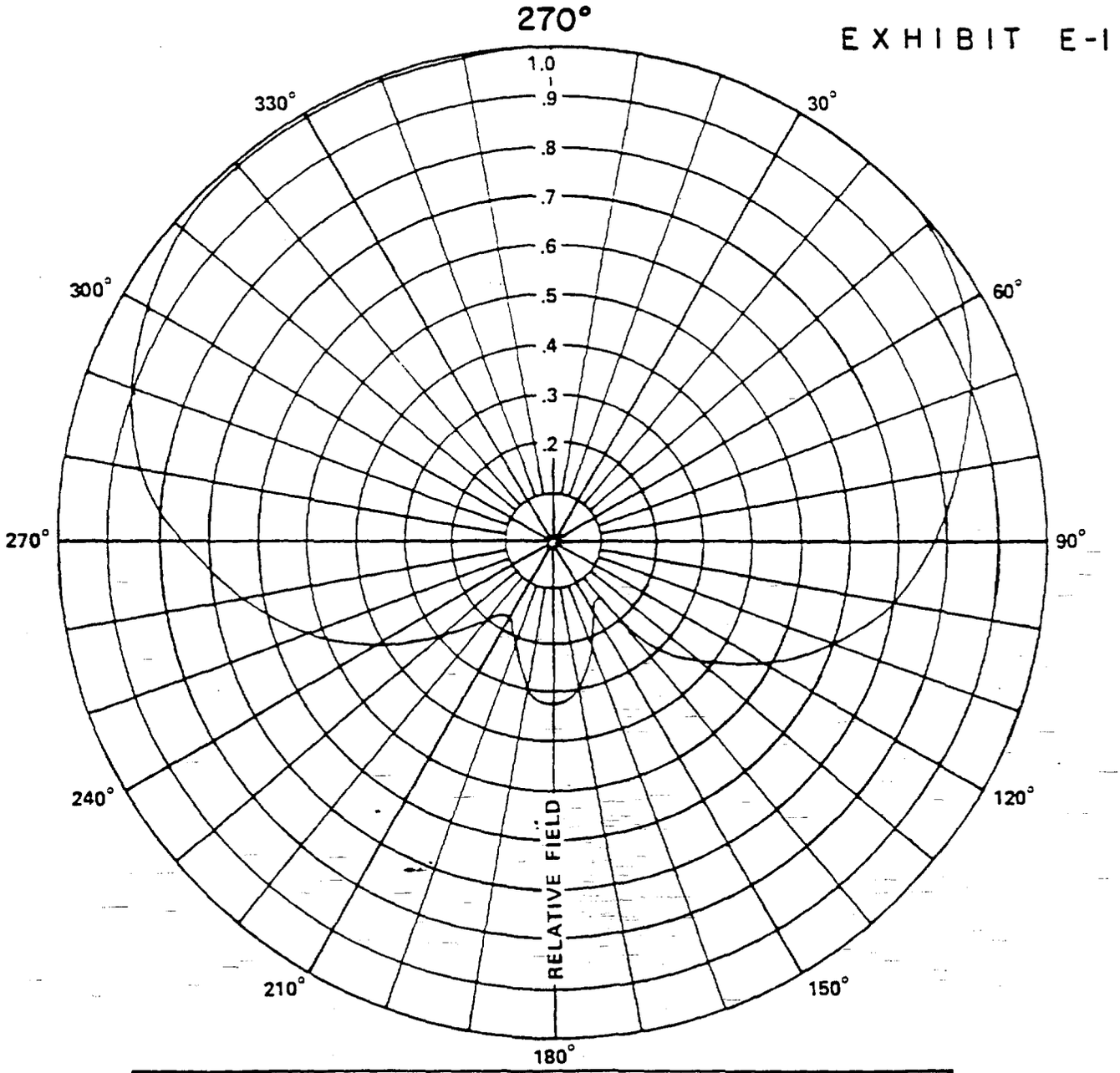
ANDREW

UHF TV SLOT ARRAY AZIMUTH PATTERN

'L' SERIES BROAD CARDIOID

ATW12L4-HSB-15

EXHIBIT E-1



CUSTOMER	PORTERVILLE, CAL.	
CHANNEL	15	
HORIZONTAL DIRECTIVITY	1.86	2.7 dB
DIRECTION OF PEAK	AS REQUIRED	

EXHIBIT E-2

ANTENNA RADIATION CHARACTERISTICS

TRINITY BROADCASTING NETWORK

PROPOSED TELEVISION TRANSLATOR K15CO
CHANNEL 15 - PORTERVILLE, CALIFORNIA
[MODIFICATION OF BPTT-880624ID]

Azimuth (° T)	Relative Field	Azimuth (° T)	Relative Field
0	1.00	180	0.32
10	1.00	190	0.30
20	1.00	200	0.22
30	1.00	210	0.18
40	1.00	220	0.21
50	0.99	230	0.29
60	0.96	240	0.42
70	0.89	250	0.53
80	0.83	260	0.64
90	0.77	270	0.76
100	0.70	280	0.84
110	0.60	290	0.90
120	0.48	300	0.94
130	0.38	310	0.98
140	0.20	320	0.99
150	0.16	330	0.99
160	0.21	340	0.99
170	0.30	350	0.99

SECTION II - ENGINEERING DATA AND ANTENNA AND SITE INFORMATION

1. Facilities requested:

Output Channel No.	Transmitter Rated Power Output	Proposed Community(ies) to be served	
		City	State
15	1.0 kilowatts	Porterville	Calif.

Frequency Offset (check one)

☐ No offset ☒ Zero offset ☐ Plus offset ☐ Minus offset

Translator Input Channel No. 65

2. Proposed transmitting antenna location:

City	State	County
near Exeter	Calif.	Tulare

Address or other description of location:	Geographical coordinates of transmitting antenna to nearest second	
	North Latitude	West Longitude
On existing communications tower atop Blue Ridge Lookout, 27 km east of Exeter.	36 ° 17 ' 07 "	118 ° 50 ' 19 "

Attach as an Exhibit a map or maps (preferably topographic, if obtainable, such as Geological Survey quandrangles) of the area of the proposed transmitting antenna location shown drawn thereon the following data:

a. Scale of kilometers
b. Proposed transmitting antenna location accurately plotted.

Exhibit No. *

* On file - no change (BPTT-880614ID)

	Make	Type No.		Output Power P
3. Transmitter:	TTC	XL1000MU		1.0 kilowatts
4. Transmission line:	Andrew	LDF7-50A	Length 75 feet	Rated efficiency E for length given (decimal fraction) 0.912

5. Transmitting antenna ☒ Directional "off-the-shelf" ☐ Directional Composite (Multiple Antennas) ☐ Non-Directional

Manufacturer	Model	Description [1]
Andrew	ATW12L4-HSB-15*	Slotted cylinder

Orientation of main lobe [2]	Overall antenna structure height above ground [3]	Elevation of Site [4]	Power gain G (multiplier) in the horizontal lobe of maximum radiation relative to a halfwave dipole [5]
270° T	30 meters	1737 meters	10.0

Effective radiated power (ERP) (ERP=P X E X G) 9.12 kilowatts

Height of antenna radiation center above ground 12 meters

Height of antenna radiation center above above mean sea level 1750 meters [6]

* w/2° mechanical beam tilt.

1 Give basic type using general descriptive terms such as half-wave dipole, "bow-tie" with screen, corner reflector, 10 element Yagi, 4 element in-phase array, two stacked 5 element Yagis, etc.

2 For directional antennas in the horizontal plane show the direction of the main radiation lobe(s) in degrees with respect to true north in a 360 degree horizontal azimuth, numbered clockwise, with true north as zero azimuth.

3 Show overall height above ground in meters to topmost portion of structure, including highest top mounted antenna and beacon if any.

4 Show the ground elevation above mean sea level in meters at the base of the transmitting antenna supporting structure.

5 Give the actual power gain toward the radio horizon.

6 This is equal to the sum of the site elevation and the height of the antenna radiation center above ground.

Section II (Page 2)

6. Attach as an Exhibit a vertical plan sketch for the proposed total antenna structure, including supporting structure, giving overall height of structure in meters above ground, including lighting beacon (if any). Exhibit No. *

* On file - no change (BPTT-880624ID)

7. Will the proposed antenna supporting structure be shared with an AM radio station? [ ] Yes [X] No

If yes, list the call sign of that station. Does not apply

8. Attach as an Exhibit a polar diagram of the radiation pattern (relative field) in the horizontal plane of the transmitting antenna showing clearly the correct relationship between the major lobe or lobes and the minor lobes of radiation and a tabulation of the pattern at every ten degrees and all maxima and minima. Applicants proposing use of multiple transmitting antennas shall submit a composite radiation pattern. If a non-directional transmitting antenna will be employed, i.e., an antenna with an approximately circular radiation pattern, check here [ ] and omit polar diagram and tabulation. If the antenna manufacturer and model number are on the Commission's list of common "off-the-shelf" directional antennas, check here [X] and omit polar diagram and tabulation. Exhibit No. E

9. Has FAA been notified of proposed construction? [ ] Yes [X] No

If Yes, give date and office where notice was filed: No change in overall height or location of existing structure.

10. Environmental Statement (See 47 C.F.R. Section 1.1301 et seq.)

Would a Commission grant of this application come within 47 C.F.R. 1.1307, such that it may have a significant environmental impact, including exposure to workers or the general public to harmful nonionizing radiation levels? [ ] Yes [X] No

If you answer Yes, submit as an Exhibit an Environmental Assessment as required by Section 1.1311. If no, explain briefly why not. Exhibit No. --

Proposal is believed to comply with pertinent provisions of §1.1305, §1.1306, and §1.1307 of FCC Rules (*see also Exhibit A of Engineering Report*).

11. Unattended operation:

Is unattended operation proposed? [X] Yes [ ] No

If Yes, and this application is for authority to construct a new station or to make changes in the facilities of an authorized station which proposes unattended operation for the first time, applicant will comply with the requirements of 47 C.F.R. Section 74.734 concerning unattended operation. [X] Yes [ ] No

12. Is type approved broadcast equipment being specified? [X] Yes [ ] No

If No, indicate date equipment was submitted to FCC Laboratory for approval. Does not apply

I certify that I represent the applicant in the capacity indicated below and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief.

March 3, 1989
Date

Signature

Typed or Printed Name: KEVIN T. FISHER

Telephone No. (include area code): (202) 293-7742

[ ] Technical Director [ ] Registered Professional Engineer [X] Consulting Engineer

[ ] Chief Operator [ ] Other (specify)

MAY AND DUNNE
ESCROW ACCOUNT
(202) 466-6220
1156 - 15TH STREET, N.W., SUITE 515
WASHINGTON, D.C. 20005

№ 274

15-7011 / 2540 12

NATIONAL PERMANENT BANK
WASHINGTON, D.C. 20006

March 10 19 89

PAY THREE HUNDRED SEVENTY-FIVE AND 00/100---------- DOLLARS $375.00

TO THE ORDER OF FEDERAL COMMUNICATIONS COMMISSION

⑈00000274⑈ ⑆254070116⑆ ⑈6018 3713⑈

DETACH AND RETAIN THIS STATEMENT
THE ATTACHED CHECK IS IN PAYMENT OF ITEMS DESCRIBED BELOW. IF NOT CORRECT PLEASE NOTIFY US PROMPTLY. NO RECEIPT DESIRED.

MAY AND DUNNE
ESCROW ACCOUNT

DATE	DESCRIPTION	AMOUNT
3/10/89	Filing fee for K15CO, Porterville, California (B78)	$375.00