

ANTENNA AND SITE INFORMATION (see instruction B Section I)	Name of applicant Rossmoyne Corporation	
	Address where applicant can be reached in person Harrisburg, Pa.	

Since this Section is submitted to the Regional Airspace Subcommittee of the Air Coordinating Committee for clearance in connection with obstructions to air navigation, it is necessary that all the data called for be supplied. Previously and separately filed data must not be incorporated by reference.

Legal Counsel McKenna & Wilkinson	Purpose of application (Check appropriate box)
Address 1028 Conn. Ave., Washington, D.C.	a. New antenna construction <input checked="" type="checkbox"/> b. Alteration of existing antenna structures <input type="checkbox"/> c. Change in location <input type="checkbox"/>

Consulting Engineer McINTOSH & INGLIS	2. Features of surrounding terrain List any natural formations or existing man-made structures (hills, trees, water tanks, towers, etc.) which, in the opinion of the applicant, would tend to shield the antenna from aircraft and thereby minimize the aeronautical hazard of the antenna.
Address Wyatt Bldg., Washington 5, D.C.	

Class of station Television	Facilities requested Channel 27
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1. Location of antenna		
State Penna.	County Cumberland	City or Town near Harrisburg

Exact antenna location (street address) (If outside city limits, give distance and direction from, and name of nearest town) Blue Mountain, approx. 1 mi. northeast of Summerdale	Submit as XXXXXX a chart on which is plotted the exact location of the antenna site, and also the relative location of the natural formations and/or the existing man-made structures listed above. The chart used shall be an Instrument Approach Chart (or the landing chart on reverse side thereof), or a Sectional Aeronautical Chart, choice depending upon proximity of the antenna site to landing areas. 1/ In general, the Sectional Aeronautical Chart should be used only when the antenna site is more than 10 miles from a landing area or when an Instrument Approach Chart is unobtainable. 1/ These charts may be purchased from the U. S. Coast and Geodetic Survey, Washington 25, D. C. 1/ Exception - Where the proposed antenna site is within the boundary of a landing area for which no Instrument Approach Chart is available, submit a self-made, large scale map showing antenna site, runway(s) and existing man-made structures listed above.
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Geographic coordinates (to be determined to nearest second. For directional antenna give coordinates of center of array.) For single vertical radiator give tower location.	
North latitude 40° 19' 26"	West longitude 76° 55' 35"

3. Designation, distance, and bearing to center line of nearest established airway within 5 miles	Red 29 - 3 miles - 94° True (Fig. 7)
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4. List all landing areas within 10 miles of antenna site. Give distance and direction to the nearest boundary of each landing area from the antenna site.					
	<u>Landing Area</u>	<u>Distance</u>	<u>Bearing</u>		<u>Direction</u>
(a)	Hackenberger	8.5 mi.	333°	T	Harrisburg State 8.3 mi 150° T
(b)	Skyport	6.2 mi.	210°	T	
(c)	Taylor	10 mi.	229°	T	

5. Description of antenna system (If directional, give spacing and orientation of towers).

Type **RCA TFU-24 BL Television antenna**

Description of tower(s) **Uniform cross-section steel**

Self-supporting	Guyed Yes	Tubular (Pole)																								
Tower (height figures should not include obstruction lighting)	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th>#1</th> <th>#2</th> <th>#3</th> <th>#4</th> <th>#5</th> <th>#6</th> </tr> <tr> <td style="text-align: center;">46.5</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">250</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: center;">1370</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>	#1	#2	#3	#4	#5	#6	46.5						250						1370						
#1	#2	#3	#4	#5	#6																					
46.5																										
250																										
1370																										
Height of radiating elements																										
Overall height above ground																										
Overall height above mean sea level																										

If a combination of Standard, FM, or TV operation is proposed on the same multi-element array (either existing or proposed) submit as Exhibit No. a horizontal plan for the proposed antenna system, giving heights of the elements above ground and showing their orientation and spacing in feet. Clearly indicate if any towers are existing.

Submit as ~~XXXXX~~ **Fig 8** a vertical plan sketch for the proposed total structure (including supporting building if any) giving heights above ground in feet for all significant features. Clearly indicate existing portions, noting painting and lighting.

Is the proposed antenna system designed so that obstruction lights may be installed and maintained at the uppermost point(s)? Yes No

6. Is the proposed site the same or immediately adjoining the transmitter-antenna site of other stations authorized by the Commission or specified in another application pending before the Commission? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Date _____
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Call letters	File numbers	Signature of Engineer preparing data
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8. Transmission line (Continued)
 (b) Aural (if separate)

Make Same as visual	Type No.	Description
Size (nominal inside transverse dimension) in inches	Length in feet	Power loss in db for this length

10. Will the studios, cameras, microphones, and other equipment proposed for transmission of programs be designed for compliance with the Commission's Rules? Yes No

9. Proposed operation
 (a) Visual

Transmitter power output (after vestigial side-band filter, if used) In dbk: 6.99 In kw: 5	Multiplexer loss in db: 0.25	Input to transmission line in dbk: 6.74
Transmission line power loss in db: 0.59	Antenna input power in dbk: 6.15	Antenna power gain in db: 13.8
		Effective radiated power In dbk: 19.95 In kw: 98.9

11. (a) Attach as **Figure 1** ~~XXXXXX~~ a map(s) (topographic where obtainable, such as U. S. Geological Survey quadrangles) for the area within 15 miles of the proposed transmitter location and show drawn thereon the following data:

- Proposed transmitter location--accurately plotted;
- Transmitter location and call letters of all known radio stations (except amateur) and the location of known commercial and government receiving stations within 2 miles of the proposed transmitter location;
- Proposed location of main studio;
- Character of the area within 2 miles of proposed transmitter location, suitably designated as to residential, business, industrial, and rural nature;
- At least eight radials each extending to a distance of ten or more miles from the proposed transmitter location, one or more of which must extend through the principal city or cities to be served.

(b) Aural

Transmitter power output In dbk: 4.24 In kw: 2.66	Multiplexer loss in db: 0.5	Input to transmission line in dbk: 3.74
Transmission line power loss in db: 0.59	Antenna input power in dbk: 3.15	Antenna power gain in db: 13.8
		Effective radiated power In dbk: 16.95 In kw: 49.5

(b) Attach as **Figure 2** ~~XXXXXX~~ profile graphs with reasonably large scales for the radials in (a)(5) above. Each graph shall show the elevation of the antenna radiation center. Identify each graph by its bearing from the proposed transmitter location. Direction of true north shall be zero azimuth, with angles measured clockwise. Show source of topographical data on each.

12. From the profile graphs in 11(b), for the eight mile distance between two and ten miles from the proposed transmitter location, and in accordance with the procedure prescribed in the Commission's Rules, supply the following tabulation of data: (Grade A and Grade B contours are those in the absence of interference.)

Radial bearing (degrees true)	Average elevation of radial (2-10 mi.) in feet above mean sea level	Height in feet of antenna radiation center above average elevation of radial (2-10 mi.)	Effective radiated power in radial direction	Predicted distance in miles to the Grade A contour	Predicted distance in miles to the Grade B contour
0	566 feet	781 feet	19.95 dbk	24.5 mi.	39 mi.
45	692	655	19.95	22.5	36
90	472	875	19.95	26	41
135	429	918	19.95	27	42
180	400	947	19.95	27.5	42.5
225	432	915	19.95	27	42
270	551	796	19.95	24.7	39.5
315	524	823	19.95	25	40
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Antenna height above average terrain **839** feet (Must be identical with Paragraph 2)

13. Attach as **Figure 3** ~~XXXXXX~~ map(s) (Sectional Aeronautical charts where obtainable, preferably without aeronautical overlay) of the area proposed to be served and shown drawn thereon:

- Proposed transmitter location and the radials along which the profile graphs have been prepared;
- The predicted Grade A and Grade B contours from 12 above;
- Scale of miles.

14. Attach as **Figure 4** ~~XXXXXX~~ a sufficient number of aerial photographs taken in clear weather at appropriate altitudes and angles to show the nature of the surrounding terrain in the vicinity of the proposed transmitter site. The photographs must be marked so as to show compass directions. Photographs taken in eight different directions from an elevated position on the ground will be acceptable in lieu of the aerial photographs if the area can be clearly shown. Give date photographs were taken.

15. Proposed location of transmitter

State Pennsylvania	County Cumberland	Geographical coordinates (to be determined to nearest second) of the proposed TV antenna structure.	
City or town near Harrisburg	Street address Blue Mountain 1 mi. N.E. of Summerdale	North latitude 40° 19' 26"	West longitude 76° 55' 35"
How were coordinates determined? U. S. Geological Survey Topographic Map			

16. Proposed location of main studio

State Pennsylvania	County Dauphin	Other studios proposed
City or town Harrisburg	Street address 228 N. Court St.	

17. State the minimum value of field strength in dbu, predicted in accordance with the method prescribed in the Commission's Rules, that will be provided over the entire city in which the main studio is located.

85 dbu (based on 8% fill in null of vertical pattern)
81 dbu (based on 5% fill in null of vertical pattern)

18. (a) Does the proposed transmitter location comply with the minimum separation requirements of the Commission's Rules?

Yes No

(b) If any co-channel separations are proposed that are less than the applicable minimum separation requirement plus 20 miles, or if other channel separations are proposed that are less than the applicable minimum separations plus 10 miles, list such separations below. (Include existing stations, proposed stations and assignments; the location and geographical coordinates of each antenna; the distance to each from the proposed transmitter location; and the method used in each instance to measure the distance.) If none, so state.

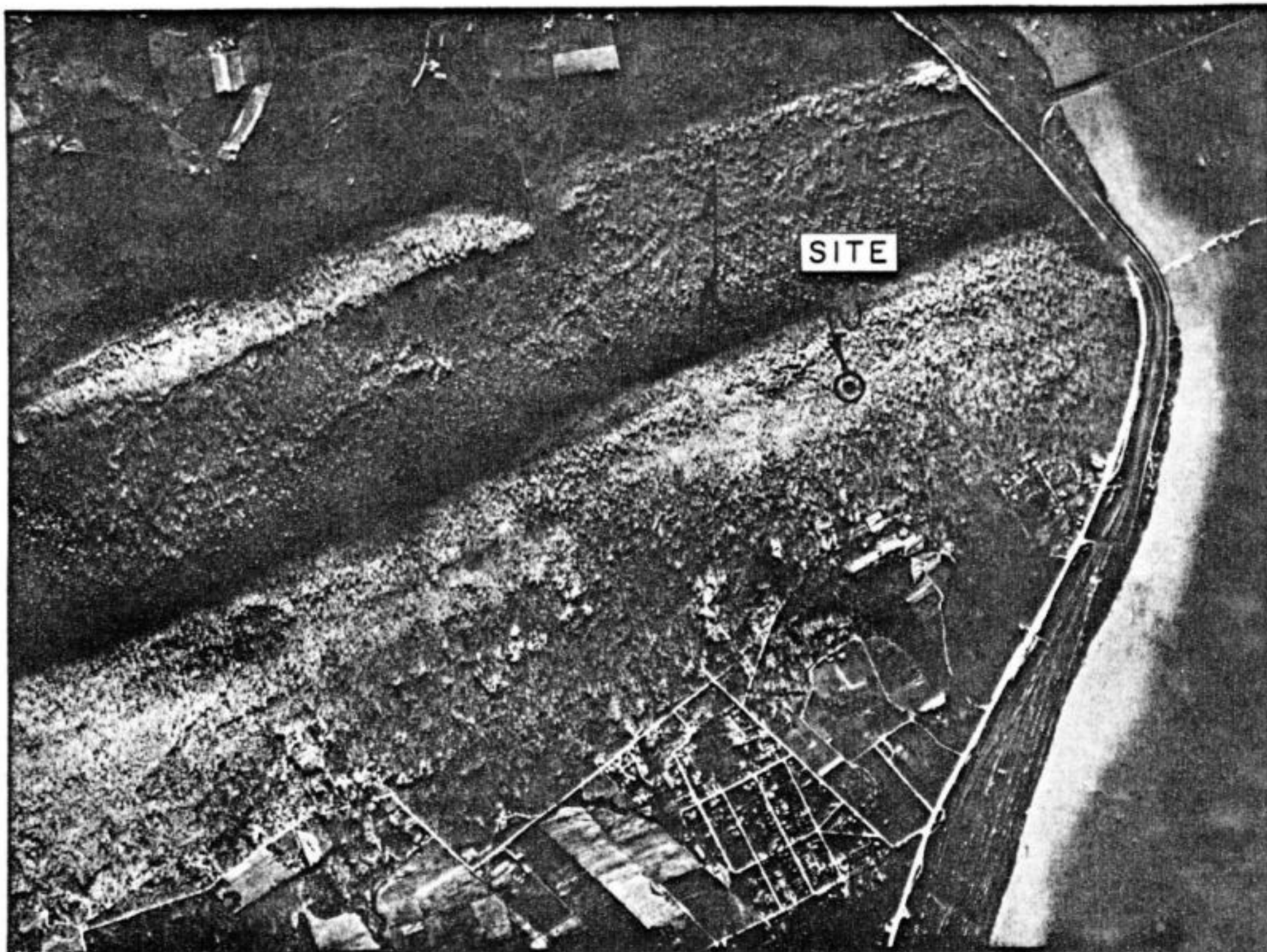
None

I certify that I am the Technical Director, Chief Engineer, or Consulting Engineer of the radio station for which this application is submitted and that I have examined the foregoing statement of technical information and that it is true to the best of my knowledge and belief. (This signature may be omitted provided the engineer's original signed report of the data from which the information contained herein has been obtained is attached hereto.)

Date _____

 Technical Director, Chief Engineer or Consulting Engineer

Broadcast Application		FEDERAL COMMUNICATIONS COMMISSION		Section V-C	
TELEVISION BROADCAST ENGINEERING DATA		Name of applicant Rossmoyne Corporation			
<p>1. Purpose of authorization applied for: (Indicate by check mark)</p> <p>(If application is for a new station or for any of the changes numbered B through E, complete all paragraphs of this form; if change F is of a character which will change coverage or increase the overall height of the antenna structure more than 20 feet, answer all paragraphs, otherwise complete only paragraphs 2 and 3 and the appropriate other paragraphs; for changes G through I, complete only paragraph 2 and the appropriate other paragraphs; for change J, complete only paragraphs 2 and 16)</p>					
<p>A. <input checked="" type="checkbox"/> Construct a new station</p> <p>B. <input type="checkbox"/> Change effective radiated power or antenna height above average terrain</p> <p>C. <input type="checkbox"/> Change transmitter location</p> <p>D. <input type="checkbox"/> Change frequency</p> <p>E. <input type="checkbox"/> Approval of site and antenna</p>		<p>F. <input type="checkbox"/> Change antenna system</p> <p>G. <input type="checkbox"/> Change transmitter</p> <p>H. <input type="checkbox"/> Install auxiliary or alternate main transmitter</p> <p>I. <input type="checkbox"/> Other changes (specify)</p> <p>J. <input type="checkbox"/> Change studio location</p>			
2. Facilities requested			4. Transmitters		
Frequency		Channel number		(a) Visual	
548 — 554 Mc.		27		Make	Type No.
				DuMont	Series 15000
				Rated power	
				In dbk: 6.99	
				In kw: 5	
Effective Radiated Power (visual)		Antenna height above average terrain in feet. (Must agree with height given in Para. 12 of this Section)		(b) Aural	
In dbk: 19.95		839		Make	Type No.
In kw: 98.9				DuMont	Series 15000
				Rated power	
				In dbk: 4.77	
				In kw: 3	
3. (a) Antenna structure			If the above transmitters are composite or of types for which data have not been filed with the F.C.C., attach as Exhibit No. a complete showing of transmitter details in accordance with the Commission's Rules. The showing should include schematic diagrams, makes and types of tubes, operating constants of the last radio stages, full details of frequency control, vestigial sideband filter (if used), multiplex networks and isolation networks. If changes are to be made in a licensed transmitter, include a schematic diagram and give full details of the changes.		
Is the proposed construction in the immediate vicinity or does it serve to modify the construction of any standard broadcast station, FM broadcast station, television broadcast station, or other class of radio station? If "Yes", attach as Exhibit No. complete engineering data thereon.			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Will proposed structure be constructed on the top of an existing structure? If "Yes", describe and give height above ground of existing structure.			Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Overall height in feet above ground. (Do not include the height of any obstruction lighting which may be required.)		Overall height in feet above mean sea level. (Do not include the height of any obstruction lighting which may be required.)		(c) Describe in XXXXXX Pg 1 means which will be used for determining and maintaining power output of the transmitters to the values specified in this application.	
250		1370		5. Modulation monitors	
				(a) Visual monitor or monitoring equipment	
				Make	Type No.
				DuMont	TA-169-A
				(b) Aural monitor	
				Make	Type No.
				General Radio	1183-T3
Height of antenna radiation center in feet above mean sea level.			6. Frequency monitors		
1347			(a) Visual monitor		
(b) Antenna data			Make		
Visual			Type No.		
Make		Type No.		Accuracy	
RCA		TFU 24BL		On file	
Number of sections		Power gain in db		(b) Aural monitor	
16		13.8		Make	
				Type No.	
				General Radio	
				1183-T3	
				On file	
Aural (if separate)			7. If the above monitors or monitoring equipment have not been approved by the F.C.C., include as Exhibit No. a brief technical description of each.		
Make		Type No.		8. Transmission line proposed to supply power to the antenna from the transmitter	
Not separate				(a) Visual	
				Make	Type No.
				Andrew	552-5
				Description	
				Teflon Coaxial	
Number of sections		Power gain in db		Size (nominal inside transverse dimensions) in inches	Length in feet
				3 1/8	235
				Power loss in db for this length	
				0.59	
Is directional antenna proposed? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>			If "Yes", attach as Exhibit No. complete engineering data thereon.		



ROSSMOYNE CORPORATION
HARRISBURG, PENNSYLVANIA

FIGURE 4

TELEVISION

McINTOSH & INGLIS
Consulting Radio Engineers
Washington, D.C.