Approved	<u>February</u>	17,	1983	
PP0.0		Date		

MINUTES OF THE <u>House</u> COMMITTEE ON <u>Communication, Computers and Technology</u>
The meeting was called to order byRepresentative Mike Meacham at Chairperson
3:30 xxx/p.m. on February 3
All members were present except: Representative Chronister (excused)
Representative Goossen (excused)

Committee staff present:

Marlin Rein, Chief Legislative Fiscal Analyst, Committee Staff Director Sherry Brown, Fiscal Staff, Research Department Betty Ellison, Secretary to the Committee

Conferees appearing before the committee:

Mr. Robert Fuzy, President and General Manager of KCPT-Channel 19 (Kansas City)

Dr. Dale Anderson, Station Manager, KTWU-Channel 11 (Topeka)

Chairman Meacham stated that since Mr. Ken Gardner of KOOD in Bunker Hill was not able to be with us, the committee would take up the southeast Kansas expansion and also hear Mr. Fuzy of Channel 19 for a review of the services they provide to the people of Kansas.

Mr. Fuzy mentioned the KCPT/Channel 19 Fact Sheet which had been handed out to committee members. (Attachment 1) He said that KCPT is a UHF public television station (higher frequency requires more power than VHF) which serves 30 percent of Kansas. Channel 19 is a community licensee, a not-for-profit organization with a board of directors made up of residents of the Kansas City Metropolitan Area. In this respect, Channel 19 is identical to the station at Wichita and the one licensed to Hays, KOOD.

Mr. Fuzy named other types of licensees in public television: state network, municipal network, school board network, college and university networks of which Washburn University is one. Community licensees are responsible for paying their own bills, insurance, security; they must raise the money for all operating expenses.

KCPT provides services for children and adults. A very important service is instructional television, kindergarten-12th grade; also adult education for working adults.

Channel 19's operating budget for FY 1982-83 is approximately \$2,334,500. Over 80 percent of this amount comes from the community. Of that amount 15 percent comes from Instructional Television fees and 9 percent comes from grants and program underwriting. The annual TV 19 Auction brings in 13 percent and 51 percent comes from viewer contributions. Contracted services and rental and interest income provide 12 percent. The remaining funds will be allocated by the Corporation for Public Broadcasting, and the State of Kansas and the State of Missouri.

Dr. Dale Anderson of KTWU distributed printed material, (Attachments 2 and 3) and spoke regarding their southeast Kansas translator project. He said the objective today is to place translators at Iola-Moran, Pittsburg, Independence, and Emporia. He explained that translators are basically unmanned, low-power, transmitters - 1,000 watts and transmit out 20, 30, or 40 miles. Their original plan was to develop translators at Emporia, Moran, and Independence. The Kansas Public Television Board approved this plan and KTWU was funded for \$264,000 by the legislature

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Communication, Computers and Technology room 522-S, Statehouse, at 3:30 %%./p.m. on February 3, 1983.

last year. This money was not to be available unless and until construction permits were received from the Federal Communications Commission and Finance Council approval was needed. The FCC approval has not been received as yet, due to the large number of applications they have to deal with.

Dr. Anderson pointed out on the maps <u>(Attachment 3)</u> that Oklahoma has a great many translators and Nebraska has satellite transmitters as well as translators.

KTWU is not proposing to modify and increase its plan. The itemized cost of the modified plan may be found in Attachment 3. This is a \$933,000 package. KTWU is planning to file with the National Telecommunications Information Agency in Washington, D.C. for a matching grant. We do not expect the matching dollars that would be required locally to exceed the \$264,000 that has previously been allocated by the State of Kansas.

Chairman Meacham asked for an engineer's report to substantiate Dr. Anderson's claim that the signal will reach 30 miles off a 500 foot tower. Dr. Anderson promised a report in writing.

The chairman said that the committee will return to this topic at some future date to hear Mr. Gardner from Bunker Hill and to hear Mr. Adkins on instructional television. Next week the committee will take up divestiture and deregulation. The following week, the telecommunications plan; the telecommunications system plan will be distributed to you sometime next week so you will have ample opportunity to study it before they make their actual proposal to the committee.

The meeting was adjourned at 4:08 p.m. by the chairman.

The next meeting of the committee will be held at 3:30 p.m. on February 7, 1983.

Date: Feb. 3, 1983

GUEST REGISTER

HOUSE

COMMITTEE ON COMMUNICATION, COMPUTERS AND TECHNOLOGY

NAME ORGANIZATION		ADDRESS		
PHITTLEMINE	KTWUTU-	TOPEKA KS		
TAMES HAYS	DIVISION of the Budget	TOPEKA, KS		
Silvoter		Topel		
Dave Voneroy	KTWU / Channel 11	Topela		

KCPT/CHANNEL 19 FACT SHEET

PUBLIC TELEVISION

- * Public television first emerged as a viewing option in 1953, and by 1970 had evolved into a national organization of independent local stations - The Public Broadcasting Service (PBS). KCPT/Channel 19 is one of those non-commercial and not-for-profit stations, now numbering over 280 and found all across the country (including U.S. territories).
- * Public television provides a distinctive alternative to the kinds of programs available on commercial television. It is geared toward many small audiences rather than the mass audience. Indeed, it makes a special effort to identify and serve specific target audiences with programs responsive to their particular needs: comedy to drama, country music to opera, disco to ballet, cooking to gardening, animal study to space exploration, local public affairs to national issues, along with special programs for certain ethnic and age groups.
- * Two out of every three American TV households now tune to public television each month, and more than half watch it weekly. Public Television does not expect to reach every household all of the time--it does hope to reach most of the people at least some of the time.
- * The diversity of public television's audience has also been growing. In terms of race, occupation, family size and geographic location, viewers now reflect the demographic profile of the country. The greatest and most significant gains in viewers in the last few years have been made in households with incomes of less than \$10,000, and in households headed by individuals with less than a high school education.
- * The growth and development of public television (and radio) were aided in 1967 by the creation of the Corporation for Public Broadcasting (CPB) to dispense annual federal appropriations to the stations. Approximately 14% of Channel 19's operating budget comes from federal funds; the remaining 86% comes from the Kansas and Missouri area, mainly from the local support of individual families. (Only one out of every eight households viewing Channel 19 weekly contributes to its support.)
- * In the last decade, public television has played a pioneering role in the development of special services for the deaf and the hearing impaired. PBS began with open captioned programs in which the lettering on the screen is visible to all viewers. At the same time, PBS initiated the development and testing of a closed captioned system in which the captions are only visible through the use of a special decoder attached to the television set. Channel 19's captioned programs are indicated in its monthly program guide.

CHANNEL 19 HISTORY

- * Channel 19 went on-the-air in March, 1961. Its call letters then were KCSD, and the station was owned and operated by the Kansas City Missouri School District.
- * In January, 1972, KCSD became KCPT-for Kansas City Public Television. The license was transferred to a not-for-profit corporation, now known as Public Television 19, Inc. The corporation's Board of Directors is composed of Kansas City civic, educational and business leaders.
- * In October, 1972, the station converted to color broadcasting and increased its transmitting power to one million watts.
- * In January, 1978, Channel 19 moved into its current facilities, previously occupied by KCMO-TV. (The transmitter and tower remained at the former location, in an unincorporated area east of the city.)
- * In March, 1978, Channel 19 completed installation of its 10 meter earth station terminal, or satellite "dish", to join other public television stations in the conversion to satellite interconnection for the reception of national programming.
- * In August, 1980, the station replaced the original antenna, greatly improving the signal for many of the communities it serves.
- * On January 1, 1982, Channel 19 celebrated its 10th anniversary as a public supported and community licensed station.
- * In December, 1982, Channel 19 received television equipment valued at 1.5 million dollars from the Crown Center Redevelopment Corporation, a subsidiary of Hallmark Cards, Inc.

VIEWING AREA OF CHANNEL 19

Channel 19 serves the ten county area surrounding Kansas City and reaches well into both states through cable and/or its on-air signal:

In Kansas, all of Johnson, Leavenworth and Wyandotte counties are covered, as well as portions of Atchison, Bourbon, Brown, Doniphan, Douglas, Franklin, Jackson, Jefferson, Linn, Miami, Pottawatomie and Shawnee counties (over 30% of the Kansas population.)

In Missouri, Channel 19 covers Buchanan, Cass, Clay, Clinton, Jackson, Platte and Ray counties. Parts of Adair, Bates, Boone, Caldwell, Carroll, Cooper, DeKalb, Gentry, Grundy, Henry, Johnson, Lafayette, Linn, Livingston, Nodaway, Saline and Vernon counties are served as well (over 24% of Missouri population).

FACILITIES AND STAFF

Channel 19's administrative and production facilities are located at 125 East 31st Street in midtown Kansas City. The three-story building, 32,000 square feet, houses the offices, three studios, two production control rooms, a renovated master control area and a film documentary unit.

Channel 19's equipment includes: six studio color cameras, three portable color cameras, five quadraplex videotape recorders, five one inch B-format videotape recorders, two portable 3/4" videocassette recorders, two 3/4" videocassette editing systems, two color film chains, two high quality character generator systems, a computer editing system, a digital special effects generator, and standard associated support equipment.

Channel 19's staff consists of approximately fifty employees.

INSTRUCTIONAL TELEVISION SERVICE

One of the important functions of Channel 19 is the delivery of instructional programs for use in Kansas and Missouri schools. The instructional television service is extensive—over 1,000 hours of daytime broadcasts are devoted to programs or lessons for students from kindergarten through the twelfth grade each school year. Additional broadcast time is used for post-secondary courses and for teacher and parent inservice.

The service is constantly growing and now provides materials for approximately 160,000 students, 9,000 teachers in 450 schools. In addition to the televised materials, the participating schools receive ancillary materials and inservice assistance from the ITV staff.

FINANCIAL

Channel 19's operating budget for the fiscal year 1982-83 is approximately \$2,334,500. Over 80% of this amount will come from the community. Of that amount 15% comes from Instructional Television fees from participating school districts.

9% comes from development grants and program underwriting. Besides unrestricted gifts, corporations and foundations can underwrite the acquisition fees for PBS syndicated programs, the costs for local productions, local program acquisitions or production equipment.

13% comes from the annual TV 19 Auction. The first Auction was held in 1973 and raised \$87,000. The 1982 Auction set a Channel 19 record by raising \$250,000.

51% comes from viewer contributions. All subscribers of \$19 or more receive the monthly TV19 Program Guide.

12% comes from contracted services and rental and interest income.

The remaining funds will be allocated by the Corporation for Public Broad-casting, and the State of Kansas and the State of Missouri.

LOCAL-PROGRAMMING

Programs produced in recent seasons by Channel 19 include:

THE KANSAS CITY STRIP -- Local weeknight series

"Portfolio" (Monday) - the city's fine arts and cultural events
"Sports Scene" (Tuesday) - amateur and professional sports highlights
"On The Line" (Wednesdays) - a one-hour live call-in on local issues
"Critical Focus" (Thursdays) - Kansas legislative issues
"Roundtable" (Fridays) - interviews with local newsmakers

ELECTION '82: BALLOT ISSUES

Major Missouri and Kansas issues on the November ballot examined by state and local legislators and civic representatives.

MEET THE CANDIDATES

Candidates in the April, 1982 election for the Kansas City School District on a one-hour information program, answering questions from reporters and the audience.

MISSOURI JOURNAL

Weekly coverage of the Missouri Legislature in cooperation with KETC, the public television station in St. Louis.

ELECTION '82 - THE AUGUST PRIMARY

Seven programs produced by Channel 19 familiarizing viewers with candidates and issues in Kansas and Missouri congressional districts, the Missouri Senate race, the Kansas gubernatorial contest, and the Jackson County Executive primary.

THE FOOD PRODUCERS

Series of weekly in-depth reports on issues relating to Kansas City's production of food and fiber.

JAZZ FROM KANSAS CITY

Two Channel 19 specials, featuring well-known KC jazz artists performing before a studio audience.

UP IN ROSEBUD COUNTY

A one-hour documentary on coal vs.cattle as industry and agriculture compete for land and water in Montana. The conflict was explored by Channel 19's film documentary unit, John Masterman and Laurel Defoe, and released for national distribution on PBS.

THE HARVEST RUN

Also produced by Masterman and Defoe and accepted for national broadcast, this one-hour documentary follows the American wheat harvest from Texas to Montana and examines the lives of the "custom harvesters" who bring in 40% of the annual crop.

WATERMELON BOATS

Channel 19's first attempt to produce a television drama, a joint venture with the Missouri Repertory Theatre. An original short play by Kansas City's Wendy MacLaughlin, the drama focused on the thoughts and uncertainties of two young women as they move from childhood to maturity.

RACE FOR THE U.S. SENATE

Two Missouri senatorial races were covered with head-to-head debates between the candidates, prompted by questions by local journalists. The debates were co-produced by Channel 19 and the St. Louis public television station.

THE URBAN FUTURE

A reflection of the changes many U.S. city managers think will affect and afflict urban governments in years ahead which evolved from the "Future Horizons" project of the International City Management Association in Phoenix, Arizona. A featured participant was Kansas City's city manager, Robert Kipp.

NATIONAL PROGRAMMING

A sampling of current national series includes:

MASTERPIECE THEATRE

Superb dramatic presentations from England. Recent titles included "Flame Trees of Thika", "Edward and Mrs. Simpson", "To Serve Them All My Days", "Pride and Predjudice" and "Winston Churchill".

GREAT PERFORMANCES

A combination of outstanding cultural events from the six-part spy thriller "Tinker, Tailor, Soldier, Spy" to the opera performances of "Live from Lincoln Center" and the classical and modern ballets of "Dance in America".

WALL STREET WEEK

Stock market authority Louis Rukeyser and a panel of economic experts examine market activity, answer viewer questions and assess economic trends.

SNEAK PREVIEWS

A consumer's guide to the movies.

NOVA

A science series for curious adults with a wide range of subjects from the life cycle of a termite to Voyager I's trip to Saturn.

SESAME STREET and ELECTRIC COMPANY

Two award-winning series for children which have become household words.

MACNEIL/LEHRER REPORT

An outstanding news series that examines one topic in-depth each weeknight.

EVENING AT POPS

Special summer fare featuring the Boston Pops Orchestra in concert with guest artists.

MISTER ROGERS'NEIGHBORHOOD

Fred Rogers offers reassurance to the very young for all kinds of childhood fears and questions.

ALL CREATURES GREAT AND SMALL

Humorous and touching recreation of James Herriot's best sellers on the life of a country veterinarian.

WASHINGTON WEEK IN REVIEW

Paul Duke and other veteran Washington correspondents comment each week on major stories from the nation's capital.

OVER EASY

Mary Martin and Jim Hartz host a unique and acclaimed weekday magazine for senior citizens.

FIRING LINE

Conversations with outspoken conservative William F. Buckley, Jr.

VICTORY GARDEN

Tips on vegetable gardening, flower raising and landscaping.

PRESIDENTIAL NEWS CONFERENCES AND CONGRESSIONAL HEARINGS

Major public affairs events often offered live with gavel-to-gavel coverage.

MATINEE AT THE BIJOU

Film treasurers from the thirties and forties which include feature movies, serials, vintage cartoons, short subjects and old newsreels.

THIS OLD HOUSE

A series that takes the mystery out of home renovation. Two very different houses are rehabilitated step by step with every aspect of the remodeling process shown along with valuable advice.

NATIONAL GEOGRAPHIC SPECIALS

A public TV staple with such documentaries as "Sharks", the program that attracted the largest viewing audience in the history of public television.

PRESENTE!

Excellent weekly series focusing on personalities, experiences and concerns of Hispanics throughtout the nation.

THE NIGHTLY BUSINESS REPORT

Television's first weeknightly newscast that is devoted exclusively to coverage of business and finance.

THE SHAKESPEARE PLAYS

Public television's most ambitious undertaking, presenting all 36 Shakespearean dramas to the American viewing public over a period of six years.

KCPT/CHANNEL 19

Kansas population served by broadcast signal (1980 census figures)

Total counties:		Additional Kansas p	opulation served
Johnson	270,269	by Cable (1980 cens	us figures)
Leavenworth	54,809		
Wyandotte	172,335	Bourbon county	
Wyandocte	172,333	-	.0 002
	. •	Fort Scott	8,893
Portions of other			
Atchison county	11,407	Brown county	
Atchison		Horton	2,130
Cummings			
Potter		Doniphan county	
		Troy	1,240
Douglas county		1103	1,2-70
Douglas county	0.000	· · · · · · · · · · · · · · · · · · ·	
Baldwin City	2,829	Franklin county	
Clinton		Ottawa	11,016
Eudora	2,934		
Lawrence	52 , 738	Jackson county	
Lecompton	576	Holton	3,132
Lone Star			•
Pleasant Grove		Pottawatomie county	
Sibleyville		Onaga	752 ·
Vinland		Onaga	132
		~ .	
Worden		Shawnee county	
_		Topeka	115,266
Franklin county			
LeLoup			
Wellsville	1,363	TOTAL SERVED 142,42	9 = 6% of KS pop.*
	·	•	
Jefferson county	•		
Boyle			
McLouth	700		
Oskaloosa -	1,092		
Perry	907.		
Williamstown			
Winchester	570 .		
Miami county			
Bucyrus			
Fontana			
Henson			
Hillsdale			
	1 744		
Louisburg	1,744		
New Lancaster	_		
Paola	4,557		
Rantoul			
Somerset			
Wagstaff			
. 6			

TOTAL SERVED: 578,830 = 24.5% KS Pop.*

1982 - 1983 KANSAS MEMBERSHIP IN KCPT-TV/19/ITV SERVICE

FULL DISTRICTS		PILOT DISTRICTS	
Atchison, KS	1,702	Burlington, KS 230) .
Basehor-Linwood, KS	1,122	Cherokee, KS 465	5
Blue Valley, KS	3,410	Columbus, KS 885	5
Gardner-Edgerton, KS	1,538	Lansing, KS 728	3
Kansas City, KS	23,697	Oswego, KS 417	<i>i</i> .
Leavenworth, KS	4,207	Scranton, KS 176	,
McLouth, KS	487	Shawnee Mission, KS 15,358	ş ·
Piper, KS	862	Spring Hill, KS 397	
SMOKY HILLS PUBLIC TV-	Bunker Hill	,KS Pilot District TOTAL 18,656)
Hill City, KS	591	PRIVATE/PAROCHIAL SCHOOLS	
LaCrosse, KS	526		
Ness City, KS	367	Argentine Youth Services, Ks 24	ŀ
Nes Tre La Go, KS	99	Kansas State School for	
Plainville, KS	500	Visually Handicapped, KS 60) -
Quinter, KS	312	Our Savior School, KS 98	} .
Smoky Hill (Ransom), KS	3 215	St. Patrick's School, KS 320) .
Stockton, KS	479		
Victoria, KS	465	Private/Parochial TOTAL 502	1
WaKeeney, KS	650.		
• •		SCHOOLS PLANNING TO JOIN	
SEKREC - Girard, KS		KCPT/ITV SECOND SEMESTER	
Altoona-Midway, KS	465	Leavenworth Prison, KS	
Cherryvale, KS	742	McEachron Elementary School,	
Coffeyville, KS	3,150	Topeka, KS 342	
Erie-St.Paul,KS	1,270	Overbrook School, KS 385	į
Fredonia, KS	944	Perry Middle School,	
Girard, KS	1,129	Perry, KS 150)
Moran, KS	332	Trinity Lutheran School,	
Neodesha, KS	803	Atchison, KS 180) .
Riverton, KS	715	Westview Grade School,	
Yates Center, KS	622	Olathe, KS 225	ŧ,
Turner, KS	3,758		
•		New District TOTAL 1,282	
Full District TOTAL	55,159		
		GRAND TOTAL 75,599	<u>.</u>

KTWU/Channel ll is pleased to be a partner with the Kansas Public Television Board and the State of Kansas in a combined effort to bring first time off air public television service to the southeast portion of the state.

We believe we are truly meeting the mandate to provide statewide public television service placed upon the Kansas Public Television Board and the State Legislature through the Southeast Kansas Translator Project.

Our original plan has been modified since its introduction and today I want to present this modified plan to you.

Incidently, the Hays/Russell/Great Bend/Bunker Hill station KOOD/
Channel 9 has really initiated translator service in Kansas. I believe
Channel 9 has already received FCC approval for translators at Concordia and
Phillipsburg and will probably construct a translator at Pratt as well. Mr.
Ken Gardner, General Manager at Channel 9 can provide you with the specifics.

Our objective is to place translators at Iola/Moran, Pittsburg, Independence and Emporia.

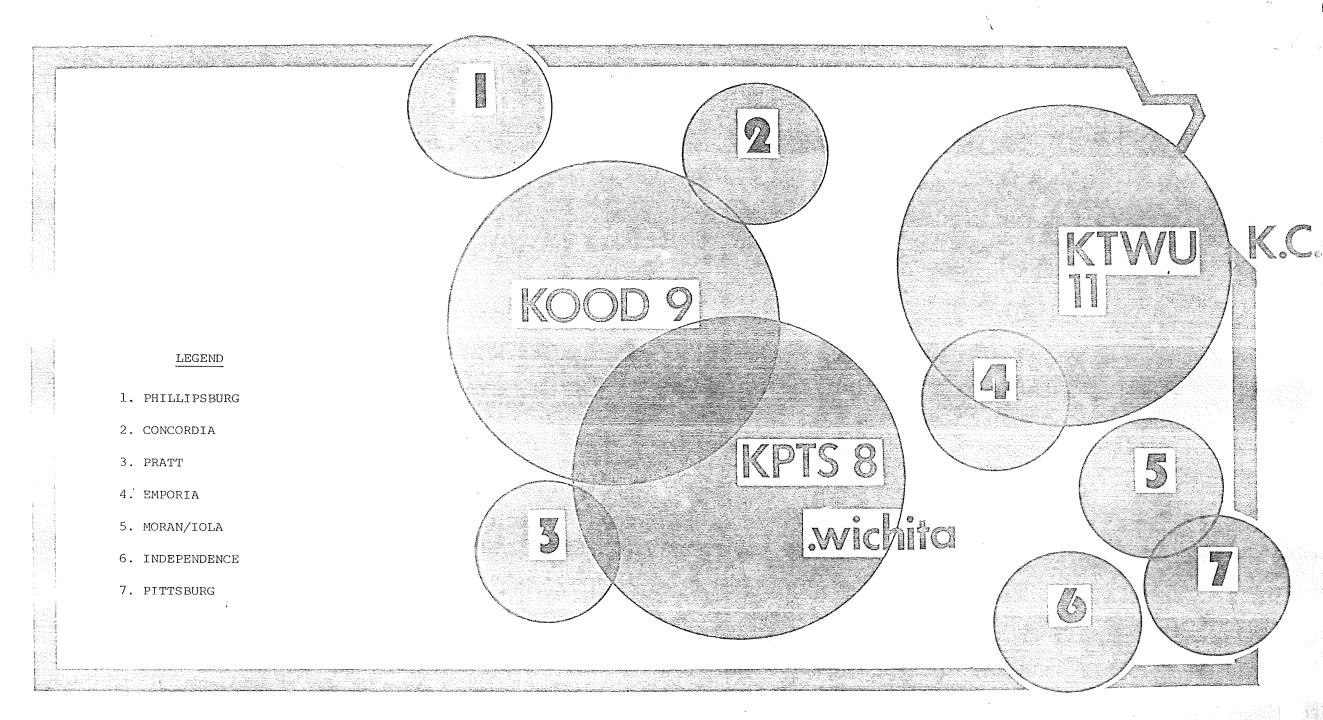
Presented to:

Kansas House Committee on Communications, Computers, Technology

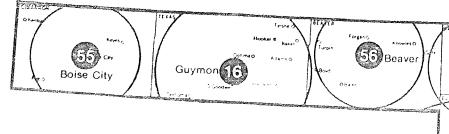
February 3, 1983

Attachment 2

House Communication, Computers and Technology 2/3/83



OKLAHOMA PUBLIC TELEVISION NETWORK

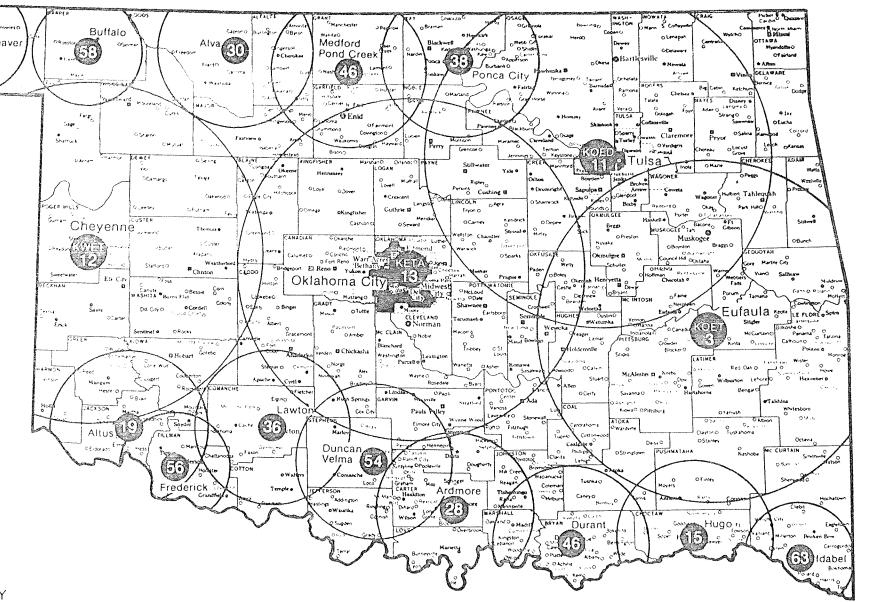


TRANSMITTER STATIONS

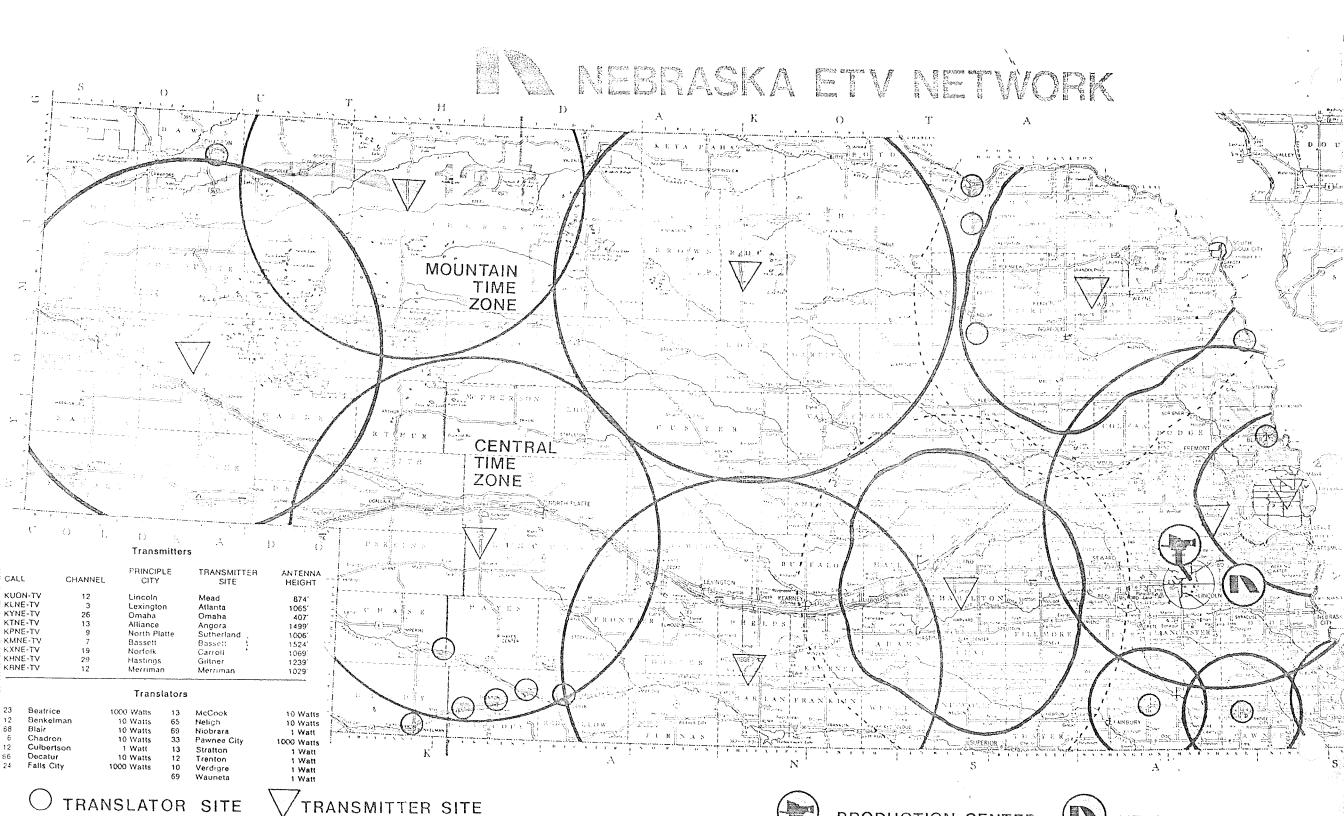
KETA-Channel 13, Oklahoma City KOED-Channel 11, Tulsa KOET-Channel 3, Eufaula KWET-Channel 12, Cheyenne

use translators

Altus-Channel 19
Alva-Channel 30
Ardmore-Channel 28
Beaver-Channel 56
Boise City-Channel 55
Buffalo-Channel 58
Duncan/Velma-Channel 54
Durant-Channel 46
Frederick-Channel 56
Guymon-Channel 15
Idabel-Channel 63
Lawton-Channel 36
Medford/Pond Creek-Channel 46
Ponca City-Channel 38



OKLAHOMA EDUCATIONAL TELEVISION AUTHORITY
7403 NORTH KELLEY AVE JP.O. BOX 14190/OKLAHOMA CITY, OKLAHOMA 73113
PHONE 848-8501 • IN STATE TOLL FREE 1-800-522-9051



PUBLIC TELEVISION EXPANSION COSTS FOR SERVICE TO IOLA/MORAN, INDEPENDENCE, PITTSBURG, AND EMPORIA TRANSMISSION EQUIPMENT

Garnett to Moran Microwave	\$ <u>70,000</u>
Iola/Moran	
500' Tower Installed Equipment Building UHF IKW Translator ASW-2D Switching Network Transmitting Antenna Transmission Line 3" Airdialectric Transmission Line Dehydrator Installation and Check Out	60,000 11,500 82,000 6,500 26,700 13,500 1,200 5,000 \$206,400
Parsons to Independence Microwave	\$70,000
Independence	
UHF IKW Translator Transmission Line 3" Airdialectric Equipment Building Transmitting Antenna Transmission Line Dehydrator Installation and Check Out	82,000 16,000 11,500 20,200 1,200 5,000 \$135,900
Pittsburg	
UHF IKW Translator ASW-2D Switching Network Transmission Line 3" Airdialectric Equipment Building Transmission Antenna Transmission Line Dehydrator Installation and Check Out	\$82,000 6,500 16,000 11,500 20,000 1,200 5,000 \$142,400*

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UHF IKW Translator Transmission Line 3' Airdialectric Equipment Building Transmitting Antenna Transmission Line Dehydrator Installation and Check Out	\$82,000 16,000 11,500 20,200 1,200 5,000
Installation and Check Out	5,000 \$135,900

Test Equipment and Spare Parts for:

Iola/Moran, Independence, Pittsburg
and Emporia

\$18,000

Soil Analysis and Site Survey for Iola/Moran

Power Connection and Line Service for Iola/Moran

Access Road to Transmitter Site for Iola/Moran

Tower Study for Pittsburg Cable Tower/ and Modification

Tower Study for Garnett and Parsons Tower/ and Modification

Sub Total

\$50,000

Sub Total

\$60,000 \$110,000

TOTAL

\$828,600

^{*} Option for Pittsburg 500' Tower Installed

MOBILE TELEPRODUCTION EQUIPMENT

Video Switcher (610AA)	\$11,000	(1)	\$11,000
Set of 3 Monochrome Monitors (6133)	1,600	(1)	1,600
Monitor Connecting Cable (6104A)	130	(1)	130
Monitor (color)	1,500	(1)	1,500
Sharp XC-800 Studio Cameras	12,400	(3)	37,200
Fujinon 1412x9BE Lens	3,500	(3)	10,500
Studio Lens Conversion Kits	850	(3)	2,550
ITE T-12 Tripods, H-14 Fluid Heads			•
& CB-3 D3 Dollys	1,900	(3)	5,700
Set of 3 Hitachi W.F. Monitors/V-099	3,900	(1)	3,900
Set of LBO 5860 W.F. Monitors &			
LVS 5850 Rector Monitor	4,125	(1)	4,125
Set of 3 Monochrome Monitors WV5203	925	(1)	925
Character Generator/Graphics T Then	9,500	(1)	9,500
Sony Microphones	170	(4)	680
Equipment Console	825	(1)	825
Sony BVU-800 Video Tape Recorder	13,200	(1)	13,200
Sony BK-806 Timecode Read ea/Gen.	1,900	(1)	1,900
			\$105,235

TOTAL \$933,835

Submitted to:

Kansas House Committee on Communications, Computers, Technology

February 3, 1983