FCC Form 30°2 March 1977

Section |

Approved By GAO B-180227 (RO 176)

United States of America Federal Communications Commission

GINFFR'S

APPLICATION FOR NEW BROADCAST STATION LICENSE

INSTRUCTIONS

A. This form is to be used in all cases when applying for a Broadcast Station License. It consists of this part, Section I, and the following sections:

Section II - A, License Application Ergineering Data Standard Broad-

Section II - B, License Application Engineering Data FM Broadcast

Section II - C, License Application Engineering Data Television Broad cast FEB 16 190 B. Prepare and file three copies of this form and all exhibits with

B. Prepare and file three copies of this form and all exhibits with Federal Communications Commission, Washington, D.C. 20554.
C. Number exhibits serially in the space provided in the body of the form and list each exhibit in the space provided on page 2 of this Section. Date each exhibit and each antenna pattern.

D. The name of the applicant must be stated exactly as it appears on the construction permit which is being covered.

E. Information called for by this application which is already on file with the Commission need not be refiled in this application provided (1) the information is now on file in another application or FCC form filed by or on behalf of this applicant; (2) the information is identified fully by reference to the file number (if any), the FCC form number, and the filing date of the application or other form containing the information and the page or paragraph referred to, and (3) after making the reference, the applicant states; "No change since date of filing." Any such reference will be considered to incorporate into this application all information, confidential or otherwise, contained in the application or other form referred to. The incorporated application or other form will thereafter, in its entirety, be open to the public.

F. This application shall be personally signed by the applicant, if the applicant is an individual; by one of the partners, if the applicant is a partnership; by an officer, if the applicant is a corporation; by a member who is an officer, if the applicant is an unincorporated association; by such duly elected or appointed officials as may be competent to do so under the laws of the applicable jurisdiction, if the applicant is an eligible government entity; or by the applicant's attorney in case of the applicant's physical disability or of his absence from the United States. The attorney shall, in the event he signs for the applicant, separately set forth the reason why the application is not signed by the applicant. In addition, if any matter is stated on the basis of the attorney's belief only (rather than his knowledge), he shall separately set forth his reasons for believing that such statements are true.

G. BE SURE ALL NECESSARY INFORMATION IS FURNISHED AND ALL PARAGRAPHS ARE FULLY ANSWERED. IF ANY PORTIONS OF THE APPLICATION ARE NOT APPLICABLE, SPECIFICALLY SO STATE. DEFECTIVE OR INCOMPLETE APPLICATIONS MAY BE RE-TURNED WITHOUT CONSIDERATION. H. See back of last page for Privacy Act Notice. File No BLH-810217 AI

appricant (include ZIP Code)

(See Instruction D)

PENINSULA COMMUNICATIONS, INC..

P.O. Box 103 - KGTL RADIO

Homer, Alaska 99603

(907) 235-7551 or 235-7651

Notices and communications with respect to this application are to be addressed to the following - named persons at the address indicated (Include ZIP Code) David F. Becker

P.O. Box 103 Homer, Alaska

and the second		And the second			
1. Facilities authorized	d by construc	tion permit			
Frequency	Channel No.	No. Power in kilowatts			
103.5 Mhz	278 <u></u> C	Night 100	^{Day} 100		
Hours of operation		Call letters KGTL+FM			
2. Construction permit	covered by th	is application			
File number	E	Date			
BPH-800422AB		July 8	. 1980		
Construction begun	0	Construction completed			
August 1, 1980	D 1	December 1, 1980			

Is the station now in satisfactory operating condition Yes X No and ready for regular operation? If not, explain

PROGRAM DATA

3. Has applicant any contract, arrangement, or understanding, expressed or implied, with a network organization for the broadcasting of network programs? On file

Does applicant, in the event this application is granted, Yes X No propose to broadcast network programs? If network programs are to be broadcast, state as Exhibit No. # 1 arrangements under which they are to be obtained and attach copies of any contractual arrangement which may have been made. If the arrangement is based on an oral understanding, a written statement of the arrangement should be submitted.

FINANCIAL DATA	a desta de la composición de la composi		
4. Give actual costs of making installation	on for which construction was authoriz	ed	
Transmitter proper including tubes	Antenna system, including antenna-ground system, coupling equipment, trans- mission line	Frequency and modulation monitors	Studio technical equipment, microphones, transcription equipment, etc.
\$ 7,173.98	\$ 25,111.28	s none	s none
Acquiring land none	Acquiring or constructing buildings none	Other items, state nature none	Total 32,285.26

All previous edition of this form are canceled.

	DATA (Continued)			Secti	ion I, Page 2
5. (a) Attach Exhibit No. No. on file with request in tion in fin	a detailed balance sh b. 2 (b) If the actu a detailed statement sl th the Commission an this application is for ancial position has oc	eet, as at the completion dat al cost of construction mater lowing the plan used to finan Annual Financial Report (FC a change in existing facilit curred.)	te of the authorized const vially exceeds the origina ince such construction. (I C Form 324) showing its ies, these exhibits need i	nuction, showing applicant's financial lestimated cost of construction, attac f applicant is licensee of a broadcast financial position within the past 12 m not be supplied provided that no subst	position as h as Exhibit station having nonths and the antial reduc-
 State chan (If none, s 	ges, if any, in capital o state)	zation, and report any contr	acts affecting ownership	not shown in the application for const	nuction permit.
	NONE				
7 Annat (christer to the agencies of the contract of the	-	
set forth in If "No", s	the above-described at the exceptions.	cted, have all the terms, con application for construction p	ditions, and obligations permit been fully met?	Yes Ž	No 🗌
8. Is a reque	st for authority to conc	luct program tests a part of t	his application?	Yes] No 🕅
THE A power of th zation in a	APPLICANT hereby te United States bec ccordance with this	waives any claim to the u ause of the previous use application. (See Section	ase of any particular fr of the same, whether b a 304 of the Communica	equency or of the ether as against y license or otherwise, and reques ations Act of 1934).	the regulators ts an authori
THE A ination on a	APPLICANT represe any other application	nts that this application with which it may be in	is not filed for the purp conflict.	pose of impeding, obstructing, or d	elaying deter
THE A terial repre application	PPLICANT acknow sentations, and that	edges that all the statem all the exhibits are a ma	ents made in this appl terial part hereof and a	cation and attached exhibits are c re incorporated herein as if set ou	considered ma t in full in th
		C	ERTIFICATION		
I certif	y that the statement	s in this application are			
are made in			The complete and com		
and made in	good faith.	are are	rue, complete, and cor	rect to the best of my knowledge a	nd belief, an
	good faith.		rue, complete, and cor	rect to the best of my knowledge a	nd belief, and
	good faith.		rue, complete, and cor Signed and	dated this <u>10</u> day of <u>Februa</u>	nd belief, an
WILLFUL FORM AR MENT. U	good faith. FALSE STATEMENTS E PUNISHABLE BY F . S. CODE, TITLE 18,	MADE ON THIS INE AND IMPRISON- SECTION 1001.	rue, complete, and cor Signed and PENINS	tect to the best of my knowledge a dated this $\frac{10}{2}$ day of $\frac{10}{2}$ Junc Hebruar ULA COMMUNICATIONS, INC	nd belief, an
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6 B)



February 11, 1981

Mr. William J. Tricarico, Secretary Federal Communications Commission 1919 M Street, N. W. Washington, D.C. 20554 RECEIVED BY FCC MAIL BRANCH ON FEB 1 6 1981

RE: BP 800226AM and BPH 800422AB

Dear Mr. Tricarico:

Submitted herewith are the following:

-- FCC Form 302- Application for a new AM broadcast license, 620 kHz, 5 kw - Homer, Alaska

-- FCC Form 302- Application for a new FM broadcast license, 103.5 mHz, 100 kw- Homer, Alaska

The above applications are for a new AM station and modification of power, change of antenna and HAAT of an existing station, KGTL-FM, in Homer, Alaska.

A request for Program Authority Test for the new AM station was granted today per telephone conversation with Mr. Bill Martin, FCC, (202) 254-9570 at 4:30 am (AST) 2/11/81. This is to be followed by telegram confirmation.

Please refer any questions with regard to these matters to myself. Yours truly,

Favid & Becker

David F. Becker, President Peninsula Communications, Inc K G T L Radio- AM/FM



LICENSE APPL				CATIONS COMMISSION		Section II
	A BROADCAST	ERING DATA N	lame of Applicant	· · · -		
1 Encilities au	the stand in second		entinsula com	munications, 14c.		
Coll Sta	Inorized in constru	ction permit		9, Transmission line		
Call Sign File No. of construction permit		t	Make	Type No.	Description	
KGIL-FM	DPH-80	10422 AB	/	Cablewave	HCC 300-	Air
Frequency	Effective	Antenna			50.J	Wellflex
103.5 MHz	power in 100K	W average terrain	1,150 ft.	Size: (nominal inside transverse dimension) in inches	Length in feet	Rated efficiency in percent for this lengt
2. Station locati	on		ana ana amin'ny faritr'oran' amin'ny faritr'orana amin'ny faritr'orana amin'ny faritr'orana amin'ny faritr'oran	3 inch	495 feet	83% V
State	-	City or town	an Alek kelan sedang berakan kelakan berakan berakan perakan perakan berakan perakan berakan berakan berakan b			03%
Alas	ka	Homer		10. Modulation monitor		
3. Transmitter la	ocation			Make	Type No.	
State	ander and a second s	County Kena	1	TFT	763 &	72/14
Alas	ka	Peninsula	Borough		, 05 u	
City or town		Street Address	(or other identifica-	-11. Frequency measureme	ents	
17		tion) Diamo	nd Ridge Rd.	Give the following data of	on the checks of th	ne frequency
nomer		Lofty Fet	o DIK.4	Date and Time	Frequ	sency measured by such
A Main sudial	cation (far -	LOLLY ESL	ares oup. #1			-Banel of method
State	Canon Coame	as above				
Alack	9	Ke	nai	1.11/30/80 22:15	103.	499988
City of town	a	Peninsu	la Borough	12/7/80 21.05	102	500002
Homer		Street address		2.12/1/00 21:05	103.	500023
5 0.		mile 1.8	Diamond Ridg	10/11/200		
J. Remote contro	point location		and the Difference of the same of the same state of the sam	3.12/14/80 21:05	103.	499976
none		City or Town		Name of checking agency	or method used	
6. Transmitter in	Transmitter installed Type No. Rated Power		graphs together with description of measurement procedures and instruments with regard to the following: (All measurements shall be made with the equipment adjusted for normal program			
Make	1570iled	Type No.	Rated Power	graphs together with de instruments with regard shall be made with the	scription of measu to the following: equipment adjusted	grams, and appropriate rement procedures and (All measurements d for normal program
Make CCA	nstalled	Type No. FM20,000E	Rated Power 22kw	graphs together with de instruments with regard shall be made with the operation and shall incl microphone terminals ar	scription of measu to the following: equipment adjusted lude all circuits be of the aptenne out	grams, and appropriate irement procedures and (All measurements d for normal program etween the main studio nut including telephone
Make CCA 7. Operating con	nstants	Type No. FM20,000E	Rated Power 22kw	graphs together with de instruments with regard shall be made with the operation and shall incl microphone terminals ar lines, preemphasis circ	scription of measu to the following: equipment adjusted lude all circuits be and the antenna outputs uits and any equal	grams, and appropriate rement procedures and (All measurements d for normal program stween the main studio put, including telephone izers employed except
Make CCA 7. Operating con "D.C. plate curren in last radio stag in amperes	nstalled	Type No. FM20,000E Applied D.C voltage of la stage, in vol	Rated Power 22kw - plate st radio 7700v ts	graphs together with de instruments with regard shall be made with the operation and shall incl microphone terminals ar lines, preemphasis circ for microphones, and wi amplifier is installed.)	scription of measu to the following: equipment adjusted lude all circuits be nd the antenna outjuits and any equal ithout compression	grams, and appropriate rement procedures and (All measurements d for normal program etween the main studio put, including telephone izers employed except if a compression
Make CCA 7. Operating con "D.C. plate curren in last radio stag in amperes Plate input power isst radio stage, i kilowatts	to in 25.179	Type No. FM20,000E Applied D.C. voltage of la stage, in vol Efficiency fa of transmitte operating por percent	Rated Power 22kw 22kw st redio 7700v ts ctor F r at ver, in 76%	graphs together with de instruments with regard shall be made with the operation and shall incl microphone terminals an lines, preemphasis circ for microphones, and wi amplifier is installed.) a. Audio frequency reap mately 25, 50 and 100 p be made on at least the 400, 1000, 5000, 10,000	scription of measu to the following: equipment adjusted lude all circuits be not the antenna out uits and any equal ithout compression ponse from 50 to 15 percent modulation. following audio fr and 15,000 Hertz.	grams, and appropriate irement procedures and (All measurements d for normal program attween the main studio put, including telephone izers employed except if a compression 5,000 Hertz for approxi- Measurements shall equencies: 50, 100, The frequency
Make CCA 7. Operating cor D.C. plate curren in last radio stag in amperes Plate input power last radio stage, i kilowatts Transmitter power output in kw by indirect method	astants at 3.27a to in 25.179 19.12	Type Nc. FM20,000E Applied D.C. voltage of la stage, in vol Efficiency fa of transmitte operating por percent RF transmiss line meter re- relat	Rated Power 22kw .plate st radio7700v ts .ctor F r at n 76% sion 100% tive power	graphs together with de instruments with regard shall be made with the operation and shall incl microphone terminals ary lines, preemphasis circ for microphones, and wi amplifier is installed.) a. Audio frequency resp mately 25, 50 and 100 p be made on at least the 400, 1000, 5000, 10,000 response measurements phasis; however, stands employed in the measure	scription of measu to the following: equipment adjusted lude all circuits be not the antenna outy uits and any equal ithout compression ponse from 50 to 15 percent modulation. following audio fr and 15,000 Hertz, should normally b and 75 microsecond ing equipment or a set	grams, and appropriate irement procedures and (All measurements d for normal program etween the main studio put, including telephone izers employed except if a compression 5,000 Hertz for approxi- . Measurements shall equencies: 50, 100, . The frequency e made without deem- I deemphasis may be ystem provided the Helent to increase
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Broadcast Application	FM BROADCAST ENGINEERING DATA	Section II-B, Page :
13. In what respect, if any, does not in the permit?	the apparatus constructed differ from that described in the appli	cation for construction permi
NONE		
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		5 B .
I certify that I represent the applic	cant in the capacity indicated below and that I have examined th	e foregoing statement of
technical information and that it is	s true to the best of my knowledge and belief.	<i></i>
	 C. S. M. M.	
T 1 10 1001	() DED	Do
DateFebruary 10, 1981	Signature Florid FBec	her
	David F. Becker	x below)
	Technical Director	
Telephone No. (907) 235-75	51 Consulting Engineer	
(include area code	e) KX Chief Operator	
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ENGINEERING REPORT KGTL

The Second Audio Proof of Performance for Radio Station KGTL, Homer, Alaska 99603

This proof was run November 23 and 30, 1980 between 9pm and 3am the next morning. The entire proof was performed by David F. Becker, President of Peninsula Communications, Inc. and chief Engineer of KGTL Radio.

Procedure

The procedure to run this proof was basically the same as outlined in the First Audio Proof performed last year. Due to construction changes which were in the process of being made to increase power from 25 kw to 100 kw during the months of Sept., Oct. and the first two weeks of November, it was not possible to perform final Proof measurements until construction was completed. The changes made as authorized by the construction permit were to increase tower height from 283 feet to 406 feet; replace a 7 bay, low-power circular-polarized FM antenna and 1-5/8" transmission line with a 6 bay, high-power horizontally polarized FM antenna and 3" transmission line. Also, the CCA FM 8000E (8.2 kw) transmitter was converted into a CCA FM 20,000E (22 kw) transmitter. This was done by installing a factory conversion kit consisting of a new final tube (3CX15,000A7) and higher voltage and current power supply components.

The proof was run at the new authorized power level of 100,000 watts with the Orban Optimod Stereo Generator automatic level control disabled. All test equipment was at the studio during the time measurements were made. The signal was demodulated at the station's FM and Stereo Modulation monitors. Both modulation monitors were calibrated following procedures outlined by the manufacturer and were adjusted to conform to manufacture's specifications of accuracy. A Potomac AT-51 Audio Test System was utilized which has an automatic "null" feature for measuring distortion, thus greatly simplifying this part of the proof. A "L+R/L-R" test box constructed for the first proof was again used for performing cross-talk measurements. Channel balance was set-up using the L-R meter function of the Optimod Stereo Generator and adjusting for a null with equal amplitude and phase on both left and right channels.

Beautifully Gentle



ENGINEERING REPORT KGTL page two

DATA

Attached are the data summary sheets and frequency response and distortion measurement graphs. As the data indicates, the proof shows the station performance at the new 100,000 watt power level to meet and exceed all FCC performance specifications. The station technical performance continues to be excellent in all operating parameter areas.

Final System Adjustment

All that was required following the proof to restore normal broadcast operation was to switch the Optimod automatic level control back into operation. Input levels were set for approximately 6db average gain reduction on normal program levels. This allows for approximately 10 db additional head room for levels which may inadvertently be higher and yet will not exceed 100 % modulation.

Signal reports 75-80 miles distant have indicated with the new higher power level and increased antenna height there is a substantial improvement in quality of reception.

Date

David F. Becker, Chief Engineer, P1-23-2389 and President KGTL

Beautifully Gentle



FM Radio Station KGTL

Second Annual Proof of Performance

5

Block Diagram fo the System Tested Radio Station KGTL, Homer, Alaska David F. Becker, Chief Engineer



1980 ANNUAL PROOF OF PERFORMANCE

List of Station Equipment Tested

(1)	Studio Console
(2)	Intermediate AGCnone
(3)	Telephone Line Co
(4)	Telco Line Equalizernone
(5)	Limiter 8000A
(6)	Transmitter
(7)	ExciterCCA FM-40E
(8)	Antenna System Polar.
(9)	Modulation MonitorTFT 763 FM and 724A Stereo
(10)	Frequency MonitorSystron-Donner 1037

List of Equipment Used

(1)	Audio Oscilator
(2)	Audio Osc. to Equip. CouplerInterface Coupler Box. A20's
(3)	Demodulator
(4)	Distortion MeterPotomac AA-51
(5)	Audio VTVM Hewlett-Packard HP 400D
(6)	Frequency CounterSystron-Donner 1037 with 500Mhz Plug-in

Certification

I do hereby certify that:

- (1) I did perofrm the engineering work as described and did compose this report.
- (2) I am the holder of a currently valid FCC first class license, P1-23-2389, continously since 1969.
- (3) I have a B.S.E.E. degree from California State Polytechnic University, 1967 and a M.S.E.E. degree from the University of California, 1970.
- (4) My qualifications to perform this exact type of work are known to personnel of the FCC with offices in Anchorage and Washington, D.C.
- (5) That the work and the data given in this report is true, correct and accurate to the best of my knowledge.

F. Becker, Chief Engineer P1-23-2389 Date Beautifully Gentle



Beautifully Genile

DATA SUMMARY SHEET STATION _____ FM

P.O. BOX 103 • HOMER, ALASKA 99603

	NOISE TESTS: AM NOISE-57 dB FM LEFT (or mono)-60.5dB FM RIGHT-63							ант <u>-63.0</u> dв
			LEET (or mono)				RIGHT	тен тен тен тел тел тен
	FREQ	GEN. OUT.	RESP. DEV.	DIST.	FREQ	GEN. OUT.	RESP. DEV.	DIST.
	÷ε0	32.4	- 0.6	0.28	50	31.9	- 0.7	0.35
ingenerative spectrum of the filling	TÜC	32.4	-0.6	0.2.3	100	32.1	-0.5	0.27
	400	33.0	REF	0.23	400	32.6	REF	0.25
0% N	14.	33.9	0.9	0.22	1 k	33.5	0.9	0.21
10(100	40.9	7.9	0.43	5*	40.8	8.2	0.27
ingli an manageri and an an	104	46.5	13.5	0.96	10k	46.1	13.5	0.56
Annual Contents	15K	49.7	16.7	2.2	15k	49.1	. 16.5	1.
ga Jan ya Mileki ya mana na Pakata ya Mana ya M	50	37.7	···· 0.6	0.2.9	50	37.1	- 0.7	0.28
	100	37.7	- 0.6	0.27	100	37.3	-0.4	0.23
()	. 400	38.3	REF	0.28	400	37.7	REF	0.22
1. 0/20	11-	38.9	0.6	0.30	1 k	38.5	0.8	0.2.1
5(5 k	46.3	8.0	0.74	5k	46.0	8.3	0.42
	1Ùk	51.5	13.2		10k	51.0	13.3	
	1.5k	54.7	16.4		15k	54.2	16.5	
And an an address of the second	50	43.6	-0.4	0.47	50	43.2	-0:4	0.31
	100	43.5	-0.5	0.45	100	43.)	-0.5	0.30
	400	44.0	REF	0.49	400	43.6	REF	0.31
₩ %	1 k	44.9	0.9	0.49	1k	44.7	1.1	0.34
25	5ĸ	52.1	8.1	1.6	5k	51.7	8.1	0.2.8
Arthurst Index Are Arthurst Inter	104	57.4	13.4		10k	57.0	13.4	
	154	60.4	16.4		15k.	60.0	16.4	

ALL RESPONSE DATA IN dB ALL DISTORTION DATA IN%

ALL TESTS PERFORMED BY David F. Becken P1-23-238



P.O. BOX 103 • HOMER, ALASKA 99603

FM STEREO PERFORMANCE DATA

STEREO SEPARATION

RESIDUAL LEFT IN RIGHT FREQ. RESIDUAL RIGHT IN LEFT

	-41.0	50	- 40.5	
	-45.7	100	- 45.5	
	- 51.1	400	-50.7	•
dB	- 52.0	1 k	-51.4	dB
	-52.0	ъĸ	-51.5	,
	- 51.5	10k	-51.5	
	-47.6	15k	-52.3	

CROSS-TALK

RESIDUAL MAIN IN SUB CHANNEL FREQ. RESIDUAL SUB IN MAIN CHANNEL

	-47	50	- 44	
	- 52	100	- 50	
	- 50	400	- 55°	
oВ	- 50	1 K	- 53 xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	dB
	- 50	5k	-48	
	-44	10k	and but 0	
	-40	15k	-40	

38 kHz SUPPRESSION = -63 dB (1% = 40dB) PILOT INJECTION = 9.5%, FREQ. DEV. = -0.1 Hz Diff put Frequency = 103.499956 MHz (18.9999 KHz) channel 278C/= 103.5 MHz

ALL TESTS PERFORMED BY: David F. Becker PI-23-2389

DATE: 11-30-80





DATE: 11-30-80





P.O. BOX 103 • HOMER, ALASKA 99603

FM FREQUENCY RESPONSE

MONO LEFT RIGHT



ALL TESTS PERFORMED BY: David F.Becker P1-23-2389

DATE: 11-30-80

dB



ALL TESTS PERFORMED BY David F. Becker P1-23-2389

DATE: 11-30-80





FM SYSTEM DISTORTION

MONO LEFT X RIGHT



ALL TESTS PERFORMED BY: Favid F.Becker P1.23.2389



FM SYSTEM DISTORTION

FM 103.5

ALASKA'S MOST POWERFUL RADIO STATION

RIGHT 🗶 MONO LEFT 🖸



ALL TESTS PERFORMED BY: David F.Becker P1-23-2389