

ENGINEERING EXHIBIT

KGO TELEVISION, INC.

**TELEVISION STATION KGO-TV, FACILITY ID 34470
APPLICATION FOR MODIFICATION OF POST-TRANSITION DTV
CONSTRUCTION PERMIT**

CHANNEL 7 – 23.8 KW (DTV AVERAGE) – 519 METERS HAAT

SAN FRANCISCO, CALIFORNIA

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ENGINEERING EXHIBIT

KGO TELEVISION, INC., TELEVISION STATION KGO-TV, FACILITY ID 34470 APPLICATION FOR DTV POST-TRANSITION CONSTRUCTION PERMIT CHANNEL 7 – 23.8 KW (DTV AVERAGE) – 519 METERS HAAT

SAN FRANCISCO, CALIFORNIA

ENGINEERING STATEMENT

Introduction

KGO Television, Inc. (KGO) is the licensee of KGO-TV, San Francisco, California. KGO was licensed to operate NTSC analog facilities on channel 7 with an effective radiated power of 316 KW at a height above average terrain of 509 meters. FCC File Number BLCT-2339 describes the KGO-TV analog channel 7 facilities. This license describes the facilities that were used as the basis for DTV replication facilities. Although the outstanding DTV construction permit describes the former NTSC antenna, the parameters specified in the outstanding post-transition construction permit, BPCDT-20080606AAE, differ slightly from the parameters in the NTSC license, primarily because of changes attributable to the tower registration process. The present channel 7 antenna is an RCA TW-9A7-P.

KGO-TV began operation in May, 1949 and has been serving San Francisco since that time. KGO-DT was first licensed in December 1998 and has been continuously broadcasting Digital Television on channel 24 since that time. The DTV Construction Permit, FCC File Number BPCDT-19980424KF, and the subsequent license file number BLCDT-19981216KF describe the pre-transition DTV transmission system which was licensed to operate on channel 24.

In the Seventh Report and Order, KGO was assigned a DTV Allotment on Channel 7 of 21 KW at 509 meters HAAT with a directional antenna which bears Antenna ID 74465.

KGO has transitioned to the facilities described in the outstanding construction permit, BPCDT-20080606AAE, and filed an application for license to cover which bears FCC file Number BLCDT-20090615AAD which was accepted for filing on June 16, 2009.

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Sutro Tower has obtained local permits to perform the work necessary to replace all antennas at the top of the tower. This construction was delayed until after the transition to DTV on June 12, 2009. As part of this construction, KGO proposes to replace its present channel 7 RCA antenna with a circularly polarized antenna, a Dielectric TCL-6A7(S), which is described in the instant application.

Licensed Facility

The KGO-TV license bears FCC File Number BLCT-19820609KE and specifies an ERP of 316 KW at 509 meters HAAT, which was a full NTSC facility for channel 7 operation in Television Zone II.

Through this application KGO-DT seeks a post-transition construction permit to replace its licensed NTSC and permitted channel 7 antenna with a Dielectric TCL-6A7(s) antenna as part of the Sutro Tower post-transition construction project. Because of mechanical differences between the present channel 7 RCA TW-9A7-P antenna and the proposed circularly polarized antenna, the center of radiation is slightly higher. In order to prevent the creation of impermissible interference, a slightly lower ERP of 23.8 KW is specified. This produces no more than 0.4517 percent additional interference to any allotment, construction permit or license. The specified ERP of 23.8 KW satisfies the height vs. ERP requirements of Section 73.622(f)(7)(i) for DTV operation in Television Zone II.

The Dielectric TCL-6A7(S) antenna is a circularly polarized antenna and has a non-directional azimuth pattern.

The Sutro Tower bears Antenna Structure Registration Number 1001289.

The KGO-TV Main License Expiration Date

The KGO-TV Main License bears an expiration date of December 1, 2006. A timely application for renewal of the KGO license was filed with the Commission and bears FCC File number BRCT-20060810ANL and was accepted for filing on August 18, 2006 and it remains in pending status as of this writing. The instant application is acceptable for filing pending a final determination by the Commission on the outstanding application for renewal of the KGO-TV/DT main license.

Interference Calculation Methodology

The results of interference calculations that are contained in this engineering statement were obtained by Longley-Rice methods that are described in OET Bulletin 69, July 1997, as implemented in the Commission's TV Process software with 2 KM cell size. The post-transition data that were used for these calculations were obtained from the Commission's CDBS database of May 27, 2009. The population census data were obtained from the Year 2000 Census. This methodology and the associated Longley-Rice parameters and cell size are described in the Report and Order in the Third Periodic Review at Paragraph 155.

Protection to Post-Transition DTV Authorized Facilities and Allotments

Television channel 7 was tentatively designated for KGO-DT post-transition operation during the channel election process. Channel 7 is shown in the DTV Table of Allotments of Section 73.622 of the Rules, and in Appendix B for use by KGO-DT, Facility ID number 34470. The facilities associated with this allotment are also shown in Appendix B of the Seventh Report and Order, which was released August 6, 2007. The interference studies conducted and the results of those calculations that are shown in this statement are based on the facilities contained in Appendix B, and the post-transition database that is described above.

The designated facilities described in Appendix B that are associated with post-transition operation of KGO-DT contain a directional antenna pattern and a maximum of 21 KW ERP. The directional pattern, Antenna ID 74465 is referenced in Appendix B and is a product of the channel election process.

Operation with the antenna that is described in Appendix B with an ERP of 21 KW DA-Max and the 74465 antenna pattern provides coverage to 6,516,637 persons, according to the results that were obtained from a calculation of Appendix B coverage. This calculation to check the population served by the KGO-DT post-transition Appendix B facility is in close agreement with the Commission's result of 6,516,000. This lends some confidence that the calculations are being performed with reasonable accuracy and that the input data for Appendix B facilities is in close agreement with the Commission's input data.

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Operation with 24.0 KW ERP and the presently licensed NTSC channel 7 non-directional antenna that is described in BPCDT-20080606AAE, the outstanding construction permit, produces coverage of 6,563,188 persons after consideration of losses to terrain and interference from post-transition DTV facilities as found in Appendix B, according to results from TV_Process calculations.

Interference Calculations

The TV_Process calculations of new interference to other stations caused by the use of 23.8 KW ERP with the proposed non-directional TCL-6A7(S) antenna in place of the Appendix B facilities for KGO identified four affected stations and show the following results:

07 KRVN, Reno, Nevada	0.0036% Additional Interference
07 KAIL, Fresno, CA	0.0009% Additional Interference
07 KRCR-TV, Redding, CA	0.0339% Additional Interference
08 KSBW, Salinas, CA	0.4517% Additional Interference

The calculations show that the proposed KGO channel 7 DTV post-transition facilities with the proposed Dielectric TCL-6A7(S) antenna when operating with 23.8 KW ERP causes no additional interference beyond that which is allowed by the Rules for post-transition DTV operation.

The complete results of interference calculations can be found in the figure that is labeled Exhibit 2 and is part of this engineering statement.

Requirements of Section 73.625 and Section 73.685

Section 73.625 requires that DTV stations provide service to their city of license. For high VHF channel stations this service is defined by the FCC Rules as the 43 dBu F(50:90) contour. Exhibit 1 is a map that shows the city of license, San Francisco, California, is completely contained within the 43 dBu contour, and meets the requirements of Section 73.625.

The present high VHF channel stations which transmit from the Sutro Tower are channel 7, KGO, Facility ID 34470, and KQED, Facility ID 35500. KQED will remain on channel 30 for its post-transition DTV service. As such there will be no television station within 20 percent of channel 7 frequencies at Sutro Tower.

Protection to Class A Stations

There is no Class A station that requires study.

Protection to Nearby AM Stations

There is no AM station within 3.2 kilometers of the KGO-DT site.

Protection to FCC Monitoring Stations and Radio Astronomy Installations

Section 73.1030 defines criteria by which FCC Monitoring Stations and other protected receiving facilities are protected from changes to their radio receiving environment.

The nearest FCC Monitoring Station is located in Livermore, California. It is located approximately 61.6 KM from the KGO transmission system. The greatest study distance for transmission systems that operate in the 174 to 180 MHz range with less than 25 KW ERP is 16 kilometers, per Section 73.1030(c)(3), and the distance to the monitoring station alone satisfies the requirements of Section 73.1030 to protect FCC Monitoring Stations.

The nearest protected receiving location is Table Mountain, Colorado. The large distance to the protected receiving location is sufficient to satisfy the requirement to protect this facility. This agrees with TV Process results which report the instant proposal needs no further consideration of protection to the Table Mountain receiving location.

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Principal Community Coverage

Exhibit 1 is a map which depicts the 43 dBu F(50:90) contour and demonstrates that the entire city of San Francisco, California is contained within this contour. This map also depicts the 36 dBu noise limited contour. This map clearly demonstrates compliance with the requirement to cover the city of license with a 43 dBu F(50:90) contour as outlined in Section 73.625(a)(1) of the Commission's Rules.

Environmental Considerations

Introduction

The KGO Transmitter is located on the Sutro Tower, 1 La Avanzada Street, San Francisco, California.

The instant application requests authority to replace the present KGO channel 7 antenna. Because the overall height of the mast upon which the antenna is located will not change, there will be no physical effect to the environment at or near the Sutro Tower attributable to KGO. Replacement of the antennas on Sutro Tower has been locally permitted and KGO is participating in the project which will replace all television antennas at the top of the Sutro Tower. KGO will change antennas or cease operation as required to assure compliance with the Commission's rules regarding human exposure to radiofrequency energy and other safety practices.

The KGO-DT main transmitting antenna is situated presently at the top level of the Sutro Tower with several other television and FM radio broadcasting stations. The proposed antenna will replace the existing KGO channel 7 antenna. The antennas associated with the broadcasting stations at the Sutro Tower have been installed over a period of several decades, with much of the recent activity owing to the construction of DTV main and auxiliary antenna systems. Measurements of radiofrequency fields on and around the Sutro Tower and associated building areas were made by the consulting engineering firm of Hammett and Edison.

Site Description

The Sutro Tower site is completely surrounded by a fence which precludes public access. The site is manned at all times, every day of the year, 24 hours each day. Access to the tower itself is controlled by electrical lock-out switches which preclude any access to the tower elevators without first obtaining a key from the Sutro Tower management. Only persons who have been properly instructed in RF safety procedures are permitted on the tower or on those locations on the site when elevated levels of radiofrequency energy are expected at ground level.

The Hammett and Edison study has concluded that during operation on main antennas, the fields at ground level do not exceed the limits in the Commission's Rules for Uncontrolled Areas. Some locations inside the perimeter fence exhibit elevated levels of radiofrequency fields when certain combinations of antennas are operating, but no location at ground level was found to exceed the occupational maximum permissible exposure limit with any combination of antennas in the recent evaluation.

Safety Practices

The Sutro Tower RF safety practices are followed within the fenced area and on the tower itself. The locations on the Sutro Tower where occupational levels are exceeded are defined in the Sutro Tower RF Safety Practices documents that are supplied to each tenant. This document also contains safety requirements to instruct workers and others who must work aloft about basic physical safety measures as well as measures that are taken to assure workers that they will not inadvertently be subjected to excessive exposure to radiofrequency energy.

The tenants who operate transmitting facilities have agreed to reduce power, operate from auxiliary antennas or cease operation when access is required by workers aloft. As a tenant, KGO-TV is required to follow the RF safety practices that have been developed, and supports efforts by Sutro Tower Inc. to revise the safety practices as required when new operations begin or older operations are modified.

Study Results

The Hammett and Edison evaluation determined that the Sutro Tower Communications Site fully complies with applicable FCC Rules regarding human exposure to radiofrequency energy.

Based on the latest evaluation of the RF environment at Sutro Tower, and the commitment of KGO-TV/DT to strictly follow the RF Safety Practices that have been developed by Sutro Tower Inc., it can be concluded that the operation of KGO-TV/DT meets the Commission's requirements regarding human exposure to radiofrequency energy, as contained in Sections 1.1307(b) and 1.1310 of the Commission's Rules and continues to meet these requirements for post-transition operation.

The KGO transmitter site as presently operating and the proposed post-transition operation complies with Section 1.1307 and the limits of human exposure to radiofrequency energy that are found in Section 1.1310 of the Commission's rules.

The KGO-DT facilities as proposed and as presently authorized and operating, meet the Commission's requirements as described in the Rules, and as such, no Environmental Assessment is required for this location.

The proposed KGO-DT post-transition DTV operation will meet the requirements of the Commission's Rules regarding human exposure to radiofrequency energy.

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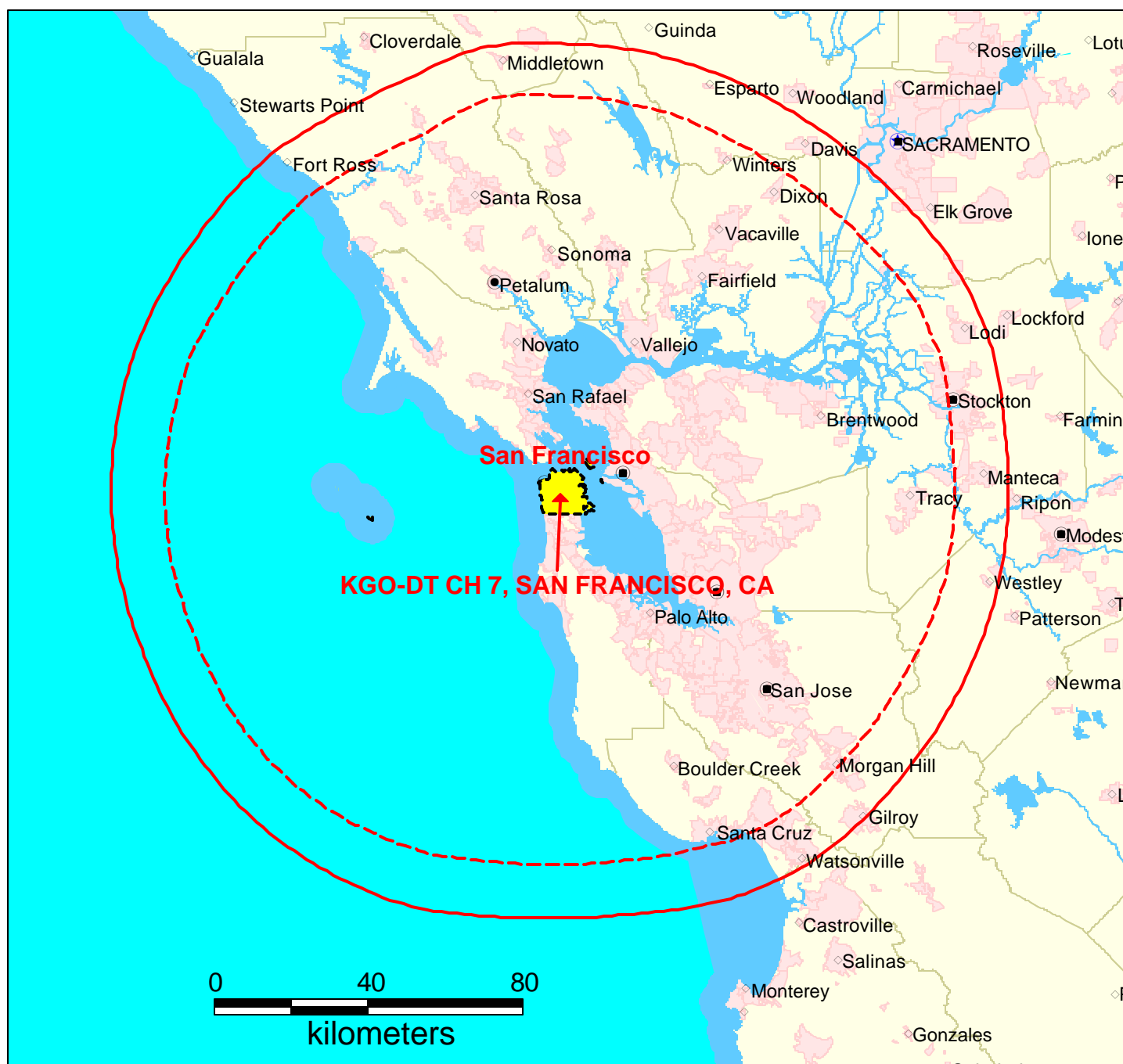
Certification

I certify that, on behalf of the KGO Television, Inc., licensee of KGO-TV and KGO-DT, the information in this statement was prepared by me or under my supervision with the assistance of Zar B. Aung, EIT. On behalf of KGO Television, Inc., I have prepared or reviewed the information that is contained in this Statement, and that after such review and examination have found it to be accurate and true to the best of my knowledge and belief.



Signed: _____
Alfred E. Resnick, P. E.

Dated: June 22, 2009



PREDICTED COVERAGE CONTOURS

KGO-DT Ch 7, SAN FRANCISCO, CA

23.8 kW, 517.6 mHAAT

544.2 mRCAMSL, NOND ANT

Predicted Noise Limited Coverage Contour
F(50,90), 36 dBu

Predicted Principal Community Coverage Contour
F(50,90), 43 dBu

JUNE 2009

CARL T. JONES
CORPORATION

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 05-29-2009 Time: 17:32:49

Record Selected for Analysis

KGO-TV BDTV -NEWKGODT7 SAN FRANCISCO CA US
Channel 07 ERP 23.8 kW HAAT 517.6 m RCAMSL 544.2 m
Latitude 037-45-19 Longitude 0122-27-06
Status CP Zone 2 Border
Dir Antenna Make Model Beam tilt Y Ref Azimuth 0.0
Last update Cutoff date Docket
Comments
Applicant

Cell Size for Service Analysis 2.0 km/side

Distance Increments for Longley-Rice Analysis 1.00 km

Facility meets maximum height/power limits

Azimuth (Deg)	ERP (kW)	HAAT (m)	36.0 dBu F(50,90) (km)
0.0	23.800	518.8	115.3
45.0	23.800	529.2	115.9
90.0	23.800	533.1	116.1
135.0	23.800	525.9	115.7
180.0	23.800	427.0	109.2
225.0	23.800	535.7	116.2
270.0	23.800	538.2	116.4
315.0	23.800	537.8	116.4

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

KGO-TV 07 SAN FRANCISCO CA BDTV NEWKGODT7

and station

SHORT TO: KGO-DT 07 SAN FRANCISCO CA DTVPLN DTVP0525
037-45-20 0122-27-05
Req. separation 273.6 Actual separation 0.0 Short 273.6 km

Proposed facility OK to FCC Monitoring Stations

Proposed facility OK toward West Virginia quite zone

Proposed facility OK toward Table Mountain

Proposed facility is beyond the Canadian coordination distance

Proposed facility is beyond the Mexican coordination distance

Proposed station is OK toward AM broadcast stations

Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
07	KGO-TV	SAN FRANCISCO CA	BDTV NEWKGODT7

Stations Potentially Affected by Proposed Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KRNV	RENO NV	282.7	LIC	BLCDDT	-20040622ABF
07	KAIL	FRESNO CA	277.2	LIC	BLCDDT	-20021002ABH
07	KRCR-TV	REDDING CA	317.0	CP	BPRM	-20000412AAE
07	KRCR-TV	REDDING CA	317.0	CP MOD	BMPCDDT	-20080613ABE
08	KSBW	SALINAS CA	139.3	CP MOD	BMPCDDT	-20080530AFT
08	KSBW	SALINAS CA	139.3	CP	BFRCDT	-20050815ACD

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Analysis of Interference to Affected Station 1

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KRNV	RENO NV	BLCDDT	-20040622ABF

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KAIL	FRESNO CA	252.4	LIC	BLCDDT	-20021002ABH
07	KWNV	WINNEMUCCA NV	260.5	CP	BPCDDT	-19991029AEB
07	KGO-TV	SAN FRANCISCO CA	282.7	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	282.7	PLN	DTVPLN	-DTVP0525
07	KRCR-TV	REDDING CA	275.7	CP	BPRM	-20000412AAE
07	KRCR-TV	REDDING CA	275.7	CP MOD	BMPCDDT	-20080613ABE

Total scenarios = 2

Result key: 1
Scenario 1 Affected station 1
Before Analysis

Results for: 7A NV RENO BLCDT 20040622ABF LIC
HAAT 879.0 m, ATV ERP 16.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	828499	47854.2
not affected by terrain losses	697953	40375.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20709	1075.2
lost to ATV IX only	20709	1075.2
lost to all IX	20709	1075.2

Potential Interferring Stations Included in above Scenario 1

7A CA FRESNO	BLCDT	20021002ABH	LIC
7A NV WINNEMUCCA	BPCDT	19991029AEB	CP
7A CA REDDING	BPRM	20000412AAE	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 7A NV RENO BLCDT 20040622ABF LIC
HAAT 879.0 m, ATV ERP 16.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	828499	47854.2
not affected by terrain losses	697953	40375.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20733	1079.3
lost to ATV IX only	20733	1079.3
lost to all IX	20733	1079.3

Potential Interferring Stations Included in above Scenario 1

7A CA FRESNO	BLCDT	20021002ABH	LIC
7A NV WINNEMUCCA	BPCDT	19991029AEB	CP
7A CA REDDING	BPRM	20000412AAE	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

Result key: 2
Scenario 2 Affected station 1
Before Analysis

Results for: 7A NV RENO BLCDT 20040622ABF LIC
HAAT 879.0 m, ATV ERP 16.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	828499	47854.2
not affected by terrain losses	697953	40375.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20713	1115.5
lost to ATV IX only	20713	1115.5
lost to all IX	20713	1115.5

Potential Interfering Stations Included in above Scenario 2

7A CA FRESNO	BLCDT	20021002ABH	LIC
7A NV WINNEMUCCA	BPCDT	19991029AEB	CP
7A CA REDDING	BMPCDT	20080613ABE	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 7A NV RENO BLCDT 20040622ABF LIC
HAAT 879.0 m, ATV ERP 16.1 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	828499	47854.2
not affected by terrain losses	697953	40375.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	20737	1123.6
lost to ATV IX only	20737	1123.6
lost to all IX	20737	1123.6

Potential Interfering Stations Included in above Scenario 2

7A CA FRESNO	BLCDT	20021002ABH	LIC
7A NV WINNEMUCCA	BPCDT	19991029AEB	CP
7A CA REDDING	BMPCDT	20080613ABE	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KAIL	FRESNO CA	BLCDT	-20021002ABH

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KRNV	RENO NV	252.4	LIC	BLCDT	-20040622ABF
07	KLAS-TV	LAS VEGAS NV	411.6	CP	BPCDT	-20020418AAD
07	KGO-TV	SAN FRANCISCO CA	277.2	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	277.2	PLN	DTVPLN	-DTVP0525
07	KABC-TV	LOS ANGELES CA	339.5	CP	BDTV	-0000
08	KSBW	SALINAS CA	187.3	CP MOD	BMPCDT	-20080530AFT
08	KSBW	SALINAS CA	187.3	CP	BFRCT	-20050815ACD

Total scenarios = 1

Result key: 3
Scenario 1 Affected station 2
Before Analysis

Results for: 7A CA FRESNO BLCDT 20021002ABH LIC
HAAT 560.0 m, ATV ERP 38.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1660067	36963.8
not affected by terrain losses	1634894	34350.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3262	693.5
lost to ATV IX only	3262	693.5
lost to all IX	3262	693.5

Potential Interfering Stations Included in above Scenario 1

7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN
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After Analysis

Results for: 7A CA FRESNO BLCDT 20021002ABH LIC
HAAT 560.0 m, ATV ERP 38.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	1660067	36963.8
not affected by terrain losses	1634894	34350.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	3249	697.5
lost to ATV IX only	3249	697.5
lost to all IX	3249	697.5

Potential Interfering Stations Included in above Scenario 1

7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP
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Analysis of Interference to Affected Station 3

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KRCR-TV	REDDING CA	BPRM	-20000412AAE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KRNV	RENO NV	275.7	LIC	BLCDDT	-20040622ABF
07	KWNV	WINNEMUCCA NV	413.3	CP	BPCDDT	-19991029AEB
07	KGO-TV	SAN FRANCISCO CA	317.0	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	316.9	PLN	DTVPLN	-DTVP0525
08	KUNO-TV	FORT BRAGG CA	128.2	CP	BPCDDT	-19991019ABW

Total scenarios = 1

Result key: 4
Scenario 1 Affected station 3
Before Analysis

Results for: 7A CA REDDING BPRM 20000412AAE CP
HAAT 1106.0 m, ATV ERP 11.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	403406	46754.0
not affected by terrain losses	372114	38613.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	310	251.9
lost to ATV IX only	310	251.9
lost to all IX	310	251.9

Potential Interfering Stations Included in above Scenario 1

8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 7A CA REDDING BPRM 20000412AAE CP
HAAT 1106.0 m, ATV ERP 11.6 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	403406	46754.0
not affected by terrain losses	372114	38613.8
lost to NTSC IX	0	0.0
lost to additional IX by ATV	359	263.9
lost to ATV IX only	359	263.9
lost to all IX	359	263.9

Potential Interfering Stations Included in above Scenario 1

8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KRCR-TV	REDDING CA	BMPCDT	-20080613ABE

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KRNV	RENO NV	275.7	LIC	BLCDDT	-20040622ABF
07	KWNV	WINNEMUCCA NV	413.3	CP	BPCDDT	-19991029AEB
07	KGO-TV	SAN FRANCISCO CA	317.0	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	316.9	PLN	DTVPLN	-DTVP0525
08	KUNO-TV	FORT BRAGG CA	128.2	CP	BPCDDT	-19991019ABW

Total scenarios = 1

Result key: 5
Scenario 1 Affected station 4
Before Analysis

Results for: 7A CA REDDING BMPCDT 20080613ABE CP
HAAT 1103.0 m, ATV ERP 14.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	462144	51570.4
not affected by terrain losses	418883	42538.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	131	307.9
lost to ATV IX only	131	307.9
lost to all IX	131	307.9

Potential Interfering Stations Included in above Scenario 1

8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 7A CA REDDING BMPCDT 20080613ABE CP
HAAT 1103.0 m, ATV ERP 14.5 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	462144	51570.4
not affected by terrain losses	418883	42538.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	273	311.9
lost to ATV IX only	273	311.9
lost to all IX	273	311.9

Potential Interfering Stations Included in above Scenario 1

8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	KSBW	SALINAS CA	BMPCDT	-20080530AFT

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KAIL	FRESNO CA	187.3	LIC	BLCDDT	-20021002ABH
07	KGO-TV	SAN FRANCISCO CA	139.3	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	139.3	PLN	DTVPLN	-DTVP0525
08	KUNO-TV	FORT BRAGG CA	373.5	CP	BPCDDT	-19991019ABW
09	KVIE	SACRAMENTO CA	168.4	CP	BDTV	-0000

Total scenarios = 1

Result key: 6
Scenario 1 Affected station 5
Before Analysis

Results for: 8A CA SALINAS BMPCDT 20080530AFT CP

HAAT 760.0 m, ATV ERP 20.6 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	4704422	47668.6
not affected by terrain losses	4216662	40970.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	692611	3120.0
lost to ATV IX only	692611	3120.0
lost to all IX	692611	3120.0

Potential Interfering Stations Included in above Scenario 1

7A CA FRESNO	BLCDDT	20021002ABH	LIC
8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
9A CA SACRAMENTO	BDTV	0000	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 8A CA SALINAS BMPCDT 20080530AFT CP

HAAT 760.0 m, ATV ERP 20.6 kW		
	POPULATION	AREA (sq km)
within Noise Limited Contour	4704422	47668.6
not affected by terrain losses	4216662	40970.2
lost to NTSC IX	0	0.0
lost to additional IX by ATV	708528	3148.2
lost to ATV IX only	708528	3148.2
lost to all IX	708528	3148.2

Potential Interfering Stations Included in above Scenario 1

7A CA FRESNO	BLCDDT	20021002ABH	LIC
8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
9A CA SACRAMENTO	BDTV	0000	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

The following station failed the de minimis interference criteria.

7D CA SAN FRANCISCO BDTV NEWKGODT7
ERP 23.80 kW HAAT 517.6 m RCAMSL 544.2 m
Antenna none

Due to interference to the following station and scenario: 1

8D CA SALINAS BMPCDT 20080530AFT
ERP 20.60 kW HAAT 760.0 m RCAMSL 1048.0 m
Antenna 99999999999999

Percent Service lost without proposal: 0.0 to BMPCDT 20080530AFT
Percent Service lost with proposal: 0.5 to BMPCDT 20080530AFT

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Analysis of Interference to Affected Station 6

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
08	KSBW	SALINAS CA	BFRCTT	-20050815ACD

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KAIL	FRESNO CA	187.3	LIC	BLCDDT	-20021002ABH
07	KGO-TV	SAN FRANCISCO CA	139.3	CP	BDTV	-NEWKGODT7
07	KGO-DT	SAN FRANCISCO CA	139.3	PLN	DTVPLN	-DTVP0525
08	KUNO-TV	FORT BRAGG CA	373.5	CP	BPCDDT	-19991019ABW
09	KVIE	SACRAMENTO CA	168.4	CP	BDTV	-0000

Total scenarios = 1

Result key: 7
Scenario 1 Affected station 6
Before Analysis

Results for: 8A CA SALINAS BFRCTT 20050815ACD CP

	POPULATION	AREA (sq km)
HAAT 736.0 m, ATV ERP 19.2 kW		
within Noise Limited Contour	3649746	38999.7
not affected by terrain losses	3007140	29901.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	446080	1050.2
lost to ATV IX only	446080	1050.2
lost to all IX	446080	1050.2

Potential Interfering Stations Included in above Scenario 1

7A CA FRESNO	BLCDDT	20021002ABH	LIC
8A CA FORT BRAGG	BPCDDT	19991019ABW	CP
9A CA SACRAMENTO	BDTV	0000	CP
7A CA SAN FRANCISCO	DTVPLN	DTVP0525	PLN

After Analysis

Results for: 8A CA SALINAS BFRCT 20050815ACD CP

HAAT 736.0 m, ATV ERP 19.2 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	3649746	38999.7
not affected by terrain losses	3007140	29901.6
lost to NTSC IX	0	0.0
lost to additional IX by ATV	457253	1094.5
lost to ATV IX only	457253	1094.5
lost to all IX	457253	1094.5

Potential Interfering Stations Included in above Scenario 1

7A CA FRESNO	BLCDT	20021002ABH	LIC
8A CA FORT BRAGG	BPCDT	19991019ABW	CP
9A CA SACRAMENTO	BDTV	0000	CP
7A CA SAN FRANCISCO	BDTV	NEWKGODT7	CP

The following station failed the de minimis interference criteria.

7D CA SAN FRANCISCO BDTV NEWKGODT7
ERP 23.80 kW HAAT 517.6 m RCAMSL 544.2 m
Antenna none

Due to interference to the following station and scenario: 1

8D CA SALINAS BFRCT 20050815ACD
ERP 19.20 kW HAAT 736.0 m RCAMSL 1034.0 m
Antenna CDB 00000000070343

Percent Service lost without proposal:	0.0	to BFRCT	20050815ACD
Percent Service lost with proposal:	0.4	to BFRCT	20050815ACD

#####

Analysis of Interference to Affected Station 7

DTV Baseline Analysis

Channel	Call	City/State	Application Ref. No.
07	KGO-DT	SAN FRANCISCO CA	DTVPLN -DTVP0525

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application Ref. No.
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Results for: 7A CA SAN FRANCISCO DTVPLN DTVP0525 PLN

HAAT 509.0 m, ATV ERP 21.0 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	7659021	40507.4
not affected by terrain losses	7026972	35889.7
lost to NTSC IX	0	0.0
lost to additional IX by ATV	0	0.0
lost to ATV IX only	0	0.0
lost to all IX	0	0.0

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
07	KGO-TV	SAN FRANCISCO CA	BDTV	-NEWKGODT7

Stations Potentially Affecting This Station

Chan	Call	City/State	Dist(km)	Status	Application	Ref. No.
07	KRNV	RENO NV	282.7	LIC	BLCDT	-20040622ABF
07	KAIL	FRESNO CA	277.2	LIC	BLCDT	-20021002ABH
07	KRCR-TV	REDDING CA	317.0	CP	BPRM	-20000412AAE
07	KRCR-TV	REDDING CA	317.0	CP MOD	BMPCDT	-20080613ABE
08	KSBW	SALINAS CA	139.3	CP MOD	BMPCDT	-20080530AFT
08	KSBW	SALINAS CA	139.3	CP	BFRCT	-20050815ACD

Total scenarios = 4

Result key: 8
Scenario 1 Affected station 7
Before Analysis

Results for: 7A CA SAN FRANCISCO BDTV NEWKGODT7 CP
HAAT 517.6 m, ATV ERP 23.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	7719186	41748.0
not affected by terrain losses	7124965	37021.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	576145	3730.7
lost to ATV IX only	576145	3730.7
lost to all IX	576145	3730.7

Potential Interfering Stations Included in above Scenario 1

7A NV RENO	BLCDT	20040622ABF	LIC
7A CA FRESNO	BLCDT	20021002ABH	LIC
7A CA REDDING	BPRM	20000412AAE	CP
8A CA SALINAS	BMPCDT	20080530AFT	CP

Result key: 9
Scenario 2 Affected station 7
Before Analysis

Results for: 7A CA SAN FRANCISCO BDTV NEWKGODT7 CP
HAAT 517.6 m, ATV ERP 23.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	7719186	41748.0
not affected by terrain losses	7124965	37021.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	557444	3606.2
lost to ATV IX only	557444	3606.2
lost to all IX	557444	3606.2

Potential Interfering Stations Included in above Scenario 2

7A NV RENO	BLCDT	20040622ABF	LIC
7A CA FRESNO	BLCDT	20021002ABH	LIC
7A CA REDDING	BPRM	20000412AAE	CP
8A CA SALINAS	BFRCT	20050815ACD	CP

Result key: 10
Scenario 3 Affected station 7
Before Analysis

Results for: 7A CA SAN FRANCISCO BDTV NEWKGODT7 CP
HAAT 517.6 m, ATV ERP 23.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	7719186	41748.0
not affected by terrain losses	7124965	37021.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	576458	3802.9
lost to ATV IX only	576458	3802.9
lost to all IX	576458	3802.9

Potential Interfering Stations Included in above Scenario 3

7A NV RENO	BLCDDT	20040622ABF	LIC
7A CA FRESNO	BLCDDT	20021002ABH	LIC
7A CA REDDING	BMPCDDT	20080613ABE	CP
8A CA SALINAS	BMPCDDT	20080530AFT	CP

Result key: 11
Scenario 4 Affected station 7
Before Analysis

Results for: 7A CA SAN FRANCISCO BDTV NEWKGODT7 CP
HAAT 517.6 m, ATV ERP 23.8 kW

	POPULATION	AREA (sq km)
within Noise Limited Contour	7719186	41748.0
not affected by terrain losses	7124965	37021.5
lost to NTSC IX	0	0.0
lost to additional IX by ATV	557757	3678.5
lost to ATV IX only	557757	3678.5
lost to all IX	557757	3678.5

Potential Interfering Stations Included in above Scenario 4

7A NV RENO	BLCDDT	20040622ABF	LIC
7A CA FRESNO	BLCDDT	20021002ABH	LIC
7A CA REDDING	BMPCDDT	20080613ABE	CP
8A CA SALINAS	BFRCCCT	20050815ACD	CP

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FINISHED FINISHED FINISHED FINISHED FINISHED FINISHED

APPENDIX

**KGO TELEVISION, INC.
TELEVISION STATION KGO-TV, FACILITY ID 34470
APPLICATION FOR POST-TRANSITION DTV CONSTRUCTION PERMIT
CHANNEL 7 – 23.8 KW (DTV AVERAGE) – 519 METERS HAAT
SAN FRANCISCO, CALIFORNIA**

DIELECTRIC TCL-6A7 ELEVATION PATTERN DATA

Contents	Dielectric TCL-6A7(S) Elevation Pattern Data
	Pages 1 and 2 - Elevation Pattern Plot
	Page 3 – Elevation Pattern Tabulation



Proposal Number	C-02068	
Date	25-Oct-07	
Call Letters	KGO-DT	Channel 7
Location	San Francisco, CA	
Customer		
Antenna Type	TCL-6A7(S)	

ELEVATION PATTERN

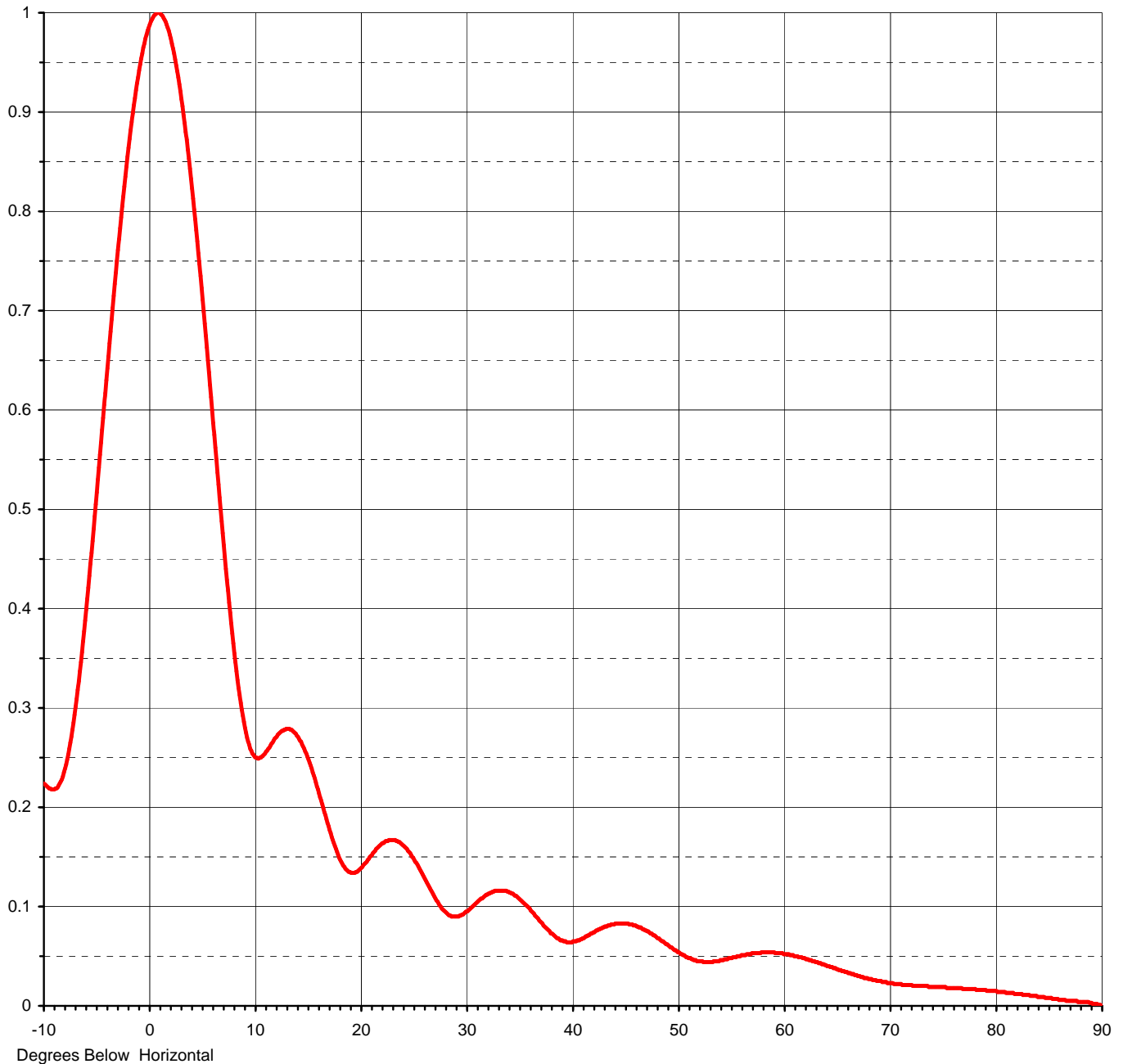
RMS Gain at Main Lobe	3.20 (5.05 dB)	Beam Tilt	0.80 deg
RMS Gain at Horizontal	3.10 (4.91 dB)	Frequency	177.00 MHz
Calculated / Measured	Calculated	Drawing #	06C032080



Degrees Below Horizontal

ELEVATION PATTERN

RMS Gain at Main Lobe	3.20	(5.05 dB)	Beam Tilt	0.80 deg
RMS Gain at Horizontal	3.10	(4.91 dB)	Frequency	177.00 MHz
Calculated / Measured	Calculated		Drawing #	06C032080-90





Proposal Number **C-02068**
Date **25-Oct-07**
Call Letters **KGO-DT** Channel **7**
Location **San Francisco, CA**
Customer
Antenna Type **TCL-6A7(S)**

TABULATION OF ELEVATION PATTERN

Elevation Pattern Drawing #: **06C032080-90**

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10.0	0.224	2.4	0.953	10.6	0.250	30.5	0.099	51.0	0.048	71.5	0.021
-9.5	0.219	2.6	0.941	10.8	0.252	31.0	0.104	51.5	0.046	72.0	0.021
-9.0	0.218	2.8	0.928	11.0	0.254	31.5	0.108	52.0	0.045	72.5	0.020
-8.5	0.224	3.0	0.913	11.5	0.262	32.0	0.112	52.5	0.044	73.0	0.020
-8.0	0.239	3.2	0.897	12.0	0.270	32.5	0.115	53.0	0.044	73.5	0.020
-7.5	0.265	3.4	0.880	12.5	0.276	33.0	0.116	53.5	0.045	74.0	0.019
-7.0	0.301	3.6	0.862	13.0	0.279	33.5	0.116	54.0	0.046	74.5	0.019
-6.5	0.346	3.8	0.843	13.5	0.278	34.0	0.115	54.5	0.047	75.0	0.019
-6.0	0.399	4.0	0.823	14.0	0.272	34.5	0.112	55.0	0.048	75.5	0.018
-5.5	0.456	4.2	0.802	14.5	0.263	35.0	0.108	55.5	0.049	76.0	0.018
-5.0	0.517	4.4	0.781	15.0	0.251	35.5	0.103	56.0	0.051	76.5	0.018
-4.5	0.580	4.6	0.758	15.5	0.235	36.0	0.098	56.5	0.052	77.0	0.017
-4.0	0.642	4.8	0.735	16.0	0.218	36.5	0.091	57.0	0.053	77.5	0.017
-3.5	0.703	5.0	0.711	16.5	0.199	37.0	0.085	57.5	0.053	78.0	0.017
-3.0	0.761	5.2	0.687	17.0	0.181	37.5	0.079	58.0	0.054	78.5	0.016
-2.8	0.783	5.4	0.663	17.5	0.164	38.0	0.073	58.5	0.054	79.0	0.016
-2.6	0.805	5.6	0.638	18.0	0.149	38.5	0.069	59.0	0.054	79.5	0.015
-2.4	0.825	5.8	0.613	18.5	0.140	39.0	0.066	59.5	0.053	80.0	0.015
-2.2	0.845	6.0	0.587	19.0	0.135	39.5	0.064	60.0	0.052	80.5	0.014
-2.0	0.864	6.2	0.562	19.5	0.134	40.0	0.064	60.5	0.052	81.0	0.013
-1.8	0.882	6.4	0.537	20.0	0.138	40.5	0.066	61.0	0.050	81.5	0.013
-1.6	0.899	6.6	0.512	20.5	0.144	41.0	0.068	61.5	0.049	82.0	0.012
-1.4	0.914	6.8	0.488	21.0	0.151	41.5	0.071	62.0	0.048	82.5	0.011
-1.2	0.929	7.0	0.464	21.5	0.158	42.0	0.074	62.5	0.046	83.0	0.011
-1.0	0.942	7.2	0.440	22.0	0.163	42.5	0.077	63.0	0.044	83.5	0.010
-0.8	0.954	7.4	0.418	22.5	0.166	43.0	0.079	63.5	0.043	84.0	0.009
-0.6	0.965	7.6	0.396	23.0	0.167	43.5	0.081	64.0	0.041	84.5	0.009
-0.4	0.974	7.8	0.375	23.5	0.166	44.0	0.082	64.5	0.039	85.0	0.008
-0.2	0.982	8.0	0.355	24.0	0.162	44.5	0.083	65.0	0.037	85.5	0.007
0.0	0.988	8.2	0.337	24.5	0.156	45.0	0.083	65.5	0.035	86.0	0.006
0.2	0.993	8.4	0.320	25.0	0.149	45.5	0.082	66.0	0.033	86.5	0.006
0.4	0.997	8.6	0.305	25.5	0.140	46.0	0.081	66.5	0.032	87.0	0.005
0.6	0.999	8.8	0.292	26.0	0.130	46.5	0.079	67.0	0.030	87.5	0.005
0.8	1.000	9.0	0.280	26.5	0.120	47.0	0.076	67.5	0.028	88.0	0.004
1.0	0.999	9.2	0.270	27.0	0.110	47.5	0.073	68.0	0.027	88.5	0.004
1.2	0.997	9.4	0.263	27.5	0.101	48.0	0.069	68.5	0.026	89.0	0.003
1.4	0.993	9.6	0.257	28.0	0.095	48.5	0.065	69.0	0.025	89.5	0.002
1.6	0.988	9.8	0.254	28.5	0.091	49.0	0.062	69.5	0.024	90.0	0.000
1.8	0.982	10.0	0.251	29.0	0.090	49.5	0.058	70.0	0.023		
2.0	0.974	10.2	0.250	29.5	0.091	50.0	0.054	70.5	0.022		
2.2	0.964	10.4	0.249	30.0	0.095	50.5	0.051	71.0	0.022		

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