

National Academy of Television Arts and Sciences Presents Three Awards for Engineering Excellence

The National Academy of Television Arts and Sciences presented Emmy Awards to Sony Corp., ABC-TV, and RCA Corp. at the eighth annual NATAS Engineering and Scientific Awards ceremony, held Sept. 9, 1985, in the Imperial Ballroom of the Sheraton Centre Hotel in New York City. The companies, each a Sustaining Member of the SMPTE, were honored for distinguished achievement in the science of television engineering.

Sony Corp. won an Emmy "for the technology leading to significant improvement in slow-motion picture quality," inherent in its Super Motion video system. The award also honored ABC-TV, which co-developed the system and utilized it for dramatic slow-motion coverage of the 1984 Summer Olympics in Los Angeles. ABC-TV was accorded recognition by NATAS "for the concepts for a television system leading to significant improvement in slow-motion picture quality."

The Super Motion video system is the first high-resolution, slow-motion recording and playback system to capture in detail the progress of a given subject's movement. Sony's technological design elevates the basic capture rate of the Super Motion camera to 180 fields instead of the conventional 60 fields/second, leading to improved slow-motion imaging quality. The slow-motion VTR can be slowed down considerably while still preserving the fluidity of motion. With more original fields captured, the chances of losing a split second of action are reduced.

The award also recognized the Super Motion video system's incorporation of the 1-in. Type-C compatible format. Sony demonstrated ingenuity in this conversion of a high-speed television system to conventional TV playback, with no loss in the additional original information captured by the camera.

William G. Connolly, president, Sony Broadcast Products Co., accepted the award on behalf of the company. Julius Barnathan, president, Broadcast Operations and Engineering, ABC-TV, accepted his company's Emmy.

RCA Corp. was the recipient of an Emmy for its development of the CCD color television camera. NATAS cited RCA "for pioneering efforts leading to the development of broadcast television cameras with solid-state image pickup devices."

The development of the CCD-1 camera was a major innovation in camera design. The solid-state chips (or CCD elements), which replaced



Julius Barnathan accepts the award for ABC-TV.



Joseph C. Volpe (left), RCA Broadcast Systems Div., accepts the Emmy from John Cannon, president of NATAS.

the three tubes used in conventional broadcast television cameras, eliminate lag. Many setup adjustments used in the conventional cameras have been eliminated in the CCD design. Also, the high sensitivity of RCA's camera allows for superior pictures in low-light and fast-action situations.

Joseph C. Volpe, division vice-president and general manager, Broadcast Systems Div., RCA Corp., accepted the award.



William G. Connolly (right), Sony Broadcast Products Co., accepts award from John Cannon (left), NATAS president. Also pictured is Neil Vander Dussen, president, Sony U.S. Marketing Group.