

**ORIGINAL**

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

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**APR 14 2004**

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**

In the Matter of )  
 )  
Amendment of Section 73.622(b) ) MM Docket No. 04-\_\_\_\_  
Digital Television Table of Allotments ) RM-\_\_\_\_  
Anchorage, Alaska )

To: Office of Secretary  
Attn: Chief, Video Division  
Media Bureau

**THIRD AMENDMENT TO  
JOINT PETITION FOR RULE MAKING**

Channel 2 Broadcasting Company ("Channel 2 Broadcasting"), licensee of NBC-affiliated, commercial, analog television station KTUU-TV, Channel 2, Anchorage, Alaska, and permittee of unbuilt digital television station KTUU-DT, Channel 18, Anchorage, Alaska; Alaska Public Telecommunications, Inc. ("Alaska Public Telecom"), licensee of PBS-affiliated, noncommercial educational, analog television station KAKM(TV), Channel 7, Anchorage, Alaska, and permittee of unbuilt digital television station KAKM-DT, Channel 24, Anchorage, Alaska; and Smith Television License Holdings, Inc. ("Smith Television"), licensee of ABC-affiliated, commercial, analog television station KIMO(TV), Channel 13, Anchorage, Alaska, and permittee of unbuilt digital television station KIMO-DT, Channel 30, Anchorage, Alaska, (each, a "Joint Petitioner" and collectively, the "Joint Petitioners"), by their attorneys, and pursuant to Section 1.401 of the Commission's rules, hereby jointly further amend the Joint Petition for Rule Making ("Joint Petition") filed by Channel 2 Broadcasting and Alaska Public Telecom on February 20, 2003 (the "Original Joint Petition), as first amended by Channel 2

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Broadcasting, Alaska Public Telecom, and Smith Television on July 24, 2003 (the "First Amended Joint Petition"), and as subsequently amended on March 12, 2004 (the "Second Amendment") (the Original Joint Petition, as amended by the Second Amendment and by this Amendment, the "Third Amended Joint Petition.").

**Discussion**

1. By this Third Amended Joint Petition, the Joint Petitioners continue to urge the Commission to amend Section 73.622(b) (Digital Television Table of Allotments) of the Commission's rules and regulations as follows:

<u>Community</u>	<u>Current Allotment</u>	<u>Proposed Allotment</u>
Anchorage, AK	18, 20, 22, *24, *26, 28, 30, 32	*8, 10, 12, 20, 22, *26, 30, 32

2. To that end, the Joint Petitioners have removed their specification of a vertical antenna pattern. Moreover, as relates to proposed power levels, and as shown in the revised Engineering Statements which comprise Amended Exhibit A attached hereto, the Joint Petitioners propose the following ERP levels:

(a) For KAKM-DT, to operate on Channel 8 with 50 kW ERP from the F.A.M. Tower Site. This power level has been agreed to by Alaska Broadcast Television, Inc. ("ABT"), applicant for a new noncommercial analog television broadcast station on Channel 9, Anchorage, Alaska (FCC File No. BPET-19961115KE), as evidenced by Section 2 of the Settlement Agreement ("Settlement Agreement") that was filed with the Commission on March 2, 2004 under ABT's and Alaska Public Telecom's "Joint Request for Approval of Agreement" ("Joint Request"), which, if granted, will result in the dismissal of Alaska Public Telecom's application for Channel 9 and the grant of ABT's application for the same channel. The Joint

Request, including the Settlement Agreement, was attached to the Joint Petitioners' Second Amendment as Exhibit B. This power level remains unchanged.

(b) For KTUU-DT, to operate on Channel 10 with 21 kW ERP from the Frank A. Mengel Broadcast Site (the "F.A.M. Tower Site"). (Since the attached Engineering Statement for KTUU-DT demonstrates that its DTV proposal, as contained herein, will not cause prohibited interference to either ABT's proposed analog use of Channel 9 or to Alaska Public Telecom's proposed use of Channel 9, the Commission may adopt the requested Notice of Proposed Rule Making without having to await action on the Joint Request filed by ABT and Alaska Public Telecom.)

(c) For KIMO-DT, to operate on Channel 12 with 41 kW ERP from the F.A.M. Tower Site.

#### **Conclusion**

For the foregoing reasons, the Joint Petitioners respectfully renew their request that the Commission promptly initiate the rule making requested in this Third Amended Joint Petition by adopting a Notice of Proposed Rule Making that proposes to substitute:

(i) DTV Channel 8 for DTV Channel 24 at Anchorage as the digital television channel assigned to KAKM-DT with an ERP of 50 kW operating from the F.A.M. Tower Site;

(ii) DTV Channel 10 for DTV Channel 18 at Anchorage as the digital television channel assigned to KTUU-DT with an ERP of 21 kW operating from the F.A.M. Tower Site; and

(iii) DTV Channel 12 for DTV Channel 30 at Anchorage as the digital television channel assigned to KIMO-DT with an ERP of 41 kW operating from the F.A.M. Tower Site, and to modify the Joint Petitioners' respective digital construction permits accordingly.

Respectfully submitted,

Channel 2 Broadcasting Company  
Alaska Public Telecommunications, Inc.  
Smith Television License Holdings, Inc.

By: *Veronica D. McLaughlin Tippet*  
Richard R. Zaragoza  
Veronica D. McLaughlin Tippet

Their Attorneys

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2300 N Street, N.W.  
Washington, D.C. 20037-1128  
(202) 663-8000

Dated: April 14, 2004

**AMENDED EXHIBIT A**

**ENGINEERING STATEMENT  
IN SUPPORT OF THIRD AMENDMENT TO JOINT PETITION  
FOR RULE MAKING  
KTUU-DT, ANCHORAGE, ALASKA  
CHANNEL 10 21 KW MAX. 240 METERS  
APRIL 2004**

This engineering statement has been prepared on behalf of Channel 2 Broadcasting Company, licensee of station KTUU-TV, and permittee of KTUU-DT, Anchorage, Alaska in support of a Third Amendment to Joint Petition for Rule Making filed on February 20, 2003 and previously amended on July 24, 2003 and March 12, 2004 (“JPRM”) to substitute Channel 10 for the allotted Channel 18 for its digital television (DTV) operation on KTUU-DT.

At present KTUU-TV operates on analog Channel 2 (54-60 MHz) with 100 kW effective radiated power (ERP) and 219 meters antenna height above average terrain (HAAT) using a non-directional TV antenna from the Frank A. Mengel tower site (“F.A.M. Tower Site”). The geographic coordinates of that site are as follows: N 61° 25’ 22”, W 149° 52’ 20”. The F.A.M Tower Site is located approximately 22.7 km (14 miles) north of Anchorage.

The Commission has allotted KTUU-TV Channel 18 for its digital television (DTV) operation with 1000 kW ERP and 219 meters HAAT. KTUU-DT currently holds a construction permit to operate on DTV Channel 18 with 50 kW ERP and 143 meters HAAT using a non-directional TV antenna from an antenna site which is located in downtown Anchorage, Alaska.

In the JPRM, the licensees/permittees of stations KTUU-TV/KTUU-DT, KAKM(TV)/KAKM-DT and KIMO(TV)/KIMO-DT proposed the following amendment to Section 73.622(b) (Digital Television Table of Allotments) of the Commission’s rules.

<u>Community</u>	<u>Current Allotment</u>	<u>Proposed Allotment</u>
Anchorage, AK	18, 20, 22, *24, *26 28, 30, 32	*8, 10, 12, 20, 22, *26, 30, 32

The JPRM specified that the substitute DTV channels would be used by the respective DTV stations at the F.A.M. Tower Site. The Third Amendment to the JPRM (“Third Amendment”) proposes further changes to the maximum power levels and/or directional antenna system for each DTV allotment. Specifically, the Third Amendment, as it applies to KTUU-DT specifies a slightly different power level for the station. The amended Channel 10 DTV allotment for station KTUU-DT is for 21 kW maximum ERP and 240 meters HAAT (271 meters antenna radiation center above mean sea level) from the F.A.M. Tower Site which is the licensed site for KTUU-TV. The geographic coordinates of the KTUU-TV site, and thus for the collocated KTUU-DT site, are set forth above.

The attached Table I provides the relative field values for the directional horizontal pattern of the directional antenna associated with the KTUU-DT Channel 10 DTV allotment.

#### Analog TV and DTV Allocation Situation

The attached Table II shows the analog TV and DTV stations within 500 km of KTUU-DT site on co-channel 10 and adjacent channels 9 and 11. There are no TV or DTV stations or allotments on Channel 10 within 500 km of KTUU-DT site. Station KTVA-TV, Channel 11, Anchorage, Alaska, site is located 25.7 km south of the KTUU-DT site. In addition, the FCC database shows there are two pending applications for Channel 9 analog TV station at Anchorage, Alaska. These applications have been filed by Alaska Broadcast TV, Inc. (ABTV) (BPET-19960916KE) and Alaska Public Telecommunications (APT) (BPET-19961115KE). The proposed ABTV Channel 9 analog TV antenna site is located 40.2 km south of KTUU-DT. The proposed APT

Channel 9 analog TV site is co-located with KTUU-DT site. ABTV and APT have filed with the Commission a “Joint Request for Approval of Agreement” which, if granted, will result in the dismissal of APT’s Channel 9 analog TV application and the grant of ABTV’s Channel 9 analog TV application.

#### OET Bulletin 69 Study

Since the ABTV Channel 9 and the licensed KTVA, Channel 11 antenna sites are located more than 11 km and less than 125 km from the KTUU-DT site, electromagnetic interference studies were conducted according to the FCC OET Bulletin 69 to determine any impact on these two analog TV operations.

The FCC OET Bulletin 69 study was conducted for cell sizes 0.5 km/side and 1 km terrain intervals. In addition, the KTUU-DT ERP in each direction was adjusted according to the horizontal directional pattern of the DTV antenna. The vertical pattern of the proposed DTV antenna was not used in the study.

The results of the OET Bulletin 69 study are provided in the attached Table III, and indicate the proposed Channel 10 DTV operation of KTUU-DT would not cause harmful interference to more than 2% population of the Grade B contours of KTVA-TV and the proposed ABTV Channel 9 operation. Therefore, the proposed Channel 10 DTV operation at Anchorage, Alaska would be in compliance of Section 73.623(c) of the Commission’s rules.

#### Principal Community Coverage

The attached map shows the computed 36 dBu contour for the proposed KTUU-DT operation on Channel 10 with 21 kW maximum ERP and 240 meters HAAT using a

directional antenna. The map indicates the proposed 36 dBu contour would cover all of Anchorage, Alaska.

It has been demonstrated above that the proposed substitution of Channel 10 for Channel 18 would be in full compliance with the Commission's rules. Therefore, Channel 2 Broadcasting Company respectfully requests the Commission to allot Channel 10 for KTUU-TV for its DTV operation (KTUU-DT) at Anchorage, Alaska.

Under penalty of perjury the undersigned states that the foregoing statement has been prepared by him and that the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts, he believes them to be true.

5 April 2004

S. K. Khanna  
Professional Engineer  
District of Columbia, PE License No.8057

TABLE I  
KTUU-DT, CHANNEL 10, ANCHORAGE, ALASKA  
HORIZONTAL DIRECTIONAL RADIATION PATTERN  
APRIL 2004

<u>AZIMUTH</u>	<u>RELATIVE FIELD</u>	<u>ERP/kW</u>
0.0	0.710	10.59
10.0	0.800	13.44
20.0	0.870	15.89
30.0	0.950	18.95
40.0	0.960	19.35
50.0	0.900	17.01
60.0	0.820	14.12
70.0	0.740	11.50
80.0	0.680	9.71
90.0	0.640	8.60
100.0	0.730	11.19
110.0	0.830	14.47
120.0	0.940	18.56
130.0	0.970	19.76
140.0	0.940	18.56
150.0	0.840	14.82
160.0	0.750	11.81
170.0	0.690	10.00
180.0	0.680	9.71
190.0	0.750	11.81
200.0	0.830	14.47
210.0	0.910	17.39
220.0	0.930	18.16
230.0	0.890	16.63
240.0	0.810	13.78
250.0	0.740	11.50
260.0	0.690	10.00
270.0	0.700	10.29
280.0	0.780	12.78
290.0	0.870	15.89
300.0	0.940	18.56
310.0	0.940	18.56
320.0	0.860	15.53
330.0	0.800	13.44
340.0	0.710	10.59
350.0	0.660	9.15
37.0	1.000	21.00
129.0	1.000	21.00

TABLE II  
ANALOG TV AND DTV ALLOCATION SITUATION  
FOR THE PROPOSED DTV OPERATION OF  
KTUU-DT, ANCHORAGE, ALASKA  
CHANNEL 10 21 KW 240 METERS  
APRIL 2004

<u>CHANNEL</u>	<u>CALL</u>	<u>CITY/ STATE</u>	<u>GEOGRAPHIC COORDINATES</u>	<u>DISTANCE km</u>
10	KTUU-DT	Anchorage, AK	N 61-25-22 W 149-52-20	--
9	Application BPET-19960916KE	Anchorage, AK	N 61-04-02 W 149-44-36	40.2
9	Application BPET-19961115KE	Anchorage, AK	N 61-25-22 W 149-52-20	0.0
10	None within 500 km		--	--
11	KTVA(TV) LIC	Anchorage, AK	N 61-11-33 W 149-54-01	25.7

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TABLE III

TV INTERFERENCE and SPACING ANALYSIS PROGRAM

Date: 04-01-2004 Time: 18:11:27

Record Selected for Analysis

NEW USERRECORD-01 ANCHORAGE  
AK US  
Channel 10 ERP 21. kW HAAT 240. m RCAMSL 00271 m  
Latitude 061-25-22 Longitude 0149-52-20  
Status APP Zone 2 Border  
Dir Antenna Make usr Model KTUUH Beam tilt N Ref Azimuth  
0.  
Last update Cutoff date Docket  
Comments  
Applicant

Cell Size for Service Analysis 0.5 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	10.586	227.7	89.1
45.0	18.163	202.5	91.0
90.0	8.602	270.3	89.9
135.0	19.153	260.2	95.7
180.0	9.710	270.9	90.9
225.0	17.390	239.2	93.7
270.0	10.290	235.4	89.4
315.0	17.010	217.2	91.8

Evaluation toward Class A Stations

No Spacing violations or contour overlap to Class A stations

Class A Evaluation Complete

SPACING VIOLATION FOUND BETWEEN STATION

NEW 10 ANCHORAGE  
AK USERRECORD01

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and station

SHORT TO: 960916KE 09 ANCHORAGE AK BPET 19960916KE  
 061-04- 2 0149-44-36  
 Req. separation => 11.0 <= 125.0 Actual separation 40.2 Short 84.8 (29.2) km

SHORT TO: KTVA 11 ANCHORAGE AK BLCT 19831019KM  
 061-11-33 0149-54- 1  
 Req. separation => 11.0 <= 125.0 Actual separation 25.7 Short 99.3 (14.7) km

- Proposed facility OK to FCC Monitoring Stations
- Proposed facility OK toward West Virginia quite zone
- Proposed facility OK toward Table Mountian
- Proposed facility is beyond the Canadian coordination distance
- Proposed facility is beyond the Mexican coordination distance
- Proposed station is OK toward AM broadcast stations

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Start of Interference Analysis

Channel	Proposed Station Call	City/State	ARN
10	NEW	ANCHORAGE	
AK	USERRECORD01		

Stations Potentially Affected by Proposed Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
09	961115KE	ANCHORAGE AK	0.0	APP	BPET	-
19961115KE						
09	960916KE	ANCHORAGE AK	40.1	APP	BPET	-
19960916KE						
11	KTVA	ANCHORAGE AK	0.0	CP	BPCT	-
20010426AAO						
11	KTVA	ANCHORAGE AK	25.6	LIC	BLCT	-
19831019KM						

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 %

Analysis of Interference to Affected Station 1

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NTSC Baseline Analysis

Channel	Call	City/State	Application Ref. No.
09	NEW	ANCHORAGE AK	DTVPLN -NPLN0576

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist (km)	Status	Application Ref.
----------	------	------------	-----------	--------	------------------

Results for:	9N AK ANCHORAGE	DTVPLN	NPLN0576	PLN
		POPULATION	AREA (sq km)	
within Noise Limited Contour		289136	28253.6	
not affected by terrain losses		269649	24921.3	
lost to NTSC IX		0	0.0	
lost to additional IX by ATV		0	0.0	
lost to all IX		0	0.0	

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	961115KE	ANCHORAGE AK	BPET -19961115KE

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist (km)	Status	Application Ref.
09	KUAC-TV	FAIRBANKS AK	401.7	LIC	BLET -319
10	NEW	ANCHORAGE			
AK	0.0	APP			USERRECORD-01

Proposal causes no interference

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Analysis of Interference to Affected Station 2

Analysis of current record

Channel	Call	City/State	Application Ref. No.
09	960916KE	ANCHORAGE AK	BPET -19960916KE

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist (km)	Status	Application Ref.
10	NEW	ANCHORAGE			
AK	40.1	APP			USERRECORD-01

Total scenarios = 1

Result key: 1  
Scenario 1 Affected station 2  
Before Analysis

KHANNA & GULL, Inc. - Consulting Engineers

Results for: 9N AK ANCHORAGE	BPET	19960916KE	APP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	289136	28253.6	
not affected by terrain losses	269649	24921.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 9N AK ANCHORAGE	BPET	19960916KE	APP
	POPULATION	AREA (sq km)	
within Noise Limited Contour	289136	28253.6	
not affected by terrain losses	269649	24921.3	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4465	138.7	
lost to all IX	4465	138.7	

Potential Interfering Stations Included in above Scenario 1

10A AK ANCHORAGE  
USERRECORD01 APP

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Analysis of Interference to Affected Station 3

NTSC Baseline Analysis

Channel	Call	City/State	Application	Ref. No.
11	KTVA	ANCHORAGE AK	DTVPLN	-NPLN0694

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
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Results for: 11N AK ANCHORAGE	DTVPLN	NPLN0694	PLN
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
11	KTVA	ANCHORAGE AK	BPCT	-20010426AAO

Stations Potentially Affecting This Station

**KHANNA & GULL, Inc. - Consulting Engineers**

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
11	KTVF	FAIRBANKS AK	395.3	LIC	BLCT	-
10	NEW	ANCHORAGE AK	0.0	APP	USERRECORD-01	

Proposal causes no interference

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Analysis of Interference to Affected Station 4

Analysis of current record

Channel	Call	City/State	Application	Ref. No.
11	KTVA	ANCHORAGE AK	BLCT	-19831019KM

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist(km)	Status	Application	Ref.
10	NEW	ANCHORAGE AK	25.6	APP	USERRECORD-01	

Total scenarios = 2

Result key: 2  
Scenario 1 Affected station 4  
Before Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 1

After Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4732	850.9	
lost to all IX	4732	850.9	

Potential Interfering Stations Included in above Scenario 1

10A AK ANCHORAGE

KHANNA & GULLI, Inc. - Consulting Engineers

USERRECORD01 APP

Result key: 3  
 Scenario 2 Affected station 4  
 Before Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	0	0.0	
lost to all IX	0	0.0	

Potential Interfering Stations Included in above Scenario 2

After Analysis

Results for: 11N AK ANCHORAGE	BLCT	19831019KM	LIC
	POPULATION	AREA (sq km)	
within Noise Limited Contour	250632	10652.7	
not affected by terrain losses	249923	9759.9	
lost to NTSC IX	0	0.0	
lost to additional IX by ATV	4732	850.9	
lost to all IX	4732	850.9	

Potential Interfering Stations Included in above Scenario 2

10A AK ANCHORAGE  
 USERRECORD01 APP

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Analysis of Interference to Affected Station 5

Analysis of current record

Channel	Call	City/State	Application Ref. No.
10	NEW	ANCHORAGE	
AK	USERRECORD-01		

Stations Potentially Affecting This Station

Chan No.	Call	City/State	Dist (km)	Status	Application Ref.
09	961115KE	ANCHORAGE AK	0.0	APP	BPET -
	19961115KE				
09	960916KE	ANCHORAGE AK	40.1	APP	BPET -
	19960916KE				
11	KTVA	ANCHORAGE AK	0.0	CP	BPCT -
	20010426AAO				

Total scenarios = 2

KHANNA & GULL, Inc. - Consulting Engineers

Result key: 4  
 Scenario 1 Affected station 5  
 Before Analysis

Results for: 10A AK ANCHORAGE

USERRECORD01	APP		
HAAT	240.0 m,	ATV ERP	21.0 kW
		POPULATION	AREA (sq km)
within Noise Limited Contour		264922	26474.7
not affected by terrain losses		263947	23075.4
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

Potential Interfering Stations Included in above Scenario 1

Result key: 5  
 Scenario 2 Affected station 5  
 Before Analysis

Results for: 10A AK ANCHORAGE

USERRECORD01	APP		
HAAT	240.0 m,	ATV ERP	21.0 kW
		POPULATION	AREA (sq km)
within Noise Limited Contour		264922	26474.7
not affected by terrain losses		263947	23075.4
lost to NTSC IX		13	234.5
lost to additional IX by ATV		0	0.0
lost to ATV IX only		0	0.0
lost to all IX		13	234.5

Potential Interfering Stations Included in above Scenario 2

9N AK ANCHORAGE BPET 19960916KE APP

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