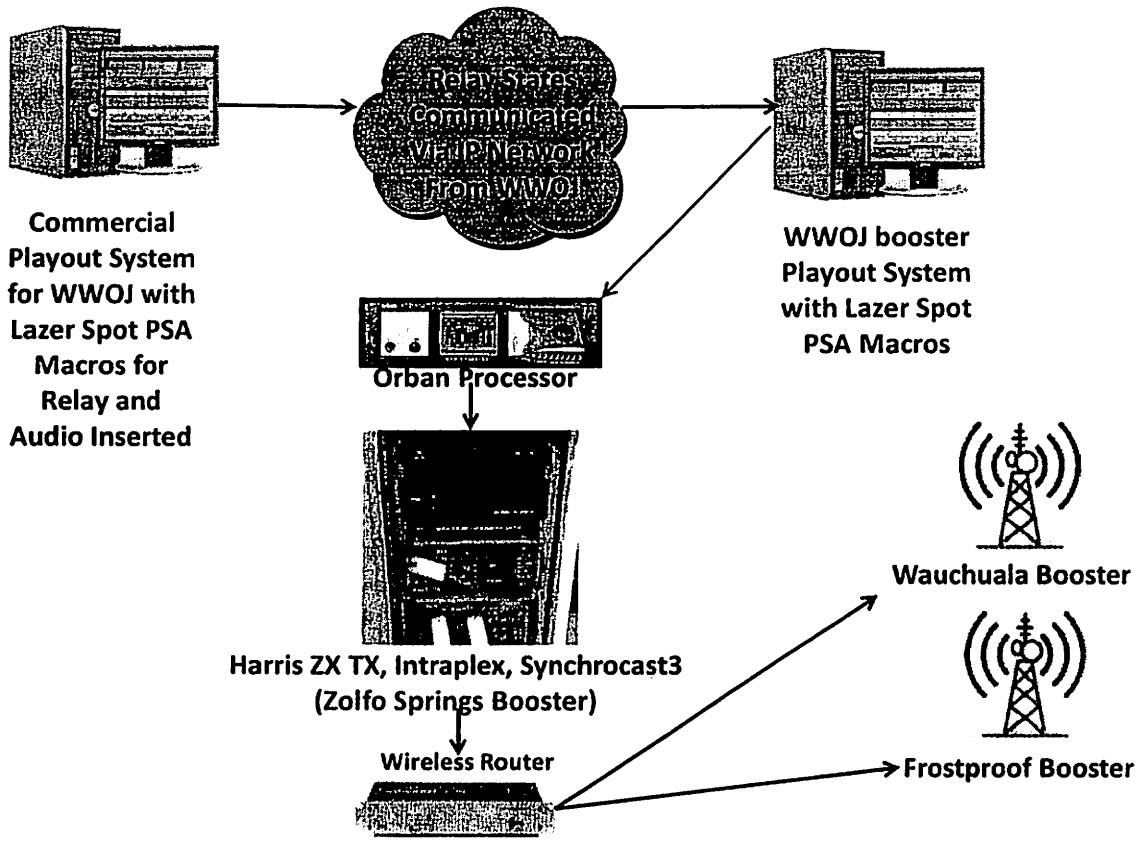

Figure 20: Audio and Microwave Distribution Network

THE LAZER SPOTS™ 'DBH CONTROL UNIT' (Patent Pending)

The Lazer Spots™ 'DBH Control Unit' is defined as a proprietary implementation of hardware and software that typically resides at the broadcast studio. The 'DBH Control Unit' design directs different audio feeds from new and existing automation and playout equipment (such as RCS -Prophet Systems, ENCO Systems, AudioVault-Broadcast Electronics, Scott Studios, Computer Concepts -Maestro, BSI Simian, WideOrbit- former Google automation, OMT Technologies –iMediatouch and others), through the 'DBH Control Unit' to different transmitter sites, while simultaneously turning the transmitters on and off (and/or increasing and decreasing the transmitters power) in synchronization with the new audio targeted audio feeds.

The 'DBH Control Unit' design is based on Ethernet, a mature technology which is the clear direction for audio routing. The major components use equipment which is 100% compatible with Ethernet networking standards, including Cisco networking equipment. The same network that switches and distributes live, linear audio targeted channels also carries GPIO signals, file transfers, and any other standard IP data.

The hardware and software that the 'DBH Control Unit' houses includes analog and digital input and output interfaces, General Purpose Input and Output (GPIO) logic interfaces, both trigger (TTL low-level voltage) and contact closure relays connections, routing software which controls consolidated access to all interfaces, and a Cisco Catalyst-Ethernet switch to connect interface nodes, PCs, WAN devices, and an internal playout system thru 10/100/1000 Mbps ports. The 'DBH Control Unit' performs timed updates (or via contact closure or audio detection) to reconfigure a few or many sources and destinations simultaneously. It also can provide the generation of Target spot audio if necessary.

ROUTING, SWITCHING, AND CONTROL FOR TARGETED SPOT DELIVERY

Each implementation of the 'DBH Control Unit' will vary in configuration depending on the broadcast studio audio equipment and STL interfaces. For WWOJ (FM), during the Targeted spot time (two to three times per hour), pre-produced 30 second Targeted spot audio streams were generated with a PC-based playout system. A relay trigger pulse from the existing on-air playout system to the 'DBH Control Unit' initiated the generation of Targeted audio playout streams. This was done by creating a script command in the existing playout system before each of the Targeted spots to pulse a relay that was connected to a trigger on the 'DBH Control Unit'. Once the trigger was pulsed, audio streams (the pre-produced Target spots) as well as GPIO control information were generated and output to an Ethernet switch/router at the IP network level.

The Ethernet switch/router interfaced directly with an IP Microwave distribution network using Harris Sychrocast 3™ IP equipment, with linear uncompressed audio. The network connected directly to a wireless router at the Zolfo Springs booster transmission site. At this site another wireless connection was made to the Wauchula booster and then to the Frostproof booster transmission site.

At the microwave connected booster sites, a digital IP relay device controlled the power amplifiers which received digital audio from the Harris Synchrocast 3™ stream by using the GPIO signals generated at the 'DBH Control Unit'.

ANALYSIS AND RATING OF THE AUDIO AND EFFECTIVENESS OF TARGETED SPOT DELIVERY WITH BOOSTERS

AUDIO SAMPLE RECORDINGS

In the WWOJ (FM) service contour, the three boosters create two distinct coverage areas, in terms of RF isolation and segregated markets. As a comparative reference, each booster play the same Public Service Announcements (PSAs) as the main WWOJ (FM) transmitter at the same time, and then the same tests were performed with a different PSA spot than the main. For WWOJ (FM), radio spots (non-commercial and commercial) start approximately at: :26, :42, and

:56 minutes of each hour, and broadcasts a country music format. The test PSAs were 30 seconds in length each, and occurred 2 to 3 times per hour depending on spot availability.

Preliminary testing occurred on 11/15/2011 to 12/01/2011 to determine appropriate test locations and drive distances between test locations. It is important to mention that 10 minutes to 30 minutes elapsed between spots, so drive distances had to be determined- typically 5-10 miles apart, and compensated by roads, construction delays, and alternate routes for high traffic or accidents. A typical test location was in an empty field or parking lot with no close obstructions.

The submitted audio clips were recorded in the field on 12/2/2011 to 12/22/2011. Audio information was collected at 20 geographical locations as described in this report. At each of the 20 test locations, a measurement of the Non-Targeted, normal simulcast audio was made for a PSA spots that occurred in rotation. These PSA spots are used as a comparative reference to the Targeted PSA spot. For the targeted-test mode, a distinct spot was broadcast on each booster. These spots were in simulcast synchronization mode, as was the reference PSA spots. When the PSA spots were not being recorded the booster transmitter PAs were muted. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the Non-Targeted PSA spot.

At each of the 20 measured locations, each audio file attached with this report has the following format:

-Approximately 125 seconds in length.

-30 seconds of WWOJ non-simulcast audio before the Simulcast (same content) spot, the 30 second Simulcast (same content) spot, and then 30 seconds of WWOJ audio after the Simulcast (same content) spot. Note this spot varies, one of 21 different PSAs that rotated.

-5 seconds of silence.

-30 seconds of WWOJ audio before the Targeted (different content reference) spot, the 30 second Targeted (different content reference) spot, 30 seconds of WWOJ audio after the Targeted (different content reference) spot. Also note that areas marked with (WWOJ) mean that the main WWOJ transmitter captured the receiver at that test point, so that the reference spot cannot be heard.

This format allows the listener to easily compare subjectively the Simulcast (same content) spot audio to the Targeted (different content reference) spot.

NON TARGETED (SIMULCAST) PSA AUDIO SPOT

As mentioned, at each of the 20 test locations a measurement of the Non-Targeted simulcast audio were made for a one of the 21 PSA spots in rotation, as shown in Figure 21:

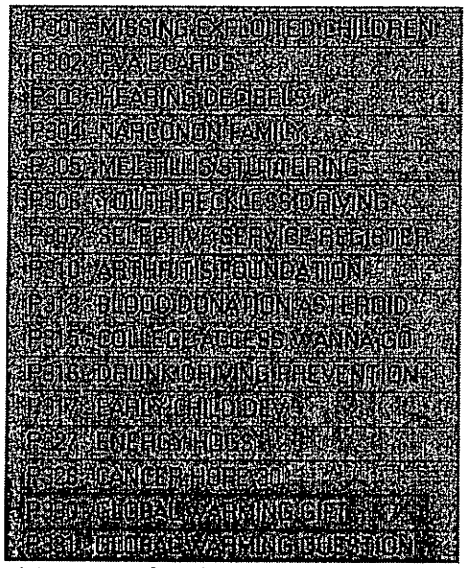

Figure 21: Rotated Reference Simulcast PSA Spots

TARGETED (NON-SIMULCAST) PSA AUDIO SPOTS

For the targeted-test mode, a distinct PSA spot was simulcast on the each of the three boosters. This spot was simulcast at the same time the main WWOJ (FM) was playing a different PSA spot. The goal was to monitor and analyze the audio at the 20 test locations for quality of reception as compared to the non-targeted PSA spot. The spot used with 30 seconds in length and titled "Living Healthy and Green-USEARADON" described the dangers of Radon gas.

OBJECTIVE AUDIO ANALYSIS FOR NON-TARGETED/TARGETED SPOTS RESULTS

The measurement receiver and collection software, GoldenEar™ developed by WorldCast Systems.com/Audemat division, is described in other sections. The GoldenEar™ software is meant to provide a numerical method for quantifying a pure subjective concept, which is quality of received FM audio. As the method is a numerical one, it will be applied every time the same way, therefore it is an objective measure, as opposed to having numerous subjects listen and evaluate the audio.

The GoldenEar™ quality algorithm uses measured data to form a quality rating, ranging from 1 to 5, 5 being the best and 1 being the worst. An indication of the grading scale algorithm is intended to be analogous to ITU-R (BS.1284-1) [3] recommendations. The following five-grade

[3] RECOMMENDATION ITU-R BS.1284-1*General methods for the subjective assessment of sound quality

scale is appropriate for the assessment of sound quality and impairment for the grading of the WWOJ (FM) test audio samples which is specified by the ITU-R recommendations.

Quality		Impairment	
5	Excellent	5	Imperceptible
4	Good	4	Perceptible, but not annoying
3	Fair	3	Slightly annoying
2	Poor	2	Annoying
1	Bad	1	Very annoying

Table Four: ITU-R Grading Scales

For comparison tests, the following ITU-R comparison scale is based on numerical differences using the above five-grade scales for the purposes of comparing the Non-Targeted PSA reference spot to the Targeted PSA spots.

Comparison	
3	Much better
2	Better
1	Slightly better
0	The same
−1	Slightly worse
−2	Worse
−3	Much worse

Table Five: ITU-R Comparison Scales

As indicated in Table Six, the Non-Targeted Simulcast PSA spots had an objective quality range of 3.30 to 4.90, with a 20 location average of 4.08. The Targeted PSA spot had an objective quality range of 3.63 to 4.90, with a 20 location average of 4.06. The difference between the two averages is 0.02, with the Non-Targeted result being less than a Slightly Better rating when compared to the Targeted results as indicated in Table x.

	RELATIVE FIELD LEVEL (dBμV/m)	SAME PSA AUDEMAT QUALITY INDEX	TARGETED PSA AUDEMAT QUALITY INDEX
SAMPLE 1	41.07	3.63	3.86
SAMPLE 2	111.73	4.10	4.00
SAMPLE 3	80.63	3.60	3.63
SAMPLE 4	71.67	4.00	4.10
SAMPLE 5	65.27	4.00	4.00
SAMPLE 6	61.97	4.23	4.53
SAMPLE 7	51.70	3.30	3.63
SAMPLE 8	88.69	3.70	3.76
SAMPLE 9	63.51	3.90	3.92
SAMPLE 10	55.00	4.00	4.00
SAMPLE 11	69.00	4.20	4.00
SAMPLE 12	77.03	4.00	4.00
SAMPLE 13	70.57	4.00	4.00
SAMPLE 14	62.03	4.53	4.00
SAMPLE 15	61.10	3.80	3.78
SAMPLE 16	70.00	4.55	4.25
SAMPLE 17	66.72	4.10	4.00
SAMPLE 18	53.77	4.87	4.73
SAMPLE 19	56.24	4.28	4.10
SAMPLE 20	68.40	4.90	4.90
AVERAGE	**67.30**	**4.08**	**4.06**

Table Six: Objective Audio Test Results

Based on the fact that that all PSA spots were completely perceptible, it is concluded that the implementation of the Lazer Spots™ Targeted messaging test was shown to be extremely successful- it is believed that it could acceptably be implemented commercially.

APPENDIX ONE: AUDEMAT FM-MC4 CALIBRATION DATA

On September 8, 2010 the Audemat FM-MC4™, antenna and RF cable were sent to the Audemat Lab in Paris for calibration. Some of the calibration data is shown below.

ANTENNA CALIBRATION

This window displays antenna response curve to be displayed as well as different loss and gain values to be taken into account for calculating the field level's real value from the raw value supplied by the measuring equipment during station acquisition.

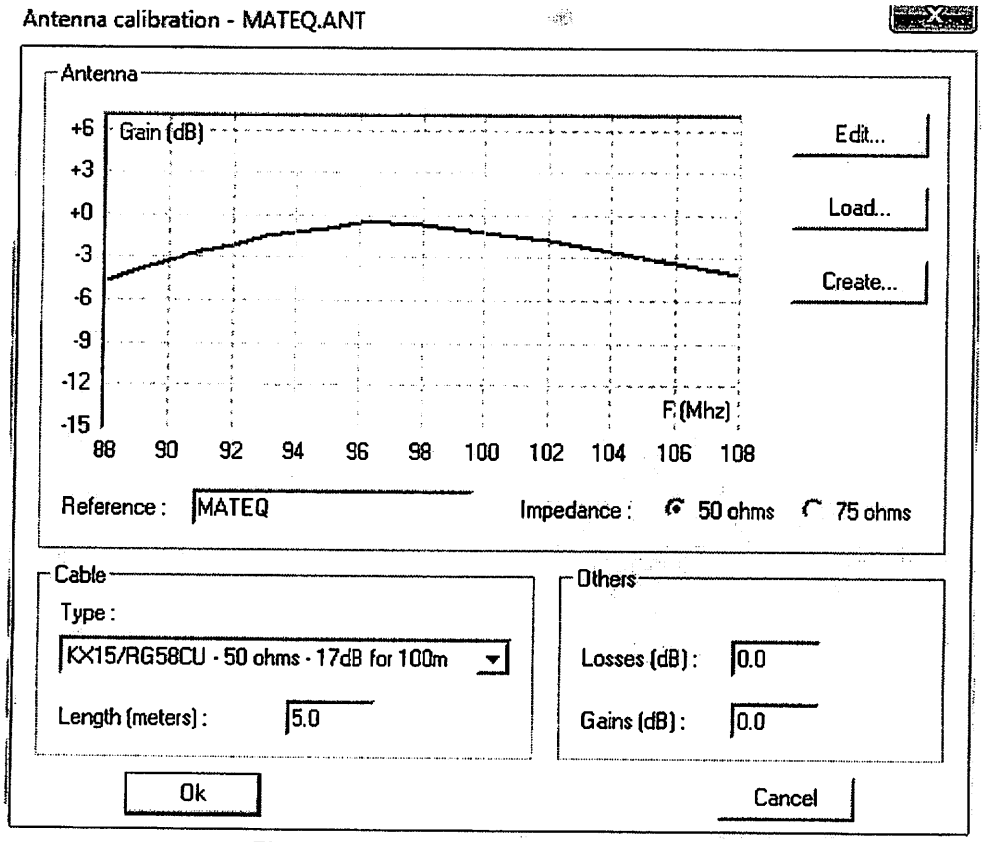

Figure 22: Antenna Calibration Curves

RECEIVER CALIBRATION

This window displays the receiver's response curve of the FM-MC4™ equipment used. The window displays the curves corresponding to different frequencies for which the equipment has

been calibrated. These values are in the receiver calibration file which is loaded when the program is launched. This file is supplied with the equipment or when recalibrated in the factory.

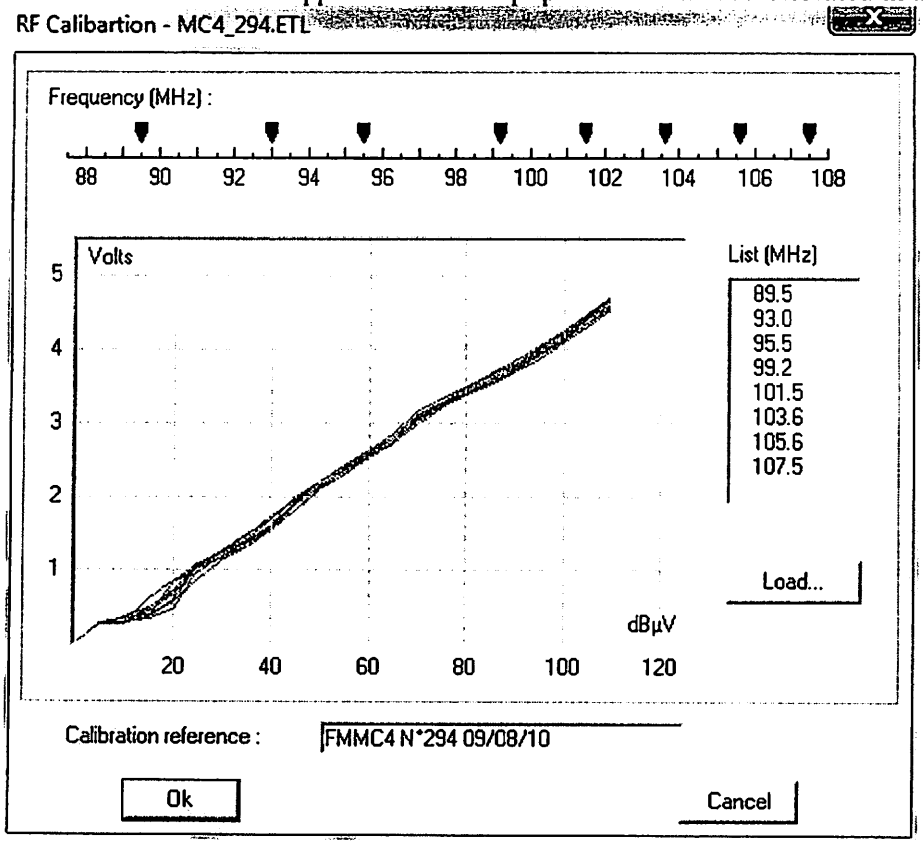

Figure 23: RF Receiver Calibration Curves

APPENDIX TWO: REFERENCE STANDARDS RELEVANT TO THIS REPORT

FCC AUDIO DIVISION

http://www.fcc.gov/mb/audio/

The Media Bureau licenses commercial and noncommercial educational AM, FM, FM Translator, and FM Booster radio services, and also the noncommercial educational Low Power FM radio service. The Division provides legal analysis of broadcast, technical and engineering radio filings and recommends appropriate disposition of applications, requests for waivers, and other pleadings. Telecommunications falls under **Title 47** of the CFR. AM, FM, and TV broadcast stations fall under **Part 73 and 74** of Title 47.

INTERNATIONAL TELECOMMUNICATIONS UNION (ITU)

ITU Radiocommunication Sector

http://www.itu.int/ITU-R/index.html

ITU-R BS.1114-5: Systems for terrestrial digital sound broadcasting to vehicular, portable and fixed receivers in the frequency range 30-3,000 MHz

ITU-R BS.412-9 17, ANNEX 3: Protection ratio for FM sound broadcasting in the case of the same programme and synchronized signals

ITU-R BS.1387-1: Method for objective measurements of perceived audio quality

ITU-R BS.1284-1 General methods for the subjective assessment of sound quality

WORLDCAST SYSTEMS / AUDEMAT DIVISION MENTION REFERENCES

http://worldcastsystems.com/

CCIR [Recommendation 638] : Terms and definitions used in planning frequencies for audio and television Broadcasting – Protection ratio in Audio Frequency

CCIR [Recommendation 559-2] : Objective measuring of RF protection ratios in broadcasting – parameters taken into consideration

CCIR [Recommendation 559-2] : Objective measuring of RF protection ratios in broadcasting – Standardised noise spectrum – Colored noise signal used for generator modulation

CCIR [Recommendation 641] : Determining RF protection ratios in audio broadcasting at frequency modulation –Appendix 1 – Maximum deviation of measurement generator frequency

IUT-R [Recommendation BS.450-2] : Transmission standards for audio broadcasting at frequency modulation in metric waves

IUT-R [Recommendation 412-6] : Planning standards for audio broadcasting at frequency modulation in metric waves – Note 4 – Sinusoid signal power

IUT-R [Recommendation 412-7] : Planning standards for audio broadcasting at frequency modulation in metric waves – Appendix 4 – Measuring complete multiplex signal power and peak deviation of an FM audio broadcasting signal

IUT-R [Recommendation 642-1] : Limiters for high quality radio-phonic program signals AFNOR 97330 :Weighting curve representing average musical messages

CEPT/ERC : [Recommendation ERC 54-01 E] – Method of measuring the maximum frequency deviation of FM Broadcast emissions in the band 87,5 MHz to 108 MHz at monitoring stations

UIT-R [Recommendation 704] : Characteristics of reference receivers in audio broadcasting at frequency modulation, at end of planning

UIT-R [Recommendation 599] : Audio broadcasting reception antenna directivity

APPENDIX THREE: FCC EXPERIMENTAL AUTHORIZATION

FEDERAL COMMUNICATIONS COMMISSION
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WASHINGTON DC 20554

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September 28, 2011

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In re: Cohan Radio Group, Inc.
WWOJ (FM), Avon Park, Florida
Facility Identification Number: 27199
Application for Experimental Authorization

Dear Counsel:

The staff has before it a request for an Experimental Authorization, filed July 19, 2011, and supplemented on September 22, 2011, on behalf of Cohan Radio Group, Inc. ("Cohan"), licensee of Station WWOJ(FM), Avon Park, Florida.[1] Cohan proposes to conduct experimental operations to determine the feasibility of broadcasting independent, targeted messages on FM Booster stations. Cohan proposes to construct three temporary FM Booster facilities and to broadcast noncommercial announcements on the booster stations while simultaneously broadcasting different programming on the main station. Cohan proposes to use proprietary technology provided by Lazer Spots, LLC, which will allow different announcements to be placed on the boosters in a synchronized time sequence. Other than the foregoing, no changes to the authorized technical facilities are contemplated. Cohan states that the experimental broadcasts will be conducted over a 60-day period.

Our review indicates that the proposed experimental operation meets the requirements of Section 73.1510 of the Commission's rules and that the proposed experimental operation is not likely to result in interference to any other station. Although some intrasystem interference is to be expected from the experimental operation, we believe that Cohan will act in its own self-interest to minimize any detrimental effect on its listeners. We find that the Public Interest would be served through the collection of data on the feasibility of transmitting independent, targeted announcements on FM Boosters, which could be used in support of a Petition for Rule Making to modify the Commission's Rules to permit the use of such transmissions. We believe that, in order to provide for setup and preliminary testing of the booster facilities in addition to the proposed 60-day experimentation, a term of 120 days is appropriate.

Accordingly, the request for Experimental Authorization IS GRANTED. Station WWOJ may construct the following temporary FM Booster facilities:

[1] WWOJ is licensed for operation on Channel 256C3 (99.1 MHz), with effective radiated power of 10 kilowatts (H&V) and antenna height above average terrain of 157 meters.

1. Booster location: Zolfo Springs, Florida
   Geographic coordinates: 27° 21' 59" N, 81° 47' 52" W (NAD 1927)
   Channel 256 (99.1 MHz)
   Effective radiated power: Not to exceed 5 kilowatts (Max-DA, V only)
   Antenna type: Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
   Antenna orientation: 0° True
   Antenna height:
      above ground: 64 meters
      above mean sea level: 81 meters
      above average terrain: 64 meters

2. Booster location: Wauchula, Florida
   Geographic coordinates: 27° 29' 24" N, 81° 50' 29" W (NAD 1927)
   Channel 256 (99.1 MHz)
   Effective radiated power: Not to exceed 5 kilowatts (Max-DA, V only)
   Antenna type: Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
   Antenna orientation: 12° True
   Antenna height:
      above ground: 72 meters
      above mean sea level: 96 meters
      above average terrain: 72 meters

3. Booster location: Frostproof, Florida
   Geographic coordinates: 27° 42' 41" N, 81° 33' 04" W (NAD 1927)
   Channel 256 (99.1 MHz)
   Effective radiated power: Not to exceed 5 kilowatts (Max-DA, V only)
   Antenna type: Composite array, Four Aldena, model ALP.08.02.712 log periodic antennas, 2 x 2 stack, directional
   Antenna orientation: 13° True
   Antenna height:
      above ground: 38 meters
      above mean sea level: 76 meters
      above average terrain: 38 meters

During the 60 day test period, Cohan may transmit independent, noncommercial announcements on the temporary FM Booster Stations as described above. Limited waiver of 47 C.F.R. Section 74.1231(h) is granted to the extent necessary for the proposed experimentation. Cohan shall employ whatever means are necessary to prevent excessive exposure of workers or the public to radio frequency radiation, pursuant to Section 1.1310. Within 60 days following completion of the experimental operation authorized herein, Cohan shall file a full report of the research,