

Architecture, which had fascinated him since his boyhood.

Born in Simla, India, his boyhood years were spent in London and he received his B.A. (Honors) and M.A. degrees from Cambridge University in 1937. He continued his academic career with graduate studies at the Sorbonne and the Ecole Libre des Sciences Politiques in Paris. Before joining SMPTE, Courtney worked for the National Planning Association and the Raw Materials Mission in Washington, DC

Courtney is survived by his daughter Jennifer Lane Justice, and son Stephen Denis Courtney.

Charles W. Wyckoff

Charles W. Wyckoff, a SMPTE member since 1949, died on May 9, 1998 in Needham, MA. He was 82 years old. Wyckoff was awarded the E.I duPont Gold Medal by the Society in 1965 for his work in high-speed photography and photo-instrumentation.

While doing postgraduate work at MIT, he worked with stroboscopic photography pioneer Harold Edgerton: Edgerton developed ultrafast flashes and Wyckoff developed ultrafast film and cameras. During World War II he helped perfect torpedoes for the Navy.

The SMPTE Life Fellow was a founding

member of the research and development firm EG & G, for which he developed a system for photographing atmospheric nuclear bomb blasts. A series of his photos of atomic bomb blasts were published in *Life* magazine in 1960. A decade later, the publication published a two-page spread of a photograph of the sun's corona taken by Wyckoff from a high-altitude NASA jet, with high-speed color film that he invented.

He shared his photographic expertise with a national audience when he was called upon by CBS to analyze the Zapruder home movie of the assassination of President Kennedy frame-by-frame on a show hosted by Dan Rather.

In 1970, he left EG & G and started Applied Photo Sciences. After an automobile accident resulted in the death of his son Charles Jr., Wyckoff devoted his energies to developing a high visibility, high-way lane-marking system to help prevent accidents during periods of low visibility.

Last year he explored the depths of Loch Ness in Scotland with high-tech photographic gear in search of the lake's legendary monster. The expedition, funded in part by the PBS series "Nova," will air later this year.

Wyckoff held more than 20 patents and was awarded a medal of honor by the Academy of Applied Science in April of this year.

Ralph J. Cook, Jr.

Long-time SMPTE member Ralph J. Cook, Jr., has passed away. Cook joined the Society at the associate level in 1933 and transferred to the active grade in 1944.

He entered the motion picture field in 1932 as a development engineer with the United Research Corp., and continued with other Warner Brothers subsidiaries until 1940. He joined Farrand Optical Co., where, as assistant chief engineer, he was involved with the development of a wide variety of equipment optics, photography, and motion picture technologies including space and combat simulators. After retiring, Cook remained in the industry in a consulting capacity. He was given Life Membership by the Society in 1983.

James H. Butts

James H. Butts, a member of the Society since 1956, has passed away. During his career, Butts was employed at WRC and WRC-TV from 1946 to 1948; WO1-TV and KBTV Denver as a television supervisor from 1949 to 1952 and 1952 to 1954, respectively; KOA-TV Broadcast Station in 1954 as chief engineer; and the RCA Corp. He was given Life Membership status in 1992.

New Products

Camera Equipment

The **Omega fluid head** from Cartoni USA features a drag system that accommodates heavy camera payloads up to 220 lbs at any angle from -90° to +90°. The drag system provides a wide range of drag effects, from wheeling to extra strength. Omega also features an illuminated bubble level, safety lock on the camera plate, and four-position front/rear pan bar attachments. The fluid head's Mitchell flatbase interfaces with all flat base tripods, mounts, cranes, or pedestals.

Genum Corp., has launched its new **Genlinx II chipset** which includes the GS9025 serial digital receiver and the GS9020 serial digital video input processor. Features of the chipset include standards-independent, adjustment-free clock recovery for all serial digital video data rates from 143 Mbits/sec to 540 Mbits/sec. A programmable Fifo reset pulse for integration with system memory is also featured. The chipsets automatically correct misplaced or erroneous TRS IDs and ANC headers along with a complete set of

error detection and handling flags (SMPTE RP 165).

Control Systems

Metawave Ltd., has launched the **MX/SC control system** which includes a range of control panels suitable for small and large routing applications up to 1024 x 1024. A wide range of panel sizes, including programmable panels, x-y, and single and multiple destination control panels with breakaways are available. The panels can be customized for the user's applications through the use of user-definable button mapping, field legendable, backlift push buttons, programmable LCD buttons, and easy reconfiguration of panels from a single PC panel. The following panels are available.

The **MX/SCP** single destination unit is a 1U single with 32 buttons per source keys, a level selector, and panel/destination lock keys with up to four levels of routing breakaways.

The **MX/SXY** is a 2U panel which allows selection of 32 sources and 32 destination buses. It includes 32 source and

destination keys, a router level selector with panel lock, and take buttons.

The **MX/SXY256** is a 2U panel which allows full-control of larger MX series routing switchers. The panel operates via 24 source and destination buttons functioning in an industry standard tree-like structure with up to eight levels of routing breakaways.

The **MX/LCP** is a 1U single with 17 programmable, 3-color LCD buttons, and controls up to eight levels of routing switchers with breakaways. This control panel can be user configured to work as a single or multidestination unit with panel lock features using the MX/SC configuration software.

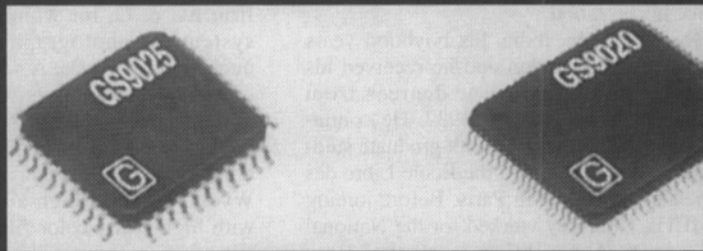
The 2U dual selector **MX/LXY** panel can be software configured to the user's requirements and can control eight routing switcher levels with breakaways.

Conversion System

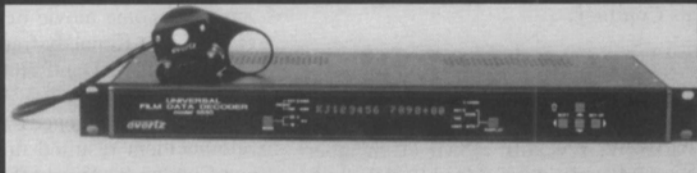
The **VersaFrame II digital conversion system** from Telect provides a comprehensive range of conversion tools for A-to-D, D-to-A, component, composite, and



The Omega fluid head from Cartoni USA.



The GS 9025 serial digital receiver and GS 9020 serial digital video input processor from Gennum Corp.



The 5550UV Universal Film reader/decoder from Evertz Microsystems.

other applications. The VersaFrame features a modular architecture that is simple to use and expandable for future growth. Individual modules dock in the chassis, allowing users to customize a conversion system to meet their specific needs. Each frame handles up to four modules and has power supply redundancy by interconnecting two frames through a rear panel patch; if one power supply fails, the other frame can pick up the load.

Digital Preview System

Kodak has released a **digital previewing system** that allows cinematographers to capture digitized still pictures on the set, alter the image files using a wide range of parameters emulating real world options, and make on-the-spot high-quality prints of the images. The system consists of a high-end digital Kodak DCS 520 camera adapted for Panavision Primo lenses, a 166-MHz Pentium MMX laptop computer, a 17-in. CRT monitor, and a high-resolution Kodak DS 8650 thermal printer. Among the system's many features are a spot meter function, a click balance option, and a quantized color zone system.

Editing Tool

Logic Innovations Inc., has announced the release of the **extensible MPEG editor (EME)**, a software system for viewing and editing MPEG transport streams in a table format.

The EME supports a more functional editing format with its native table display of transport user-defined descriptors and tables. The product can extend the readability, display, and writing capabilities of user-defined fields. The EME can also display multiple streams at one time, making

it easy to drag and drop stream elements to edit, modify, or create a new stream. Compliance standards supported by the product include: MPEG-2 PSI as defined in ISO/IEC 13818-1, DVB SI as defined in ETS 300 468, and ATSC PSIP as defined in A/65.

Encoders/Decoders

Evertz Microsystems has introduced its **HD9570 ANC. data encoder** which provides solutions for high bit rate data handling requirements such as closed captioning, source ID, time code, VITC, and other Metadata application requirements for HDTV. The encoder is housed in a compact IRU frame that consists of one front processing card and a 1.5 Gbits/sec I/O rear connector card. The frame can accommodate up to three processing cards and up to three I/O cards.

The company has also introduced the **5550UV Universal Film Reader/Decoder**. The 5550UV provides a multi-format reader head and decoder unit that will handle all the major film formats and all the various codes presently in use, all in head and a separate IRU decoder unit. The universal reader head can be mounted on a telecine or other film transport to recover keycode, Arri code, and Aaton code from 16, Super 16, or 35mm film. The decoder features automatic intensity control, and also incorporates the latest technology that provides advanced digital processing for the recovery of code from film with noise and unwanted artifacts.

Tiernan Communications, Inc., has announced the release of three encoders and one decoder. The **THE 1 modular DTV encoder** supports both HDTV and SDTV services. The "plug and play" multi-

slot architecture supports up to ten modules including the main video and audio compression processors. The encoder provides a choice of DTV formats including 1080I, 720P, and 480P. HDTV processing also supports the ATSC-compliant standard or the MPEG-2 Main Profile@High level with video rates from 10 Mbits/sec to 160 Mbits/sec. THE 1 can support up to eight SDTV channels in either MPEG-2 4:2:2 Studio Profile@Mail Level processing.

A realtime encoder, the **THE 10** meets the ATSC standard for HDTV broadcasting in either 720P or 1080I formats. The fully integrated encoder captures uncompressed HDTV video and multichannel audio, including ATSC compliant 5.1 channel and auxiliary data.

The **TE60** is a modular MPEG-2 SDTV encoder for professional broadcast applications using 4:2:2 Studio Profile@Mail Level and 4:2:0 Main Profile@Main Level processing. A series of option modules allow the TE60 to be configured for various single or multichannel digital television services. The encoder provides enhanced video performance through adaptive field/frame (AFF) compression and automatic selection of horizontal and vertical resolutions for any required video bandwidth.

Tiernan's **TDR6** modular integrated receiver decoder can be configured for both SDTV and HDTV network applications. In basic configuration, the TDR6 consists of a modular chassis supporting up to six option modules that configure the IRD for various applications supporting standard-definition and high-definition services.

Keyer

The **9580 Telecine Keyer** system from Evertz Microsystems, Ltd., features linear

keying, side-by-side comparison, letter boxing, wipes, fades, character generator for slates, safe area/safe title, and center graticule and cursors. The product consists of a IRU frame with front panel control and has an available remote control panel. A standard Windows 95 application is included to provide full-control and configuration capability thus removing the requirement to add any additional control panel to the already space constrained console.

Lens

The 12 x 5.3 AIF high-resolution (HR) wide super zoom lens from Angenieux combines F5.3 wide-angle capability with a 12x zoom range of F5.3 to F64 mm. Zoom range can be extended to F128 mm with the use of a standard 2x range extender. The lens also feature an aperture of F1.7 and is compatible with 2/3 in., digital 16/9 format cameras.

Modulator

Zenith Electronics Corp., has announced the availability of the **DTV Broadcast Modulator**. The modulator, which creates an 8-VSB trellis coded signal from an ATSC MPEG-2 encoded bitstream, was designed to provide efficient DTV transmission. The modulated signal uses a standard 44-MHz intermediate frequency (IF) output that can be upconverted to the desired channel and used by any digital transmitter for terrestrial broadcast. The IF output can also be used by standard cable upconverters for private network applications, including testing and development for ATSC compliant receivers. The modulator offers enhanced features for linear and nonlinear pre-correction for amplitude and phase errors common in high-power transmitters.

Routers

The **540 Mbits/sec SDI link** from Gennum Inc., supports several emerging applications including interconnect for 4:2:2 525p/625p video formats; higher payload link for Serial Data Transport Interface (SDTi) packetized interconnect including "lossless" compression HDTV signals, and twice realtime transfers of 4:2:2 uncompressed video. The product accomplishes this without requiring the studio to install new cable of expensive fiber infrastructure. Since this product operates at all digital video rates from 143 Mbits/sec up to 540 Mbits/sec, equipment designed for 540 Mbits/sec will be fully backwards compatible with older equipment.

Gennum Corp., has also announced the **GS1504 HDTV Cable Equalizer** and the **GS1508 HDTV Cable Driver**. The GS1504 was designed to provide cable equalization for 1.485 Gbit/sec HDTV video signals. Fully compliant with SMPTE 292M serial digital video signals,

the GS1504's differential serial outputs are designed to drive 50-ohm loads and is capable of equalizing well over 150 m of Belden 1694 or 100 m of Belden 8281. The cable equalizer is suitable for implementing coaxial receiving interfaces for HDTV broadcast production equipment such as routers, distribution amplifiers, production switchers, and other receiving equipment.

The GS 1508 was deigned to provide one differential output pair to drive two 75-ohm coaxial cables at 1.485 Gbits/sec and is also compatible with SMPTE 292M.

For further information regarding the new products and developments listed in this section, contact the companies directly at the addresses listed below:

Angenieux, 42570 Saint-Heand, France, tel: 33 (0) 477 90 78 00, fax: 33 (0) 477 90 78 03, e-mail: angenieux@calva.net, Internet: <http://www.angenieux.com>.

Cartoni USA, 2755 Alamo St., Ste. 103, Simi Valley, CA 93065, tel: (805) 520-6086, fax: (805) 520-6949, e-mail: cartoniusa@aol.com.

Eastman Kodak Co., 6700 Santa Monica Blvd., Hollywood, CA 90038, tel: (213) 464-6131, Internet: <http://www.kodak.com/go/motion>.

Evertz Microsystems Ltd., 3465 Mainway, Burlington, Ont., Canada, L7M 1A9, tel: (905) 335-3700, fax: (905) 335-3573, e-mail: sales@evertz.com, Internet: <http://www.evertz.com>.

Gennum Corp., 970 Fraser Dr., Burlington, Ont., Canada L7L 5P5, tel: (905) 632-2996, fax: (905) 632-5946, e-mail: info@gennum.com, Internet: <http://www.gennum.com>.

Logic Innovations, 6205 Lusk Blvd., San Diego, CA 92121-2731, tel: (619) 455-7200, fax: (619) 455-7273, Internet: <http://www.logici.com>.

MetaWave, 11 Kingsclere Pk., Kingsclere, Hampshire, RG20 4SW, UK, tel: +44 1635 299000 fax: +44 1635 299299, Internet: <http://www.metawave.co.uk>.

Telect, 2111 N. Molter Rd., P.O. Box 665, Liberty Lake, WA 99019-0665, tel: (509) 926-6000, fax: (509) 926-8915, e-mail: getinfo@telect.com, Internet: <http://telect.com>.

Tiernan Communications, Inc., 5751 Copley Dr., San Diego, CA 92111, tel: (619) 587-0252, fax: (619) 587-0257, e-mail: info@tiernan.com, Internet: <http://www.tiernan.com>.

Zenith Electronics Corp., 1000 Milwaukee Ave., Glenview, IL 60025, tel: (847) 391-8181, fax: (847) 391-8334.

Calendar

SMPTE Activities

PASADENA, CA—140th SMPTE Technical Conference & Exhibit, Pasadena Convention Center, *October 28-31, 1998*

ORLANDO, FL—33rd SMPTE Advanced Motion Imaging Conference, Omni Rosen Hotel, *February 25-27, 1999*

SYDNEY, AUSTRALIA—SMPTE '99, *July 13-16, 1999*

NEW YORK, NY—141st SMPTE Technical Conference & Exhibit, *November 19-22, 1999*

For more information on these and other SMPTE activities contact SMPTE Headquarters: (914) 761-1100, Fax: (914) 761-3115

August

The Illuminating Engineering Society of North America Annual Conference, San Antonio, Texas. Info: Valerie Landers, IESNA, 120 Wall St., 17th Fl., New York, NY 10005-4001, <http://www.iesna.org>, *August 10-12, 1998*

September

International Broadcasting Convention Ltd., RAI International Exhibition and Congress Centre, Amsterdam U.K. Info: IBC Office, Savoy Place, London WC2R 0BL, U.K., tel: 44 0 171 240 3839, fax: 44 0 171 240 3724, e-mail: show@ibc.org.uk, Internet: <http://www.ibc.org.uk/ibc/>, *September 11-15, 1998*.

October

Rocky Mountain Film and Video Expo, John Q. Hammons Convention Center, Denver, CO. Info: Mark Cramer, ExpoMasters, Inc., 7632 E. Costilla Ave., Englewood, CO, 80112, *October 14-15, 1998*

June 1999

TV Montreux 1999 International Television Symposium and Technical Exhibition, Montreux Switzerland. Info: Montreux International Television Symposium and Technical Exhibition, P.O. Box 1451, Rue du Theatre 5, CH-1820 Montreux, tel: +41 21 963 32 20, fax: +41 21 963 88 51, e-mail: mesage@symposia.ch, Internet: <http://www.montreux.ch/symposia>, *June 10-15, 1999*