

MINUTES OF THE HOUSE COMMITTEE ON Communication, Computers and Technology

The meeting was called to order by Representative Mike Meacham at
Chairperson

3:30 ~~xxx~~ a.m./p.m. on February 23, 1983 in room 522-S of the Capitol.

All members were present except:

Representative Cobb (excused)
Representative Goossen (excused)
Representative Rolfs (excused)

Committee staff present:

Sherry Brown, Fiscal Staff, Research Department
Chris Stanfield, Fiscal Staff, Research Department
Betty Ellison, Secretary to the Committee

Conferees appearing before the committee:

Russ Adkins, Associate Dean, Media Resources Center,
Wichita State University

Mr. Adkins listed a number of the services provided on campus by the Media Resources Center:

1. The traditional audio-visual services
2. Graphics and photography support for faculty and administrators
3. Maintain equipment and materials
4. Design material so that it ultimately is produced in some form
5. Cable television station
6. Television production

In discussing instructional telecourses offered for credit by institutions, Mr. Adkins referred to handouts regarding these telecourses: One from a consortium of telecourse producing institutions (Attachment 1); another listing telecourses offered by Wichita State University. (Attachment 2). A large variety of subject areas are covered in the telecourses and the list is growing.

Mr. Adkins stated that most telecourses consist of 24-30 lessons, over a 14-15 week semester. Telecourses are produced around a textbook and provide a study guide. There are weekly written assignments to be mailed in as well as tests and supplemental reading assignments. Mr. Adkins stressed that these courses at Wichita State University must go through the college level curriculum committee review and are very difficult, although they are more convenient for the student.

Mr. Adkins said that telecourses are delivered by several methods:

1. The Public Broadcasting System
2. The National University Consortium, based at the University of Maryland
3. ACSN, a satellite delivered educational service
4. Colleges can also access television courses by going directly to the distributor; however, this is usually the most expensive way to gain access to a course.

CONTINUATION SHEET

MINUTES OF THE House COMMITTEE ON Communication, Computers and Technology
room 522-S, Statehouse, at 3:30 ~~am~~/p.m. on February 23, 1983

Mr. Adkins commented on progress made in the field of instructional television in the States of Kentucky and Florida, indicating that Kansas should be able to do some of these things also. He described an ITFS system, which is a microwave system designed for broadcasting television signals that are received by schools or buildings that have special antennas to pick them up.

Twenty educational institutions are members of KAPSET, The Kansas Association of Post-Secondary Educational Television. KAPSET was formed several years ago to facilitate the use of telecourses. Regional groups have begun to service areas of the public stations. One group is working with KOOD; a group of six institutions is working with Channel 8.

Mr. Adkins listed schools in Kansas that have fairly active telecourse programs:

Emporia State University
Dodge City Community College
Johnson County Community College
Washburn University
Wichita State University

He said that Kansas University and Kansas State University occasionally offer telecourses.

Regarding satellite technology, Mr. Adkins showed a picture to explain how satellites work. Satellites are big reflectors in the sky; a transmitter sends a microwave signal up into space about 23,000 miles and this reflector sends it back down to earth. Communication satellites today are parked up in space over the equator in 25 slots, each slot spaced four degrees from the next. Satellites are located in "geostationary orbit" which means that they move, but they move in relationship to the earth's rotation, so they appear to be stationary. This allows us to receive that satellite 24 hours a day, seven days a week without repositioning the dish or the receiving antenna. Twenty five satellites currently serve North America.

Mr. Adkins referred to a handout sheet from Satellite TV Week (Attachment 3) which lists the television services that can be found on these satellites. There are 68 different networks and services available today via satellite; 17 of these services are provided on Wichita's Cablevision System. Mr. Adkins played portions of a sampler tape to give the committee an idea of some of the things received via satellite at the present time. The conferee gave several examples of accomplishments made possible by video and audio teleconferences via satellite.

In regard to cable television, Mr. Adkins listed three general objectives of Wichita State:

1. Transmitting the university's cultural and academic resources to the citizens of the community.
2. Through Channel 13, Wichita State offers credit via television to potential and existing students.
3. Supporting the training of students in telecommunications.

A tape was played which showed examples of Channel 13 programming.

The meeting was adjourned by the chairman at 4:45 p.m.


The next meeting of the committee will be held at 3:30 p.m. on February 24, 1983.


WHO ARE THE TELECOURSE PEOPLE?

THE TELECOURSE PEOPLE, a consortium of telecourse-producing institutions, is organized for the purpose of jointly exhibiting college level instructional television and radio course materials to those attending major educational and media conferences.

Each partner within THE TELECOURSE PEOPLE individually produces and distributes materials. Some materials are jointly produced and distributed by several members.

The partners of THE TELECOURSE PEOPLE include:

Coast Telecourses (Fountain Valley, CA); 

 Dallas County Community College - District (Dallas, TX);

Maryland Center for Public Broadcasting (Owings Mills, MD); 

 Miami-Dade Community College (Miami, FL);

Southern California Consortium for Community College Television (Cypress, CA); 

 University of Mid-America (Lincoln, NE).

WHAT IS A TELECOURSE?

A telecourse is an integrated instructional system that presents a body of knowledge through use of sight, sound, color, movement, and print.

Basic components of a telecourse include:

- video programs
- textbook
- student study guide, or combined textbook/study guide
- bank of test questions
- instructor's manual

A telecourse may also include:

- audio programs
- anthology of supplementary readings
- arrangements via computer for interaction between students enrolled and faculty supervising a telecourse
- listing of special projects, activities, or exercises
- a glossary of terminology
- marketing/promotion kit

A telecourse encompasses a variety of teaching devices and learning strategies appropriate to the subject matter and goals and objectives of the telecourse. Even though basic components can, and often do, stand alone, no single component provides the complete learning experience. Together, the print, visual, and aural elements guide the students to and through a successful learning experience.

Telecourses are constructed according to recognized principles of instructional design. The design begins with the academic consultants, working with instructional designers, script writers, and media production people.

WHAT IS A WRAP-AROUND?

A wrap-around is a special type of telecourse in which a producer, after identifying a set of learning objectives, builds a set of readings, and study and test materials around a high quality video series produced by an independent producer, commercial network or station, or networks such as the Public Broadcasting Service (PBS) and the British Broadcasting Corporation (BBC).

Wrap-arounds produced by the partners of THE TELECOURSE PEOPLE include: The Ascent of Man; Roots; The Shakespeare Plays; Classic Theater; The Adams Chronicles; The Age of Uncertainty; The Long Search; Cosmos; The American Short Story; America.

HOW ARE TELECOURSES USED?

Telecourses are produced to be of broadcast quality and are shown on commercial, public or cable television to increase access to higher education. The programs from the complete series are available individually for closed-circuit, classroom supplement, or audio-tutorial settings.

Telecourses are designed for credit and non-credit applications. Some are appropriate for consumer and continuing education utilization.

HOW ARE TELECOURSES DISTRIBUTED?

Each partner arranges its own distribution. Some distribute directly, while others work with national film distributors and print publishers. Prices depend upon project cost and intended use. They vary from producer to producer and from course to course. Reference to pricing is included in the institution's catalog of materials.

Telecourses are available in a variety of video formats including 1/2" Beta or VHS tape, 3/4" U-Matic cassettes, or 1" or 2" broadcast tape. Programs are often available individually, in modules, or as complete series.

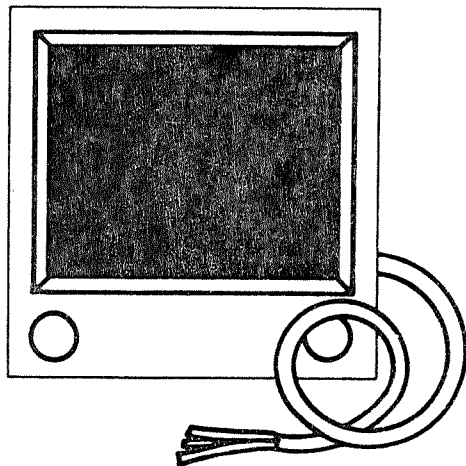
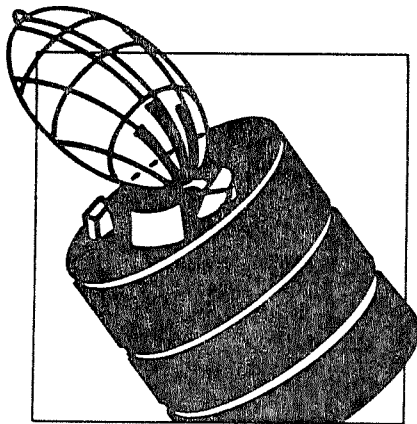
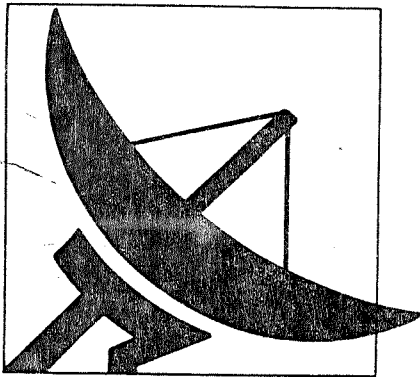
WHO BUYS OR LEASES TELECOURSES?

Approximately 61% of the institutions of higher learning throughout North America use television for instruction - over 800 institutions offer courses over television and more than 1100 institutions use television to supplement existing courses.*

In addition to colleges and universities, telecourse materials are used extensively by cable companies, divisions of the armed services, satellite services, educational organizations, state-wide consortia, libraries, business and industry.

The responsibilities of the user are to set the course's credit value, determine broadcast times, determine staffing needs, localize the course by preparing additional materials, administer courses including testing, and establish a student communications system.

*Higher Education Utilization Study Phase I: Final Report, March 1981, Corporation for Public Broadcasting and National Center for Education Statistics.



This listing of available telecourses is categorized by content area, followed by numerals identifying the number of tapes in the series and the minutes of each tape, followed by initials identifying the producing institution(s).

Visual Aids Index

	# OF TAPES/ MINUTES PERTAPE	PRODUCER
BUSINESS		
Accounting	13/30	UMA
Case Studies in Small Business	10/30	UMA
Century 21 Shorthand	45/30	MI
It's Everybody's Business - Introduction to Business Management	30/30	D
Personal Finance and Money Management	2/30	UMA
Voyage: Challenge and Change in Career/Life Planning	30/30	SCC
	30/30	C
EDUCATION		
Basic Education: Teaching the Adult	30/30	MCPB
Dealing in Discipline	12/30	UMA
Increasing Children's Motivation to Read and Write	5/30	UMA
Interaction: Human Concerns in the Schools	30/30	MCPB
Simple Gifts	12/30	UMA
HUMANITIES AND FINE ARTS		
Applied Sketching Techniques	30/30	C
Beginning Piano: An Adult Approach	30/30	C
Communicating Through Literature: Freshman Composition	30/30	D
Drama: Play, Performance, Perception	14/60	MI
Freehand Sketching	30/30	C
From Socrates to Sartre: An Introduction to Philosophy	30/30	MCPB
Humanities Through the Arts: A Humanities Survey	30/30	C
In Our Own Image - Introduction to Humanities	30/30	D
Jazz: An American Classic	10/30	UMA
Survey of English Literature I	30/45	MCPB
Survey of English Literature II	30/45	MCPB
The Art of Being Human	30/30	MI
Writing for a Reason - Freshman Composition	30/30	D
SCIENCE, MATHEMATICS AND ALLIED HEALTH		
Basic Nursing Skills - Nursing Education	32/var.	MI
Biology I	30/45	MCPB
Contemporary Health Issues - Health Science Survey	30/30	SCC
Earth, Sea and Sky - Introduction to Earth Science	30/30	D
Going Metric	4/30	UMA
Introducing Biology - A Survey for Non-majors	36/30	C
Introduction to Mathematics	30/30	MCPB

Continued on back page

	# OF TAPES/ MINUTES PER TAPE	PRODUCER
Oceanus—Introduction to the Marine Environment	30/30	SCC
Project: Universe—An Introduction to Astronomy	39/30	SCC
The Living Environment—Introduction to Environmental Science	23/30	D
SOCIAL SCIENCE		
Afro-American Perspectives	30/30	MCPB
America: The Second Century—American History II	30/30	D
American Government I—Introduction to American Government	30/30	D
American Government II	30/30	D
Family Portrait—Marriage, Family, Contemporary Lifestyles	30/30	SCC
Focus on Society—Principles of Sociology	30/30	D
Great Plains Experience	6/30	UMA
Japan: The Changing Tradition	16/30	UMA
Japan: The Living Tradition	14/30	UMA
Loosening the Grip	11/30	UMA
Of Earth and Man—An Introduction to Geography	30/30	MCPB
The American Story—American History I	30/30	D
The Growing Years—Child Development and Psychology	30/30	C
Understanding Human Behavior—Principles of Psychology	30/30	C/UMA
You and the Law—Personal Law for the '80's.	26/30	C
SPECIAL TOPICS		
Designing Home Interiors: Interior Design	30/30	C
Introduction to World Food Problems	5/30	UMA
Listening for Understanding	1/30	UMA
Needlecraft: An Introduction	20/30	C
Pests, Pesticides and Safety	5/30	UMA
Play Bridge with the Experts	26/30	UMA
The Home Gardener: Ornamental Horticulture—Revised Edition	30/30	C
Work Redesign	1/30	UMA

WRAP-AROUNDS

(SUPPORT MATERIALS AVAILABLE)

America	MI	The Age of Uncertainty	C
Classic Theatre	C	The American Short Story	C
Cosmos	C	The Ascent of Man	MI
Fast Forward	SCC	The Long Search	MI
Roots	MI	The Shakespeare Plays	C
The Adams Chronicles	C		

IN PRODUCTION

	# OF TAPES/ MINUTES PER TAPE	PRODUCER
Beginning Sewing	20/30	C
Introduction to Cultural Anthropology	26/30	C
Introduction to Management	26/30	SCC/C
Physical Assessment Skills—Nursing Education	11/var.	MI
Survival Spanish—An Introduction to Conversational Spanish	30/30	MI
The Money Puzzle—The World of Macroeconomics	30/30	MI
AUDIO/RADIO COURSES		
Business Law	28/30	MI
Death Attitudes and Life Affirmation	30/30	MI
Foundations of American Nationalism	30/30	UMA
Optimal Self-Development—Psychology of Adjustment	13/30	MI
The World of F. Scott Fitzgerald	8/60	D
You and the Law—Personal Law for the '80's.	26/30	C

OTHER TELECOURSE RELATED PRODUCTS

Administrative Guide to Telecourses	C
I'm Learning Again—Student Introduction to Telecourses	D
Management Minded Supervision	C
Promotional Public Service Announcements for Telecourses	D
Response System with Variable Prescriptions (RSVP)	MI
The AVT Learning System in Reading	MI

LEGEND

C = Coast Telecourses
 D = Dallas County Community College District
 MCPB = Maryland Center for Public Broadcasting
 MI = Miami-Dade Community College
 SCC = Southern California Consortium for Community College Television
 UMA = University of Mid-America

COAST TELECOURSES
 The Coast Community Colleges
 10231 Slater Avenue
 Fountain Valley, CA 92708
 (714) 962-8861

**DALLAS COUNTY
COMMUNITY COLLEGE
DISTRICT**
 12800 Abrams Road
 Dallas, TX 75243
 (214) 746-4609

**MARYLAND CENTER
FOR PUBLIC BROADCASTING**
 Owings Mills, MD 21117
 (301) 356-5600, Ext. 4098

**MIAMI-DADE
COMMUNITY COLLEGE**
 Auxiliary Services
 11011 S.W. 104th Street
 Miami, FL 33176
 (305) 596-1364

**SOUTHERN CALIFORNIA
CONSORTIUM**
 The Corporation for Community
 College Television
 5400 Orange Avenue, Suite 109
 Cypress, CA 90630
 (714) 828-5770

UNIVERSITY OF MID-AMERICA
 P.O. Box 82006
 Lincoln, NE 68501
 (402) 474-2300
 (800) 228-4572

Spring 1983

WSU 13 TELECOURSES

Television courses are REAL college courses . . . no easier than those on campus . . . just more convenient for some students.

Telecourses combine televised lessons, related reading assignments, and several on-campus sessions for orientation, discussions, and testing. The televised lessons will be repeated for your viewing convenience, and your instructor is but a telephone call away.

Students may enroll during regular registration or by mail (call 689-3726 for a mail admission/registration form). Tuition is \$24/credit hour for undergraduates and \$37/credit hour for graduate students.

REQUIRED ORIENTATION MEETING

All telecourse students are required to attend the meeting to be held on Saturday, January 15, in Room 208, R. Dee Hubbard Hall at 9:00 a.m. Instructors will explain individual course requirements, provide a course syllabus and answer questions.

FOR OTHER QUESTIONS, ATTEND THE ORIENTATION MEETING OR CALL THE INSTRUCTOR.



INSTRUCTIONAL SERVICES 452F — THE GROWING YEARS — Instructor: Gary Verna

The principle theme of the course is the interplay of biological factors, individual factors, individual personality, social structure, and other environmental forces in shaping the growing child. In scope, the course deals with the influences on development from conception to adulthood.

Three hours undergraduate credit. Line 9500. Two television programs per week (A & B) cablecast five times each, beginning January 17 and ending May 1. There will be six on-campus sessions in Room 228 HH, PLUS the required orientation meeting on Jan. 15.

Program A

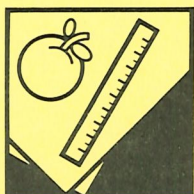
1:30 p.m. Monday
8:30 p.m. Monday
6:30 a.m. Tuesday
7:30 p.m. Tuesday
9:00 a.m. Sunday

Program B

1:30 p.m. Wednesday
8:30 p.m. Wednesday
6:30 a.m. Thursday
7:30 p.m. Thursday
9:30 a.m. Sunday

Saturday On-Campus Sessions

Jan. 22 8:30-10:30 a.m.
Feb. 5 8:30-10:30 a.m.
Feb. 19 8:30-10:30 a.m.
Mar. 19 8:30-10:30 a.m.
Apr. 9 8:30-10:30 a.m.
Apr. 30 8:30-10:30 a.m.



INSTRUCTIONAL SERVICES 754Y — DEALING IN DISCIPLINE — Instructor: Dr. Michael James

Designed to give classroom teachers, school counselors, and administrators a wide range of effective ways to prevent and deal with discipline problems. The goal is to provide the participants with an understanding of how classroom discipline is established and maintained as well as the ability to apply a variety of disciplinary methods and techniques. No one way is advocated over others presented; students should choose according to their own biases and needs.

Three hours undergraduate/graduate credit. Line 9502. One program per week cablecast five times each, beginning January 24 and ending April 16. There will be four on-campus sessions in Room 220 HH, PLUS the required orientation meeting on January 15. Enrollment limited to 50. Additional televised seminars (4) may be required.

Program A

2:30 p.m. Monday
9:00 p.m. Monday
5:30 a.m. Tuesday
9:30 p.m. Tuesday
7:30 a.m. Saturday

Saturday On-Campus Sessions

Feb. 5 9:30-11:30 a.m.
Feb. 26 9:30-11:30 a.m.
Mar. 26 9:30-11:30 a.m.
Apr. 23 9:30-11:30 a.m.



MUSICOLOGY-COMPOSITION 080 — TOPICS IN MUSIC — Instructor: Dr. J.C. Combs

This course will focus on interesting aspects of the Wichita Symphony Orchestra, providing background information about the events and composers to be featured during the 82-83 Orchestra season. Guest speakers in the class will be members of the Wichita Symphony, including Michael Palmer.

One hour credit. Line 9504. One program per week (A) cablecast two times each week beginning January 17 and ending on May 1.

Program A

9:00 p.m. Wednesday
8:00 p.m. Friday

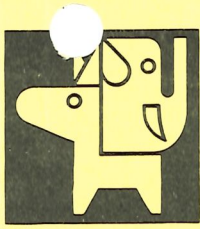
Saturday On-Campus Sessions

TO BE ANNOUNCED

House Communication, Computers and Technology

Attachment 2

2-23-83



POLITICAL SCIENCE 121 — American Politics
AMERICAN GOVERNMENT II — Instructor: Dr. John Stanga

An analysis of the basic patterns and structure of the American political system, with emphasis on policies and problems of American politics.

Three hours undergraduate credit. Line 9896. Two programs per week (A & B) cablecast four times each, beginning January 17 and ending May 1. There will be a minimum of five on-campus sessions in Room 105 LAS beginning January 29 — More may be scheduled.

Program A

5:00 a.m. Monday
 7:30 p.m. Monday
 8:30 p.m. Tuesday
 8:00 a.m. Sunday

Program B

5:00 a.m. Wednesday
 7:30 p.m. Wednesday
 8:30 p.m. Thursday
 8:30 a.m. Sunday

Saturday On-Campus Sessions

Jan. 29 9:00-11:00 a.m.
 Feb. 26 9:00-11:00 a.m.
 Mar. 26 9:00-11:00 a.m.
 Apr. 30 9:00-11:00 a.m.



STUDIO ARTS 199 —
APPLIED SKETCHING — Instructor: Randall Kust

Reviews the fundamentals of freehand drawing and builds on these principles to introduce more advanced techniques and concepts. Through the course, the student develops the ability to progress to more difficult and more interesting forms of drawing.

One hour undergraduate credit (cannot be applied to Fine Arts degree). Line 9508. Two programs per week (A & B) cablecast five times each, beginning January 18 and ending May 1. There will be four on-campus sessions in Room 205 MK, PLUS the required orientation meeting on January 15.

Program A

5:00 a.m. Tuesday
 1:30 p.m. Tuesday
 7:00 p.m. Tuesday
 7:00 p.m. Friday
 7:00 a.m. Sunday

Program B

5:00 a.m. Thursday
 1:30 p.m. Thursday
 7:00 p.m. Thursday
 7:30 p.m. Friday
 7:30 a.m. Sunday

Saturday On-Campus Sessions

Feb. 5 10:00-11:30 a.m.
 Mar. 5 10:00-11:30 a.m.
 Apr. 9 10:00-11:30 a.m.
 May 7 10:00-11:30 a.m.



PERSONAL DEVELOPMENT 199 —
VOYAGE: CAREER/LIFE PLANNING — Instructor: Dr. Donna Kater

To present concepts and techniques which will help students develop a more internal focus of control and the skills necessary for effective career and life planning.

Two hours undergraduate credit. Line 9890. Two programs per week (A & B) cablecast two times each, beginning January 17 and ending May 1.

Program A

8:00 p.m. Monday
 2:00 p.m. Tuesday
 9:00 p.m. Tuesday
 6:00 a.m. Friday

Program B

8:00 p.m. Wednesday
 2:00 p.m. Thursday
 9:00 p.m. Thursday
 6:30 a.m. Friday

Saturday On-Campus Sessions

Jan. 22 9:00-11:00 a.m.
 Feb. 19 9:00-11:00 a.m.
 Mar. 19 9:00-11:00 a.m.
 Apr. 30 9:00-11:00 a.m.



GEOLOGY 302 — Earth and Space Science
EARTH, SEA, AND SKY — Instructor: Lynette Flann

A general survey of man's physical environment, including elements of geology, geography, meteorology, climatology, oceanography, and astronomy. LAB required.

Three hours undergraduate credit. Line 9892. Lab line 9893. \$20 lab fee required. Two programs per week (A & B) cablecast four times each, beginning January 17 and ending May 1. There will be eight on-campus sessions in Room 227 McKinley Hall, PLUS the required orientation meeting on January 15.

Program A

6:00 a.m. Monday
 7:00 p.m. Monday
 8:00 p.m. Tuesday
 6:00 a.m. Sunday

Program B

6:00 a.m. Wednesday
 7:00 p.m. Wednesday
 8:00 p.m. Thursday
 6:30 a.m. Sunday

Saturday On-Campus Sessions

Jan. 29 9:00-10:30 a.m.
 Feb. 12 9:00-10:30 a.m.
 Feb. 26 9:00-10:30 a.m.
 Mar. 12 9:00-10:30 a.m.
 Mar. 26 9:00-10:30 a.m.
 Apr. 9 9:00-10:30 a.m.
 Apr. 23 9:00-10:30 a.m.
 May 7 9:00-10:30 a.m.

SATELLITE TELEVISION SERVICES

Video Services

Armed Forces Network	20	[F1]
Independent News Network	21	[W3]
Public Broadcasting Systems	23	[W4]
Public Broadcasting Systems	21	[W4]
Public Broadcasting Systems	17	[W4]
Public Broadcasting Systems	15	[W4]
EROS	19	[W4]
SelectTV	18	[W4]
Financial News Network	09	[W4]
XEW-TV, Mexico City	06	[W4]
Black Entertainment Television	24	[W5]
Satellite News Channels (feeds)	16	[W5]
Satellite News Channels	11	[W5]
Satellite News Channels (reg.)	08	[W5]
WOR-TV, New York	03	[W5]
Alaska TV Project	23	[F2]
Learn/Alaska	11	[F2]
Home Box Office (east)	24	[F3]
Cinemax (west)	23	[F3]
Modern Satellite Network	22	[F3]
Daytime	22	[F3]
USA	22	[F3]
The Weather Channel	21	[F3]
C-SPAN	19	[F3]
Eternal Word Television	18	[F3]
Cable Health Network	17	[F3]
Home Theater Network Plus	(ST) 16	[F3]
Learning Channel	15	[F3]
Cable News Network (headline)	15	[F3]
Cable News Network	14	[F3]
Home Box Office (west)	13	[F3]
Showtime (east)	12	[F3]
Music Television (MTV)	(ST) 11	[F3]
Showtime (west)	10	[F3]
USA	09	[F3]
Christian Broadcasting Network	08	[F3]
ESPN	07	[F3]
WTBS-TV, Atlanta	06	[F3]
The Movie Channel	(ST) 05	[F3]
Spotlight	(ST) 04	[F3]
WGN-TV, Chicago	03	[F3]
People That Love (PTL)	02	[F3]
Nickelodeon	01	[F3]
Alpha Repertory Theater	01	[F3]

Galavision	23	[F4]
American Movie Network	19	[F4]
Trinity Broadcasting Network	17	[F4]
BizNet (American Business)	15	[F4]
The Entertainment Channel	08	[F4]
National Christian Network	07	[F4]
The Playboy Channel	07	[F4]
Bravo	06	[F4]
Satellite Programming Network	03	[F4]
Spanish International Network	01	[F4]
Alaska TV Project	24	[F5]
Learn/Alaska	20	[F5]
CBS Network	17	[D3]
ABC Network	13	[D3]
NBC Network	01	[D3]
CBC (north-Atlantic)	19	[AB]
CBC (French)	15	[AB]
CBC (north-Pacific)	11	[AB]
House of Commons (Eng.)	24	[AD]
BCTV, Vancouver	22	[AD]
CITV, Edmonton	18	[AD]
House of Commons (French)	16	[AD]
TCTV, Montreal (French)	14	[AD]
CHCH, Hamilton	08	[AD]

(ST denotes some programming in stereo)

What the Symbols Mean

Designation	Satellite	Location
F-5	Satcom 5	139° W
F-1	Satcom 1	135° W
F-3	Satcom 3R	131° W
D-4	Comstar D-4	127° W
W-5	Westar 5	123° W
F-2	Satcom 2	119° W
A-2/3	Anik 2 & 3	114° W
AB	Anik B	109° W
AD	Anik D	104° W
W-4	Westar 4	99° W
D-2	Comstar 2	95° W
W-3	Westar 3	91° W
D-3	Comstar 3	87° W
F-4	Satcom 4	83° W
W-1/2	Westar 1 & 2	79° W

from: SATELLITE TV WEEK, January 30, 1983