

EXHIBIT 4
Radio Multiple Ownership Study
and
Radio-Television Cross Ownership Study

prepared for
Liberman Broadcasting of Houston License Corp.

KIOX-FM, Ch. 245C0 El Campo, Texas (Facility ID 36507)
KXGJ(FM), Ch. 269C1 Bay City, Texas (Facility ID 2131)
KJOJ-FM, Ch. 277C Freeport, Texas (Facility ID 69565)

Table of Contents

Engineering Statement

Figure 1	Radio Multiple Ownership Overview
Figure 1A	Radio Multiple Ownership Overview - Detail to KEYH(AM)
Figure 1B	Principal Community Contours Overlapping Some Portion of Proposed KJOJ-FM
Table 1	Stations with Principal Community Contours Overlapping Some Portion of Proposed KJOJ-FM
Figure 2	Radio - Television Cross Ownership Study

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Introduction

This statement has been prepared on behalf of *Liberman Broadcasting of Houston License Corp.* (“*Liberman*”) to show compliance with Section 73.3555(a) of the FCC Rules regarding common ownership of multiple radio stations serving the same market, and with §73.3555(c) concerning the common ownership of radio and television stations serving the same market.¹

In separate minor change applications, *Liberman* is proposing changes to three of its existing, licensed FM stations, as follows:

<u>Station</u>	<u>Proposed Change</u>
KIOX-FM (Facility ID 36507) Ch. 245C1, El Campo, TX	“One-step” upgrade, increase to maximum Class C0 at new transmitter site
KXGJ(FM) (Facility ID 2131) Ch. 269C1, Bay City, TX	Increase to maximum Class C1 at new transmitter site
KJOJ-FM (Facility ID 69565) Ch. 277C, Freeport, TX	Increase antenna HAAT to 595 meters at new transmitter site

These facility changes will result in new locations for the station’s respective coverage contours. The city grade (70 dBμ) contours for these three stations presently overlap, and will continue to overlap following the proposed change. Since *Liberman* also commonly owns other radio stations and a television station in the region, this exhibit addresses the continued common

¹ In accordance with the FCC Public Notice issued September 10, 2003 (DA 03-2867), references to Section 73.3555 of the Commission’s Rules herein refer to the Rules in effect prior to *Report and Order* in MB Docket No. 02-277 and MM Docket Nos. 01-235, 01-317, and 00-244 (adopted June 2,2003). The United States Court of Appeals for the Third Circuit has stayed the effectiveness date of the rules adopted in this *Report and Order* (see *Prometheus Radio Project v. FCC*, No. 03-3388 (3d Cir. Sept. 3, 2003)).

Engineering Statement

(page 2 of 5)

ownership of the various facilities. The radio and television stations licensed to *Liberian* in the area are listed below.

<u>Call</u>	<u>Facility ID</u>	<u>Channel</u>	<u>City, State</u>
KIOX-FM	36507	245C1	El Campo, TX
KJOJ-FM	69565	277C	Freeport, TX
KQQK(FM)	19087	300C	Beaumont, TX
KTJM(FM)	20489	253C	Port Arthur, TX
KXGJ(FM)	2131	269C1	Bay City, TX
KEYH(AM)	2911	850 kHz	Houston, TX
KJOJ(AM)	20625	880 kHz	Conroe, TX
KQUE(AM)	65309	1230 kHz	Houston, TX
KSEV(AM)	9645	700 kHz	Tomball, TX
KZJL(TV)	69531	61	Houston, TX

Radio Multiple Ownership

Under current FCC ownership rules, a “market” is defined as the area encompassed by the overlapping principal community contours of the radio stations which are commonly owned.² Accordingly, an evaluation has been made of the locations of the principal community contours of the various *Liberian* radio stations. Depicted in **Exhibit 4 - Figure 1** are the principal community coverage contours (70 dBμ) of the *Liberian* FM stations with the daytime principal community contours (5 mV/m) of the AM stations licensed to *Liberian*. The licensed and proposed city grade contours for KIOX-FM, KJOJ-FM, and KXGJ are provided.

As shown in **Exhibit 4 - Figure 1**, the only other *Liberian* station overlapped by any of the three subject FM stations (KIOX-FM, KJOJ-FM, and KXGJ) is KSEV(AM). The KSEV city grade contour is overlapped by the licensed and proposed KJOJ-FM city grade contour. Other than KSEV, the changes proposed to KIOX-FM, KJOJ-FM, and KXGJ will not involve city grade contour overlap with any additional *Liberian* stations. A detail map is provided as **Figure 1A** which shows that, although close, no city grade overlap will occur with KEYH(AM).

² Order in Implementation of Sections 202(a) and 202(b)(1) of the Telecommunications Act of 1996 (Broadcast Radio Ownership) FCC 96-90, released March 8, 1996 and Memorandum Opinion and Order in Revision of Radio Rules and Policies 7 FCC Rcd 6387, 6395 para. 39 (1992).

Using the present FCC methodology, there will continue to be two distinct radio “markets” involving the proposed KIOX-FM, KJOJ-FM, and KXGJ facilities. The first market (“Radio Market One,” 3 FM stations, as shown on **Exhibit 4 - Figure 1**) is defined by the bounds of the principal community contours of the proposed KIOX-FM and KJOJ-FM principal community contours (the proposed KXGJ principal community contour is wholly contained within that of the proposed KIOX-FM). The second market (“Radio Market Two,” 1 FM and 1 AM station, see **Exhibit 4 - Figure 1**) is defined by the bounds of the principal community contours of KSEV and the proposed KJOJ-FM.

The proposed KJOJ-FM facility is common for both of the two radio markets. For simplicity therefore, this analysis will provide a count of the city grade station contours which overlap any part of the proposed KJOJ-FM city grade area. Although not necessary to show compliance with the FCC’s Rules, inclusion of the proposed KIOX-FM and KXGJ city grade contours for Radio Market One and the KSEV city grade contour for Radio Market Two will increase the number of stations further. This approach should permit FCC Staff to process the various minor change proposals separately, as KJOJ-FM’s compliance with the multiple station ownership limits is not contingent upon the inclusion of the KIOX-FM or KXGJ changes.³ Depicted in **Exhibit 4 - Figure 1B** and listed in **Exhibit 4 - Table 1** are all of the identifiable, operating, licensed domestic commercial radio stations with principal community contours covering any part of the proposed KJOJ-FM city grade contour area.

As illustrated in **Exhibit 4 - Figure 1B** and **Exhibit 4 - Table 1**, at least 44 radio stations provide some measure of principal community coverage within the proposed KJOJ-FM city grade contour area. Therefore, the *Lieberman* station count in the two markets described herein (3 FM stations in Radio Market One and 1 FM station and 1 AM station in Radio Market Two) do not exceed the station limits permitted under §73.3555(a)(1)(ii).

Radio-Television Cross Ownership

The radio-television cross ownership rule is triggered when the Grade A contour of a television station entirely encompasses the community of license of a commonly owned AM or FM

³It is anticipated that the KJOJ-FM application could be granted well in advance of those for KIOX-FM and KXGJ, as the proposed KJOJ-FM tower structure already has FAA approval.

radio station. Additionally, the rule is triggered when the 60 dBμ (1 mV/m) FM station contour or the 2 mV/m AM station contour entirely encompasses the community of license of a commonly owned television station.

As described above, *Lieberman* has attributable ownership interest in KZJL(TV) (Ch. 61, Houston, Texas). As illustrated by **Exhibit 4 - Figure 2**, the none of the 60 dBμ contours of the proposed KJOJ-FM, KIOX-FM, or KXGJ facilities entirely encompass Houston. Nor does the Grade A (74 dBμ) service contour of KZJL encompass any of Freeport, El Campo, or Bay City (the principal communities of KJOJ-FM, KIOX-FM, and KXGJ, respectively). Thus, Radio-Television cross ownership issues of §73.3555(c) are not triggered by the proposed modifications of KJOJ-FM, KIOX-FM, and KXGJ.

Contour Methodology

In preparing the attached maps and tables, pertinent station data were extracted from the Commission's engineering databases. For AM stations, these included the operating power, radiation efficiency, directional antenna data (where appropriate), and geographic coordinates. The distances to the pertinent contours were computed using a digitized version of the Commission's estimated soil conductivity map, Figure M-3 and a computer program which simulates the Commission's AM groundwave propagation curves. For the FM and television stations, pertinent data for determining the distances to the contour included the antenna elevation above mean sea level, geographic coordinates, effective radiated power, and, where appropriate, directional antenna patterns. The requisite contours distances were determined using digitized, 3 arc-second, terrain data along radials spaced every 5 degrees from the transmitter site and an implementation of the Commission's TVFMFS computer program which simulates the FM and TV propagation curves. The distances to the pertinent contours were then fed into a GIS mapping program which was used to generate the attached maps.

Conclusion

As demonstrated by the foregoing, *Lieberman's* proposed changes to KJOJ-FM, KIOX-FM, and KXGJ are permissible pursuant to §73.3555(a)(1)(ii). The changes will not change the existing situation of three FM stations in one radio market and one AM and one FM station in another radio market. The station count for each market is at least 44 stations. No radio-television cross ownership issues of §73.3555(c) are triggered by the proposed modifications of KJOJ-FM, KIOX-FM, and KXGJ.

Certification

The undersigned hereby certifies that the foregoing statement was prepared by him or under his direction, and that it is true and correct to the best of his knowledge and belief. Mr. Davis is a principal in the firm of *Cavell, Mertz & Davis, Inc.*, is a Registered Professional Engineer in Virginia, holds a Bachelor of Science degree from Old Dominion University in Electrical Engineering Technology, and has submitted numerous engineering exhibits to various local governmental authorities and the Federal Communications Commission. His qualifications are a matter of record with that entity.

Joseph M. Davis, P.E.
December 9, 2003

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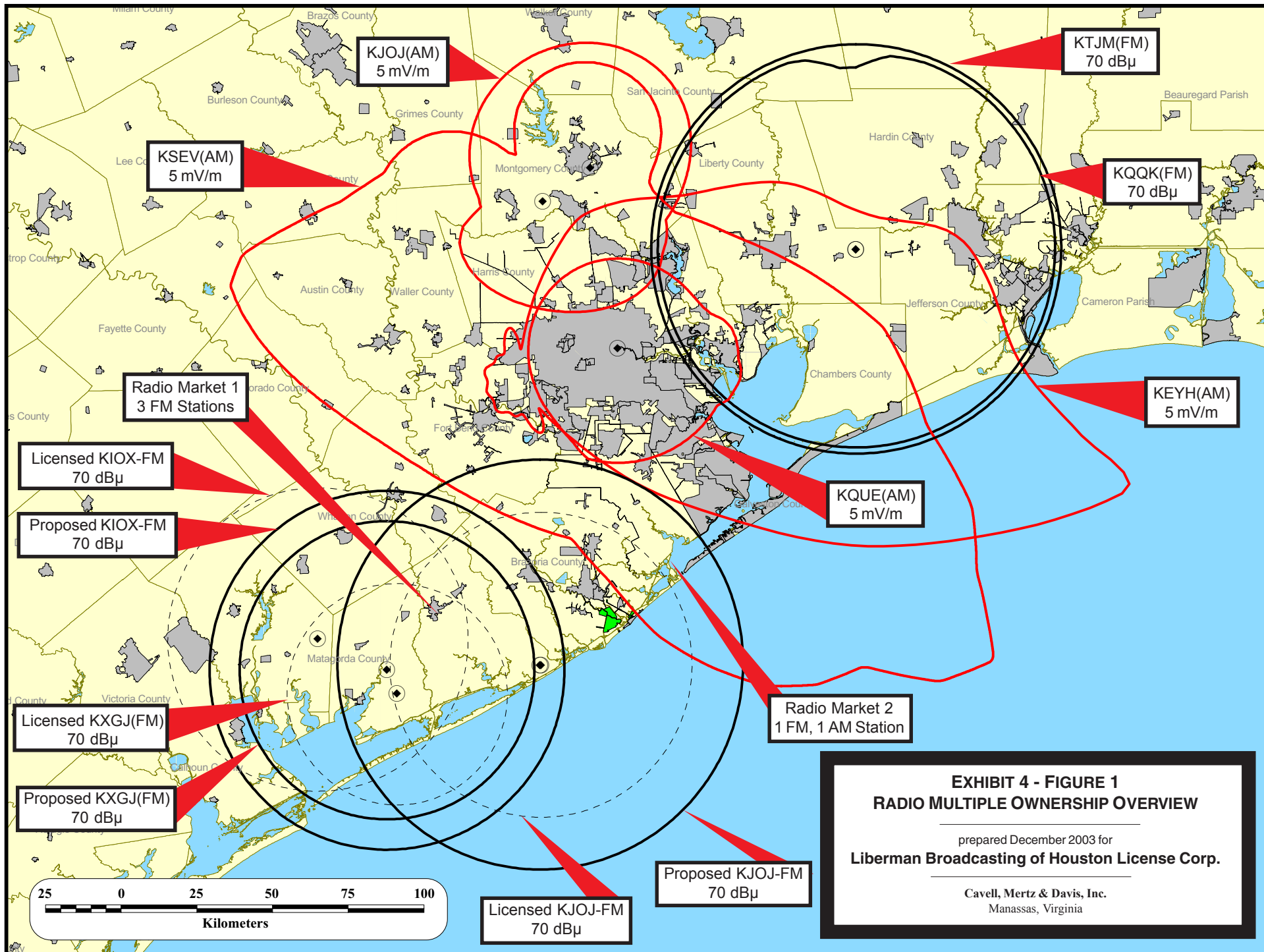


EXHIBIT 4 - FIGURE 1A
RADIO MULTIPLE OWNERSHIP OVERVIEW
DETAIL TO KEYH(AM)

prepared December 2003 for
Liberman Broadcasting of Houston License Corp.

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

KEYH(AM)
5 mV/m

Proposed KJOJ-FM
70 dB μ

2 0 2 4 6
Kilometers

City Grade Contours

- KANI(AM)
- KBME(AM)
- KBRZ(AM)
- KBXX(FM)
- KCOH(AM)
- KCTA(AM)
- KGBC(AM)
- KGOL(AM)
- KGUL(FM)
- KHCB(AM)
- KHJZ-FM
- KHMJ(FM)
- KILE(AM)
- KILT(AM)
- KILT-FM
- KIOX-FM**
- KKBQ-FM
- KKHT(AM)
- KKRW(FM)
- KLAT(AM)
- KLDE(FM)
- KLLO(FM)
- KLTN(FM)
- KMJQ(FM)
- KMKS(FM)
- KODA(FM)
- KOVE-FM
- KPRC(AM)
- KRBE(FM)
- KREH(AM)
- KROY(FM)
- KRTS(FM)
- KRTX(AM)
- KSEV(AM)**
- KTBZ-FM
- KTEK(AM)
- KTMR(AM)
- KTRH(AM)
- KULP(AM)
- KXGJ(FM)**
- KXYZ(AM)
- KYST(AM)
- KZRC(FM)

EXHIBIT 4 - FIGURE 1B PRINCIPAL COMMUNITY CONTOURS OVERLAPPING SOME PORTION OF PROPOSED KJOJ-FM

prepared December 2003 for
Liberman Broadcasting of Houston License Corp.

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

Proposed KJOJ-FM**
70 dBμ (City Grade)

44 Stations Total
KJOJ-FM, KIOX-FM, KXGJ(FM) Contours Shown as Proposed
** Indicates Stations Commonly Owned

25 0 25 50 75 100
Kilometers

Exhibit 4 - Table 1
**STATIONS WITH PRINCIPAL COMMUNITY CONTOURS OVERLAPPING
SOME PORTION OF THE PROPOSED KJOJ-FM**
prepared for
Liberman Broadcasting of Houston License Corp.

FM Stations

<u>Callsign</u>	<u>Channel</u>	<u>City, State</u>	<u>Facility ID</u>
KBXX(FM)	250C	Houston, TX	11969
KGUL(FM)	241C3	Edna, TX	27226
KHJZ-FM	239C	Houston, TX	25449
KHMX(FM)	243C	Houston, TX	47749
KILT-FM	262C	Houston, TX	25439
** KIOX-FM	245C1	El Campo, TX	36507
** KJOJ-FM	277C	Freeport, TX	69565
KKBQ-FM	225C	Pasadena, TX	23083
KKRW(FM)	229C	Houston, TX	9625
KLDE(FM)	298C	Lake Jackson, TX	59951
KLOL(FM)	266C	Houston, TX	35073
KLTN(FM)	275C	Houston, TX	65310
KMJQ(FM)	271C	Houston, TX	11971
KMKS(FM)	273C2	Bay City, TX	58979
KODA(FM)	256C	Houston, TX	35337
KOVE-FM	293C	Galveston, TX	19091
KRBE(FM)	281C	Houston, TX	35524
KROY(FM)	259C2	Palacios, TX	77693
KRTS(FM)	221C1	Seabrook, TX	35565
KTBZ-FM	233C	Houston, TX	18516
**KXGJ(FM)	269C1	Bay City, TX	2131
KZRC(FM)	223A	Markham, TX	87439

Total: 22 FM Stations

*** Stations licensed to Liberman Broadcasting of Houston License Corp.*

Exhibit 4 - Table 1
**STATIONS WITH PRINCIPAL COMMUNITY CONTOURS OVERLAPPING
SOME PORTION OF THE PROPOSED KJOJ-FM**
(page 2 of 2)

AM Stations

<u>Callsign</u>	<u>Frequency</u> (kHz)	<u>City, State</u>	<u>Facility ID</u>
KANI(AM)	1500	Wharton, TX	40487
KBME(AM)	790	Houston, TX	23082
KBRZ(AM)	1460	Freeport, TX	12156
KCOH(AM)	1430	Houston, TX	33737
KCTA(AM)	1030	Corpus Christi, TX	7093
KGBC(AM)	1540	Galveston, TX	26002
KGOL(AM)	1180	Humble, TX	34473
KHCB(AM)	1400	Galveston, TX	27703
KILE(AM)	1560	Bellaire, TX	17389
KILT(AM)	610	Houston, TX	25440
KKHT(AM)	1070	Houston, TX	61174
KLAT(AM)	1010	Houston, TX	67063
KPRC(AM)	950	Houston, TX	9644
KREH(AM)	900	Pecan Grove, TX	71631
KRTX(AM)	980	Rosenburg/Richmond, TX	57804
**KSEV(AM)	700	Tomball, TX	9645
KTEK(AM)	1110	Alvin, TX	10827
KTMR(AM)	1130	Edna, TX	28191
KTRH(AM)	740	Houston, TX	35674
KULP(AM)	1390	El Campo, TX	3710
KXYZ(AM)	1320	Houston, TX	95
KYST(AM)	920	Texas City, TX	27298

Total: 22 AM Stations

*** Stations licensed to Liberman Broadcasting of Houston License Corp.*

EXHIBIT 4 - FIGURE 2
RADIO - TELEVISION CROSS OWNERSHIP STUDY

prepared December 2003 for
Liberman Broadcasting of Houston License Corp.

Cavell, Mertz & Davis, Inc.
Manassas, Virginia

