

# Beyond ENG and Digital Video to Highlight SMPTE Winter TV Conference in San Francisco



Clockwise, from above, Conference Chairman Charles E. Anderson, "Beyond ENG" Program Chairman Carlos Kennedy, and Digital Program Chairman Joe Roizen.

The 11th Annual SMPTE Winter Television Conference will be held at the St. Francis Hotel in San Francisco January 28-29, 1976.

Following up on its highly successful Winter TV Conference last January in Detroit, the SMPTE intends to make this 1977 meeting a similar success. The program topics are "Beyond ENG," and Digital Video, two subjects of intense importance to television people. The Conference is being organized by members of the San Francisco Section. The Conference Chairman is **Charles E. Anderson**, Ampex Corp. who has overall Conference responsibility. The job of arranging the program is shared by two people: **Carlos Kennedy**, Ampex Corp. who is Program Chairman for Beyond ENG, and **Joe Roizen**, Telegen, who is Program Chairman for Digital Video. The Publicity Chairman is **Kay Kibby**, W.A. Palmer Films. **Sue Blumenberg**, ABC-TV, is in charge of Registration and the financial aspects of the Conference. **Don Lincoln**, KPIX, Westinghouse Broadcasting, is in charge of the Wine and Cheese Party.

To give some background on the program, both Program Chairmen have written brief descriptions of some of the highlights that will be on their segments of the program. Program details appear later under the "Advance Program" heading.

## Program Highlights—Beyond ENG

The "Beyond ENG" session of the Winter Television Conference is scheduled for Friday, January 28, 1977.

The "Beyond ENG" topic is shaping up very well with a roster of interesting papers already on the agenda, and a few more expected to be firmed up soon. At the present time, the following papers have been proposed and accepted by the Papers Committee.

**Joseph A. Flaherty**, General Manager of Engineering and Development, CBS Television Network, New York City will set the stage with his paper "Beyond ENG." Mr. Flaherty, Television Affairs Vice-President of SMPTE, is also well known for his pioneering work in the use of video techniques for the coverage of news. He is well qualified to discuss where we go from here in the non-news use of television.

**Scott Gibbs**, of KPIX in San Francisco, will present his paper "Wouldn't Film Be Easier." Scott is a unit producer on the Evening Show, a new half-hour evening program aired locally in San Francisco. The experiences using ENG-type equipment for the daily production will be analyzed, and strengths and weaknesses discussed, and projections into the future given.

**Howard Steele** of the Independent Broadcasting Authority, London, England will deliver his paper "Beyond ENG—The End Query." This paper will discuss electronic news from a European point of view, the experiences in making a British documentary program in America using ENG equipment, electronic news developed from the European standpoint including EBU, attempts to standardize procedures and equipment and what Europe wants. Finally, what effect digital techniques might have on "Beyond ENG" is discussed.

**Issac Hersly** of ABC-TV Engineering in New York City, will deliver his paper on the experiences of ABC in covering the summer Olympics and the recent political conventions with ENG-type equipment.

**Robert Pfannkuch** of Bell and Howell will give his paper comparing "Direct vs Color-Under or Heterodyne Color Systems." This paper will analyze these two systems of recording video signals. The limitations of the color-under signal will be examined in detail, both from a technical and subjective point of view.

**Al Hillstrom**, Engineering Director, KOOL-TV, Phoenix, AZ will deliver a paper describing KOOL experiences in producing local spots using ENG-type equipment. KOOL also has produced many documentaries using the same gear.

**Robert Paulson**, an independent consultant will deliver his paper "After ENG—What?" Bob is author of the *ENG/Field Production Handbook* which describes the early use of ENG equipment. This paper will be a logical follow-up to this publication and will describe the impact on people of this emerging technology, and will it cause a death to old skills and a birth to new skills.

**Gregg Snazelle** of Snazelle Film Inc., San Francisco, will read a paper describing his experience in both video and film production of commercials. Each have their place, depending upon the particular technique to be accomplished, and Gregg will discuss his experiences using both film and tape. Projections into the future production of commercials will be prophesied by Mr. Snazelle.

**Nigel Hamley** of Keeline Productions, London, England, will present a paper on film-type editing but using video to produce the edit. Although this is directed to Beyond ENG application, it covers the range from news to feature film production. The techniques of using videotape as a work print for film editing decision making is described. Other interesting papers are being considered for this Beyond ENG session, but finalization has not yet occurred.

The morning session will be chaired by **Lee Marvin**, Marketing Engineer for Television Research International. At TRI, editors and related equipment are finding a significant position in the Beyond ENG market place.

The afternoon session will be chaired by **Dave Fibush**, Engineering Section Manager of Ampex Corp. Mr. Fibush is a recently elected officer of the San Francisco Section of SMPTE.

Following the formal presentation of papers, the authors will form a panel to discuss Beyond ENG with active audience participation.

ENG has had a dramatic effect on television news reporting and the use of this equipment in non-news applications may also have far reaching effects. This conference should provide attendees with unique insights on Beyond ENG.

*Carlos Kennedy*  
Program Chairman, Beyond ENG

### Program Highlights—Digital Video

The digital television topic is shaping up very well with a roster of interesting papers already on the agenda and a few more expected to be firmed up soon. At the present time, the following papers have been proposed and accepted by the papers committee.

**Frank Davidoff** of CBS Engineering in New York, will do a basic digital television tutorial which will include a short review of his previous presentation on this subject and new material that has been generated since. Mr. Davidoff is uniquely qualified to speak on digital TV in particular because he is frequently the CBS representative at domestic and international broadcast standards meetings.

**Charles Rhodes** of Tektronix has submitted a paper entitled "Measurement of Video Signal Transmission Parameters Using Digital Technology To Fully Automate Such Measurement." Mr. Rhodes is well-known in our industry for his pioneering work on waveform measurement, vectorscopes and more recently, the VIRS system for automatic color correction of NTSC signals. This promises to be a significant addition to the program.

**Stephen Beck**, a consultant on video circuitry for the National Semiconductor Corp., will explain his "DSEG—Digital Special Effects Generation for Color Video" a device using microprocessors to produce digital special effects for custom pattern generation. He has developed numerous experimental video tapes at the KQED-TV National Center for Experiments in Television which are in public and private collections.

**Walter A. Kester**, a senior engineer at Computer Labs, Inc., will present a paper entitled "Analog to Digital Conversion for Video Applications," which will include a brief history of video digitizers. A/D conversion techniques, some hardware descriptions and the performance and testing of such digital video converters. This paper is very relevant to the subject matter under scrutiny during this Winter Conference.

The problem of enhancement of video signals in their analog or digital form will be reviewed by two authors who have decidedly opposite views on the subject. The paper entitled "Digital and Analog Video Enhancement Techniques" will be given by **Al Swain** who is pro digital and **Yves Faroudja** who is pro analog. Both of these engineers are directly involved with equipment design relating to these areas of discussion.

"Digital Techniques in Disc Recording" is the paper to be given by the Ampex engineer, **Luigi Gallo**, who was part of the development team on the Electronic Still Store which uses digital recording methods to store single frames of television information on magnetic disc packs. The overall system was described at the Detroit Winter Conference and this paper will now delve deeper into the technical details involved.

**Charles P. Ginsburg** of Ampex Corporation, who is also chairman of the SMPTE study group on digital video standardization, has promised to provide an update on the progress made by his committee in the area of standardizing certain common aspects of A/D and D/A conversions as well as interface devices involved in the process. As digital video hardware begins to proliferate, the aspect of standardization becomes more important, and Mr. Ginsburg is one of the leading authorities in this field.

**Charles Anderson**, the Conference Chairman, has also prepared a glossary of digital terms that will be printed and distributed at the digital video session for the information of those participants who may not know a RAM from a PROM, and the program chairman, **Joe Roizen**, will make the opening remarks on the status of digital television and some of its unique applications and problems.

The morning session will be chaired by Mr. **William H. Orr**, President of Orrox Corp., of which CMX Systems is a division where digital techniques and microprocessors are extensively used in their VTR editing systems. The afternoon session chairperson is Mr. **Louis "Dee" Pourciau**, Manager of Camera Engineering at International Video Corp. Digital methods applied to color cameras have permitted the use of triaxial camera cable which greatly extends mobility of television operations.

Another special treat for those planning to attend the Winter Conference will be a video tape presentation of a program made by Mr. **Howard Steele**, Director of Engineering of the Independent Broadcasting Authority of the United Kingdom. The program is called, "The Entertaining Electron," and is about television operations and ENG activities taped in Chicago. There is also a segment showing the role of digital techniques and computers as they are used for international standards conversion and for the ORACLE magazine of the air that has been in daily operation in England for over two years. The program ends with some projection on the future of television when new and emerging technologies will be applied to home reception. This program, which is based on a widely acclaimed series of lectures called the "Faraday Lectures," features both Mr. Steele and his colleague, **Dr. Boris Townsend**, and has been made available through the kind cooperation of Mr. Alan James, Head of Network Operations of IBA.

**Brian Matley**, Micro Consultants, will present a paper entitled, "Optimum Use of Frame Store Synchronizers" at the Winter Conference.

The Winter Conference program will continue to provide SMPTE members who attend with the most comprehensive and up-to-date information on the rapidly advancing technology which affects our positions and our future.

*Joe Roizen*  
Program Chairman, Digital Video

### Exhibit of Newsgathering & Digital Video Equipment

The SMPTE Winter TV Conference will feature a full-scale formal equipment exhibit in conjunction with the technical sessions. The exhibit will be limited to exhibitors of newsgathering and digital video equipment only. No other kinds of equipment will be shown. This is to insure that attendees can focus on the two important subjects at hand.

This product-specific exhibition is one of the few times you will find the integration of a technical program with an equipment exhibition. This is the only time that television newsgathering and digital video equipment will be featured alone in one spot without the distractions of other types of equipment. The exhibit will be open 8:00 a.m. to 6:00 p.m. Friday and Saturday.

### Exhibitors (as of November 23)

Ampex Corp.	International Video Corp.
Arvin Echo	Lowel-Light
Chyron Telesystems	Micro Consultants
Cinema Products	Microwave Associates
Cine 60	Philips Broadcast Equipment Corp.
Convergence Corp.	Recortec
Eastman Kodak	Television Research International
Eigen Video	
Hitachi Denshi	

## Advance Registration

To avoid waiting in line to register, please register in advance by mail. An advance registration form has been sent to all members. It should be returned with payment to SMPTE Winter TV Conference, 862 Scarsdale Ave., Scarsdale, NY 10583. Badges and tickets will be waiting for registrants at the Conference Registration Desk.

## Registration Rates

Member Registration (both days)	\$40.00
Nonmember Registration (both days)	50.00
Member Daily Registration	25.00
Nonmember Daily Registration	30.00
Get-Together Luncheon	10.00

## Hotel Reservations

To reserve hotel rooms at the St. Francis, use the postage paid reservation card. Cards have been sent to all members. To be assured of a reservation at the special Conference rates, mail the card to the hotel as soon as possible. If the card is not used, please specify that you will be attending the SMPTE Conference.

## Hotel Rates

	Main Building	Tower
Single	\$38.00	\$48.00
Double	48.00	58.00
Twin	48.00	58.00

## Get-Together Luncheon

A Get-Together Luncheon is scheduled for the Conference on Friday, January 28. The guest speaker will be **John**

**M. Taff**, Assistant Chief, Policy and Rules, Broadcast Bureau, FCC.

## Wine and Cheese Party

A Wine and Cheese Party for all Conference registrants will be held at Eastman Kodak's facilities. The party will be jointly sponsored by several local TV stations.

## Post Conference Tour of the California Wine Country

A tour of the California wine country is planned for the day after the Conference, Sunday, January 30. The tour will begin at 9:00 a.m. and will include the visit to three wineries and a barbeque lunch. The price, including transportation, is \$15.00 per person.

## Conference Notes

Film subjects related to television needs will be handled in several papers still to be scheduled. Already submitted for this group are:

### Eastman Ektachrome Video News Film

John Erwin, George Klein, George Isselhard, Gregg Martin, Rodney Perry, R. W. Wein, *Eastman Kodak Co., Rochester, NY*

### A Rapid Access Color Reversal Process

W. G. Doody and R. R. Andrews, *Eastman Kodak Co., Rochester, NY*

Full details will be in the Final Program

# Advance Program

This program contains the most accurate and complete information available at the time of publication. Questions about specific papers or sessions should be addressed to SMPTE Headquarters, Att: Lynne Robinson, Conference Programs Secretary, 862 Scarsdale Ave., Scarsdale, NY 10584, (914) 472-6606; or to the respective Program Co-Chairmen—Joseph Roizen, Telegen, 800 Welch Road, Suite 354, Palo Alto, CA 94304, (415) 326-6103 (Digital Television) or Carlos Kennedy, Ampex Corp., 401 Broadway, Redwood City, CA 94063, (415) 367-2240 (Beyond ENG). The final program with titles of papers, authors, and times of presentation will be available from SMPTE Headquarters on January 17, and at the Conference.

## Friday, January 28 BEYOND ENG

### Overview of Beyond ENG

Joseph A. Flaherty, *CBS Television Network, New York*

### Wouldn't Film Be Easier?

Scott Gibbs, *KPIX, San Francisco*

### Beyond ENG—The End Query

Howard Steele, *Independent Broadcasting Authority, London*

### ABC at the Summer Olympics and Political Conventions

Isaac Hershey, *ABC Television, New York*

### Direct Versus Color-under

Robert Pfannkuch, *Bell & Howell, Communications Group, Chicago*

### Beyond ENG at KOOL

Al Hillstrom, *KOOL, Phoenix*

### After ENG—What?

Robert Paulson, *AVP Communication, Westboro, Mass.*

### Film and Video in Commercial Production

Gregg Snazelle, *Snazelle Productions, San Francisco*

### Beyond ENG to Editing a Motion Picture on Video Cassette Utilizing Photographic Edge Numbers for Cinema or TV Release.

Nigel Hamley, *Keeline Productions, London*

## Friday Afternoon (4:00 to 5:30 p.m.) BEYOND ENG PANEL DISCUSSION

Authors of the ENG morning and afternoon sessions will participate in this panel discussion

## Saturday, January 29 DIGITAL VIDEO

### A Basic Digital Television Tutorial

Frank Davidoff, *CBS Television Network, New York*

### Measurement of Video Signal Parameters Using Digital Technology to Fully Automate Such Measurement

Charles Rhodes, *Tektronix, Inc., Beaverton, Ore.*

### Digital Special Effects for Color Video

Stephen Beck, *Consultant, Berkeley, Calif.*

### Analog to Digital Conversion for Video Applications

Walter A. Kester, *Computer Labs, Inc., Greensboro, N.C.*

### Digital and Analog Video Enhancement Techniques

Allen L. Swain, *Consolidated Video Systems, Inc., and Yves Faroudja, Y. Faroudja, Inc., Los Altos, Calif.*

### Digital Techniques in Disc Recording

Luigi Gallo, *Ampex Corp., Redwood City, Calif.*

### The SMPTE Study Group on Digital Video Standardization—A Progress Report

Charles P. Ginsburg, *Ampex Corp., Redwood City, Calif.*

### The Entertaining Electron (A Videotape Presentation)

Howard Steele, *Independent Broadcasting Authority, London*

### Optimum Use of Frame Store Synchronizers

Brian Matley, *Micro Consultants, Inc., Palo Alto, Calif.*