News

SMPTE Officials Speak at HDTV Symposium in Tokyo

An SMPTE delegation led by Society President Harold J. Eady, Novo Communications, participated in a series of technical sessions on high-definition television at an HDTV symposium in Tokyo, Japan, September 17-18. The two-day symposium, the first stop by the SMPTE officials on a Far East trip that also included a meeting in Beijing, China, drew engineers and technical personnel from Sony, Fuji, Japan Broadcasting Corp. (NHK), Matsushita, Far East Labs, and other well-known Japanese companies. Other countries were represented as well.

The specialized symposium attracted about 250 representatives of the Japanese film and television industry. It was arranged by the Motion Picture and Television Engineers of Japan (MPTEJ) and co-hosted by the SMPTE. Among the MPTEJ members at the symposium were MPTEJ Chairman Masahiko Morizono, deputy president, Sony Corp.; Keinosuke Nakajima, president, NAC Camera Service Co.; and Nobutada Yagi, Nihon University.

In his keynote speech at the opening session, of which he was co-chairman, Eady provided an illustrated review of the role the SMPTE has played in the early demonstrations of high-definition television in the U.S. He said the Society has been active, through its conferences and journal, in the dissemination of information pertaining to the 1125-line, 60-field HDTV, developed and proposed by NHK. Eady also discussed additional television enhancement systems currently under scrutiny by the Society, the SMPTE's achievements in the standards field, and the record of the organization's service to both the television and film industries. He expressed a desire that the two Societies will work closely with one another to arrange similar specialized symposia.

SMPTE Engineering Vice-President Richard G. Streeter, CBS Broadcast Group, expanded on Eady's presentation by explaining the current position of the Society — and its diligent work — in sponsoring HDTV demonstrations in the U.S. He emphasized the need for a world HDTV standard, and pointed out that the SMPTE contributed a significant share of the committee work that led to the Advanced Television Systems Committee (ATSC) recommendations for a U.S. State Dept. posture at the International Radio Consultative Committee (CCIR) meetings in Geneva.

The chairman of the SMPTE Working Group on High Definition Television Electronic Production, Richard J. Stumpf, Universal City Studios, gave a presentation titled "A Film Studio Look at HDTV."

Other SMPTE members who attended the symposium included SMPTE Executive Vice-President M. Carlos Kennedy, Ampex Corp.; SMPTE Eastern Region Governor Irwin Young, Du Art Film Laboratories, Inc.; Joseph Roizen, Telegen; and Arnold Brown, National Film Service, Inc.

From Tokyo the delegation traveled to Beijing, China, for a meeting with Chinese film and television officials. There, SMPTE Governor-at-Large Bengt O. Orhall, AB Film-Teknik, and SMPTE Secretary Stephen D. Kerman, Tektronix, Inc., joined the Tokyo group. A more detailed report of the trip will appear in a future issue of the *Journal*.

Addendum to 1984 Progress Report

The information below is an addition to the 1984 Progress Report published in the April 1985 *SMPTE Journal*.

Networks

In 1984, ABC provided the technical facilities for the U.S. broadcast of the 1984 Winter Olympic Games and hosted the Summer Olympics in Los Angeles. This was the first time a U.S. broadcaster had taken on this responsibility for the Summer Games.

The ABC Unilateral Broadcast Center in Sarajevo was designed and assembled in New York City, then was fully tested and shipped to Yugoslavia via 32 tractor/trailers on a container ship in October 1983. Three months and 150 miles of cable later, the system was fully operational and represented the latest state of the art in high-tech television broadcast facilities. Three hundred and fifty technicians, a portion of the total staff of 650 ABC-TV Sports personnel, were involved in bringing a total of 65 hours of Olympic television to the U.S. viewers. "Point of View" miniature cameras, Quantel Mirage & Paint Box, Ampex ADO, Dubner CBGs, and Chyron IVs were part of the unique electronic equipment employed to bring a new and different dimension to the telecasting of winter sports.

ABC domestic coverage of the Summer Olympics contained over 180 hours of live broadcasting, organized out of three control rooms in a newly-equipped Unilateral Broadcast Center at the ABC Television Center in Hollywood. Signals from venues as far away as Lake Casitas, 95 miles north of Hollywood, and Fairbanks Ranch, 121 miles to the south, were sent via common carrier, fiber-optic circuits, private microwave, and satellite earth stations to the two Broadcast Centers for distribution, coordination, editing, and broadcast.

The international broadcasters received all 1300 hours of competition from ABC's pickup, and were able to add their own commentary to the natural sound through the provision of 360 fully-equipped commentator's positions. ABC employed over 4000 personnel in this broadcast effort. The equipment consisted of more than 70 studio cameras, 30 handheld cameras, 280 videotape machines, 1800 monitors, 36 mobile units, 20 digital graphics devices, 900 miles of in-plant cable, and over three years were spent in its design and construction.

As part of the innovative coverage of the Games, ABC pioneered development of the "Super Slo-Mo" and introduced its Olympic use, along with specially designed and built electric vehicles and a "wakeless" boat for coverage of the rowing competition. This was all part of the largest effort ever put together by an American network to bring the Olympic Games to the U.S. audience and the world.

ABC continued to work on cost, technical quality, and operational flexibility as the basis for its network satellite distribution. C-Band technology was chosen for cost stability, 2-degree compatability, and picture quality. Each affiliates' earth station consisted of a 7.3-m steerable antenna, 4.5-m fixed back-up antenna, and 4 Avantek frequency agile receivers. Seventy percent of affiliates have been co-located with their TV station facilities.

Satellite network control is presently accomplished by an IBM PC via telephone lines (DDD), but will be on subcarriers via the video path when completed. Operationally, the network can be quickly reconfigured for regional news and sports networks, sectional commercial feeds and backhaul, and has spot-beam capability for transmission to Hawaii and Puerto Rico. By the end of 1984, there were 60 affiliates receiving satellite network signals.

Worldwide Digital Videotape Format Standardized

The fundamental parameters for the first standardized broadcast-quality digital videotape recording format were approved July 24 by the SMPTE Working Group on Digital Television Tape Recording (WG-DTTR). The group met in New York and agreed to submit to formal ballot a series of draft SMPTE standards.