

Forthcoming Professional Meetings

Techniques in High-Speed Photography and Videography, an intensive program, will be held 25-29 June at the Massachusetts Institute of Technology. The program is intended for scientists, engineers, and photographers who must record data on subjects and events for study, analysis, trouble-shooting, etc. The program centers on the use of high-speed film cameras and the new field of high-speed videography which combines video equipment with strobe lighting and which is finding wide application as an instant analysis tool. An intensive schedule of at least 12 "hands-on experiences" will provide a working familiarity with techniques, using some of the most modern equipment available.

Theoretical background will be provided by an outstanding staff of specialists from science and industry, including H.E. Edgerton, William Hyzer, Earl Quinn, Robert Shoberg, Hallock Swift, and Charles Wyckoff. The program is under the direction of C. E. Miller of the MIT Department of Electrical Engineering and Computer Science. Further information is available from the Director of the Summer Session, Room E19-356, Massachusetts Institute of Technology, Cambridge, MA 02139.

The 22nd Annual MPL Seminar will be held at Memphis State University, Memphis, Tenn., 20-21 July. It is open to anyone interested in the communications industry. Papers on such topics as cameras, lighting, lenses, sound, and editing will be presented on 20 July. The program for 21 July is expected to include "What's New In Motion Picture Equipment" by Anton Wilson, "16mm to 35mm Blow-Ups" by Irwin Young of Du Art Laboratories, "Depth Perception in Color Photography and What It Means to You as a Filmmaker" by Bonnie Swenford of Eastman Kodak, and "Editing on Film and on Videotape" by Roxie Gee, Memphis State University. Ott Coellin, founder of *Business Screen Magazine* will provide a presentation entitled "American Archives of the Factual Film" and will show filmclips from fact film classics dating back to 1911.

The SPIE 23rd International Symposium and Instrument Display will be held 27-30 August at the Town and Country Hotel in San Diego, Calif., with the main emphasis on optical, electro-optical, laser, and photographic technology. The General Symposium Chairman is Andrew G. Tescher of the Aerospace Corporation. Seventeen sessions have been planned. The topics are: Multiplex and/or High-Throughput Spectroscopy, Interferometry, Optical Systems Engineering, Applications of Optical Coherence, Atmospheric Effects on Radiative Transfer, Measurements of Optical Radiations, Modern Utilization of Infrared Technology V, Laser Applications in Materials Processing, Advances in Display Technology, Laser Recording and Information Handling, Optical Pattern Recognition, Active Optical Devices, Recent Advances in TV Sensors and Systems, Physical Properties of Optical Materials, Image Understanding Systems II, Recent

and Future Developments in Medical Imaging II, and Applications of Digital Image Processing III. Further information is available from Joseph Yaver, Executive Director, Society of Photo-Optical Instrumentation Engineers, P.O. Box 10, 405 Fieldstone Rd., Bellingham, WA 98225.

The Visual Communications Congress will be held 11-13 June at the New York Hilton Hotel in New York City under the auspices of United Business Publications, Inc., 475 Park Ave. South, New York, NY 10016. An estimated 10,000 visual specialists are expected to attend the three-day congress including those working in commercial, industrial documentary, educational, and medical film and television production. A highlight of the program will be demonstrations of the Magnavision Videodisk. Disk programs will be shown together with discussions on technical aspects and market availability. On 13 June, the National Academy of Television Arts and Sciences will sponsor two sessions. The first will cover the legal aspects of television production including copyrights, contracts, and Federal regulations; and the second will review opportunities for independent producers on pay television. The VPA (Videotape Production Association) will conduct a seminar on creativity covering special effects and electronic titling.

Calendar

11-13 June 1979

American Society of Safety Engineers Professional Development Conference, San Francisco. Info from ASSE, 850 Busse Highway, Park Ridge, IL 60068.

11-13 June 1979

Visual Communications Congress, New York Hilton, New York City. Info from James S. Watkins, Visual Communications Congress, 475 Park Avenue South, New York, NY 10016. (See above.)

11-15 June 1979

Acoustical Society of America, 50th Anniversary Celebration, MIT, Cambridge, Mass. Info from Betty H. Goodfriend, ASA, 335 E. 45 St., New York, NY 10017. (See *Journal*, p. 264, April 1979.)

11-15 June 1979

Videodisc/Microcomputer Seminar and Workshop, Utah State University. Info from Dr. R. Kent Wood, Department of Instructional Media, Utah State University, Logan, UT 84322.

12-14 June 1979

Sony Video Utilization Services Workshop, Chicago and Indianapolis. Info from Bob Hiller, Midwest Visual, 6500 N. Hamlin Ave., Chicago, IL 60645; or Greg Rogers, Electronic Syn- ergy, P.O. Box 20501, Indianapolis, IN 46220.

SMPTE Technical Conference

21-26 October 1979
SMPTE Technical Conference and Equipment Exhibit, Century Plaza Hotel, Los Angeles. Info from SMPTE Headquarters.

14-15 June 1979

Microprocessors, Hardware, Software and Applications Seminar, Worcester Polytechnic Institute, Worcester, Mass. Info from Ginny Bazarian, Worcester Polytechnic Institute, Worcester, MA 01609.

25-29 June 1979

Course in Advances in Color Technology, Rensselaer Polytechnic Institute. Info from Office of Continuing Studies, Rensselaer Polytechnic Institute, Troy, NY 12181.

25-29 June 1979

MIT Program, Techniques in High-Speed Photography and Videography. Info from C.E. Miller, Massachusetts Institute of Technology, Cambridge, MA 02139. (See above.)

30 June 1979

Negative Handling — Problems and Possible Solutions, joint meeting of BKSTS and ACVL, London. Info from Secretary, BKSTS, 110-112 Victoria House, Vernon Place, London WC1B 4DJ, England. (See *Journal*, p. 348, May 1979.)

2-6 July 1979

Film 79, Royal Lancaster Hotel, London. Info from Bill Pay, Conference Coordinator, BKSTS, 110-112 Victoria House, Vernon Pl., London WC1B 4DJ, England.

8-13 July 1979

NAVA Institute for Professional Development, Indiana University, Bloomington, Ind. Info from National Audiovisual Assn., 3150 Spring St., Fairfax, VA 22031.

8-14 July 1979

American Film Institute Film/TV Documentation Workshop, AFI Center for Advanced Film Studies, Beverly Hills. Info from The Registrar, Film/TV Documentation Workshop, American Film Institute, 501 Doheny Rd., Beverly Hills, CA 90210.

9-10 July 1979

Solar Energy Measurements and Instrumentation Conference, University of Michigan. Info from Fred L. Bartman, University of Michigan, Continuing Engineering Education, 300 Chrysler Center, North Campus, Ann Arbor, MI 48109.

17-20 July 1979

Seventh Cranfield International Conference on Mechanized Information Storage and Retrieval Systems, London. Info from The Cranfield Conference Secretariat, IEE, Savoy Pl., London WCR OBL, England. (See *Journal*, p. 527, Aug. 1978.)

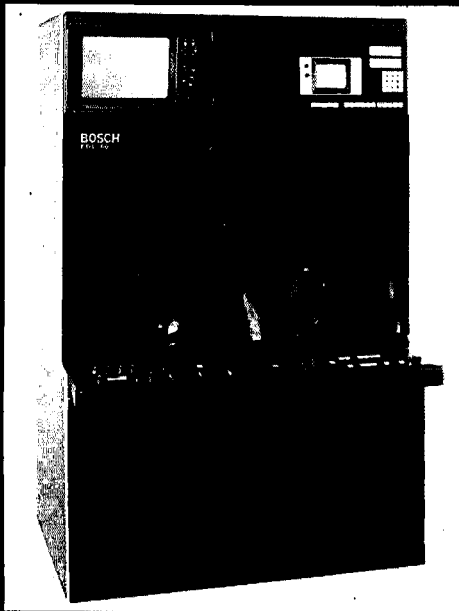
20-21 July 1979

Motion Picture Laboratories 22nd Annual Seminar, Memphis State University. Info from MPL Seminar, MPL, Inc., Box 1758, Memphis, TN 38101. (See above.)

CCD and Digital. Dual Format. FDL

50 BOSCH
TELEVISION
1929-1979

The new generation telecine employing CCD line sensors and a digital frame store. For 16 mm and 35 mm positive and negative film. Film deck with variable speed transport using continuous capstan drive. Microcomputer controlled deck and electronics. Slow motion, jogging, stills and variable search mode with correct picture format. Automatic color correction. High fidelity color reproduction and superior signal to noise ratio. No pick-up or scanning tubes. Minimal ageing. CCD line sensors and digital technology - low operating and service costs. The safe telecine system with a future. In all color standards. From Bosch.



Your Video System Partner
BOSCH
Television Systems Division

Further information obtainable from our regional representatives, subsidiaries or head-office in Darmstadt - Robert Bosch GmbH, POB 429, D-6100 Darmstadt, Fed. Rep. of Germany - Robert Bosch Ltd., POB 166, Watford, Great Britain - Robert Bosch Corp., 279 Midland Ave., Saddle Brook, N.J. 07662, U.S.A. - Robert Bosch Pty. Ltd., 69 Edward Street, Pyrmont NSW 2009, Australia - Robert Bosch Pte. Ltd., POB 4, Thomson Road, Singapore 20.

“Why we switched from tape to 16mm film halfway through.”

After shooting 11 of 24 episodes, “The Next Step Beyond” switched to film for better images and lower cost.



John Newland

“Proctor & Gamble were used to 35mm film. It took me a year to persuade them to go with tape for *Next Step Beyond*,” says John Newland.

“The shows go to the affiliate stations on tape. And I had used tape on location before. Estimates we got suggested that tape would be less expensive for *this* series, too.”

“But on those previous location tape shows, I had directed and edited mostly in the monitor truck,” says Mr. Newland. “*Next Step Beyond* had to be shot on more remote locations — and movie style. Directing from camera position, editing later.”

Multiple cameras

“I started out, years ago, in live television. I’m used to the time-saving rapidity of shooting with multiple video cameras and editing on the hoof. And I’ve often carried the multiple-camera method over into shooting film for television.”

“Our idea was to use the most efficient medium and style for this job. Tape *seemed* to add up... but there was no precedent for using it this way. After we started, we got several calls from other producers asking: *How’s it going?*”

“That was a hard question to answer — because, early on, I knew we’d made a mistake. We allowed ourselves to be persuaded that it would get better; but the eleventh show was as intractable as the first.”

Long walks

“It hit me one day that both Mike Sweeten and I were spending up to *two hours* of the ten-hour day walking back and forth from the set to the monitor truck. At one beach location, the truck was 100 yards away! That’s 300 feet of *sand*!”



Camera “B” crew (Bob Isenberg and Rick Nervik) covers another angle.

“We also shot in gullies, forests, skyscrapers and goldmines... Everywhere, the video setup turned out to be impractical for our purposes,” says Mr. Newland. “*Working from a booth with standing sets would have been a different story!*”

“We had to make these repeated journeys to the truck because only there could you really see the shot. And, in any case, we had to explain what we wanted to the engineer.”

Thin patience

“The video outfit we were working with were all real pros — but the camera operators weren’t used to motion-picture work. Mike would have to tell one of them: *Pan*

left a little... frame a little tighter... That wore my patience thin, because I was used to cameramen improving on what I ask them for!”

“The other major problem was the time and money spent editing the taped material. *It took more than twice as long as estimated.* The video people, again, were real pros. But it was hard for them (and for us) to make accurate estimates on these half-hour shows to be edited movie-style.”

Gossamer sheen

“We had spent a lot of time working with the video people to replace the flat electronic look with a gossamer sheen reminiscent of film. At first, the affiliates had been nervous about that effect — but they had grown to love it. So had Proctor & Gamble.”

“Now, after eleven shows, I had to tell P&G we had changed our minds! We wanted to revert to film. OK, they finally said. And we wanted to go to 16mm. *What??* they said.”

“Eventually, I persuaded them to let me shoot *one* show in 16mm. If I’d had my druthers, I’d have gone with the high-priced 35mm gear and paid the tab. But I wanted two cameras...”

Useful lesson

“I was leery of sixteen, then. *But I learned an invaluable lesson.* After using those incredible little Arri cameras, I realize I don’t *need* 35mm! For what I’m doing now, I wouldn’t use 35mm if I had a billion-dollar budget.”

“The SR’s instant magazine change saved us endless time and rawstock. With two cameras running, we would deliberately let one run out *during a scene*. Speed and spontaneity are what I’m always after — and those cameras gave me all I wanted and more.”



Director of Photography Mike Sweeten (left) with Producer/Director John Newland (right): Two perspectives on the same tape/film story.

"We went with 16mm partly because the lower rental costs let us keep the two-camera system. But we discovered that faster setups were saving us a day's shooting on each show, at around \$2,000 a day," says Mr. Newland. "In post-production, 16mm film was costing us *five or six times less than tape.*"

"With this equipment, I'm sold on 16mm. When I screened the first 16mm show for Proctor & Gamble, I said: *Just remember one thing. The room is smaller. The screen is smaller. But the quality is identical. They bought it.*"



Mike Sweeten

"I had never used tape before," says Director of Photography Mike Sweeten. "And I wasn't crazy about the idea."

"But John Newland wanted a *film look* . . . so it began to seem a challenge. The first setup was exactly that. A dimly lit bar interior

up in Fillmore — about fifty foot-candles and a high contrast ratio."

"To the video engineer, our methods must have seemed strange. Low-key lighting, not much fill, plus diffusion and low-contrast filters! But that guy was a genius."

"With his expert help, we began to get a pleasing quality. It wasn't film — but it had less of the sterile look of tape. It was, really, a *new look*. People liked it."

Slow setups

"But the time-consuming setups began to wear us down," says Mr. Sweeten. "Cables all the way back to the truck. Fifty-pound cameras that needed color calibration for fifteen minutes every morning. Color charts every time we changed tape reels."

"And you couldn't judge color quality through the video camera's finder, or even on the portable monitor. To make sure, we had to go back and look at *every shot* on the big screen in the truck."

Unhelpful finder

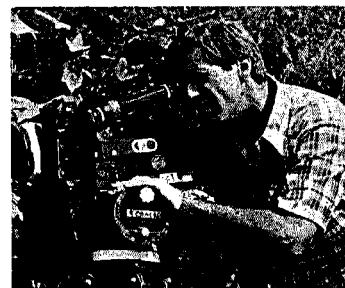
"The video finder doesn't help the operator make subtle visual choices. They're made by the engineer in the truck. The way it looks in the truck is the way it's going home. You have to *be there.*"

"I'd say our reasons for switching to film were 25% aesthetic and 75% financial. 16mm was definitely cheaper — but at first I thought the equipment might be less than professional. I was wrong."

Friendly gear

"We rented a pair of Arri SR cameras, and I was delighted with them. After the video equipment, the Arris seemed *friendly* — helping you see what was going on, helping you get the *feel* of it," says Mr. Sweeten. "I felt much more at home, I can tell you."

"Moves were faster. Setups were faster. Magazine changes were faster. The new operators were used to film. With two small, lightweight cameras shooting simultaneously, we got more footage and better footage. *And the look of film.*"



Mike Sweeten lines up a shot with Camera "A."

"With the Zeiss T1.3s, we never had to push the film. Once, we shot inside an enormous theater at twelve foot-candles! Underexposure looks a lot more believable on film than it does on tape."

Any location

"We used the T1.3s on night exteriors, too. In fact, *whatever* the script called for, I could go to the location and just plunge right in. I knew that Eastman, Zeiss and Arriflex could handle it."



ARRI
ARRIFLEX CORPORATION

One Westchester Plaza, Elmsford, New York 10523. (914) 592-8510. And 600 N. Victory Blvd., Burbank, Calif. 91502. (213) 841-7070

In Canada: ARRI/NAGRA Inc., 6467 Northam, Mississauga, Ont. L4V 1J2. (416) 677-4033.

21-25 July 1979

Photographic Industry Council (Australia), Third South Pacific Photographic Convention. Info from PIC Office, 161 Clarence St., Sydney, N.S.W., Australia 2001.

23-27 July 1979

Course in Photographic Science, Rochester Institute of Technology, Graphic Arts Research Center. Info from Andrew V. Johnson, RIT-GARC, One Lomb Memorial Dr., Rochester, NY 14623. (See *Journal*, p. 348, May 1979.)

24-27 July 1979

Video and Data Recording International Conference, University of Southampton, Eng-

land. Info from Conference Secretariat, IERE, 99 Gower St., London WC1E 6AZ, England. (See *Journal*, p. 527, Aug. 1978.)

28 July-1 August 1979

International Exposition of Professional Photography and National Industrial Photographic Conference, Chicago. Info from Professional Photographers of America, Inc., 1090 Executive Way, Des Plaines, IL 60018.

27-30 August 1979

SPIE 23rd International Symposium and Instrument Display, San Diego, Calif. Info from Joseph Yaver, Executive Director, Society of Photo-Optical Instrumentation Engineers,

P.O. Box 10, 405 Fieldston, Bellingham, WA 98225. (See above.)

30 August-9 September 1979

World Film Festival, Montreal. Info from Festival des Films du Mond, 1455 Boulevard de Maisonneuve Quest, Montreal, Que., Canada H3G IM8.

5-7 September 1979

Course in Preservation and Restoration of Photographic Images, Rochester Institute of Technology, Graphic Arts Research Center. Info from Andrew V. Johnson, RIT-GARC, One Lomb Memorial Dr., Rochester, NY 14623.

10-13 September 1979

4th International Colloquium of Research and Educational Cinematography, Ostrava, Czechoslovakia. Info from Mrs. L. Zimmerová, Zemědělská 1, 662 65 Brno, Czechoslovakia.

17-21 September 1979

FKTG Meeting, Dortmund, W. Germany. Info from Fernseh und Kinotechnische Gesellschaft e.V., ZDF, Postfach 4040, 6500 Mainz, Federal Republic of Germany.

19-23 September 1979

Information Film Producers of America Conference and Trade Show, San Diego, Calif. Info from IFPA National Headquarters, 750 East Colorado Blvd., Pasadena, CA 91101.

24 September-30 November 1979

World Administrative Radio Conference, Geneva, Switzerland. Info from Union Internationale des Télécommunications, Place des Nations, 1211 Geneva 20, Switzerland.

October 1979

European Colloquium on Audiovisual Equipment for Use in Education, Belgrade, Yugoslavia. Info from A. H. Crocker, National Audiovisual Aids Centre, 254 Belsize Rd., London NW6 4BY, England. (See *Journal*, p. 348, May 1979.)

14-19 October 1979

Audiovisual Institute for Effective Communications, Indiana University, Bloomington, Ind., Info from NAVA Institute, 3150 Spring St., Fairfax, VA 22031.

21-26 October 1979

SMPTE Technical Conference and Equipment Exhibit, Century Plaza Hotel, Los Angeles. Info from SMPTE Headquarters.

22-26 October 1979

Cisco International Biennial Fair (cinema theater equipment, cinema and video production equipment). Hall 3, Porte de Versailles, Parc des Expositions, France. Info from Bernard Chevy, Commissaire Général, 179 Ave. Victor Hugo, 75116, Paris, France.

1 December 1979

SMPTE Chicago Section Midwinter Symposium, Chicago. Info from Edward J. Blasko, Eastman Kodak Co., 1901 W. 22 St., Oak Brook, IL 60521.

9-14 January 1980

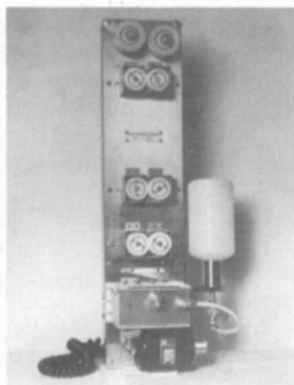
NAVA Convention and Exhibit. Georgia World Congress Center, Atlanta, Ga. Info from NAVA Convention, 3150 Spring St., Fairfax, VA 22031.

Up-grade your lubrication, squeegeeing, rem-jet removal of motion picture films.

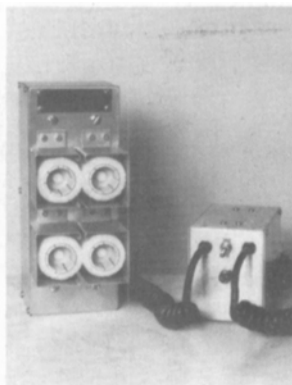
The Rotary Buffer Concept

Two Plush Covered Rollers lightly contact and wipe the film's surface as they rotate at high speed counter to the direction of the film's motion.

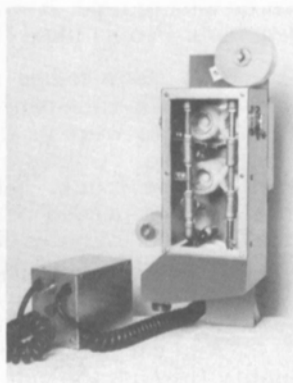
Anything whisked from the film by the fast moving plush is immediately thrown away from the roller by centrifugal force.



Model L-3 Rotary Buffer Lubricator with Automatic Feed Bottle



Model S-3 Rotary Buffer Squeegee with Power Pack



Model BR-2 Rotary Buffer Rem-Jet Removal with Power Pack

Wooster Buffers available for Rotary Buffer Units:

100% Dacron (R-294), 16mm (15/16") 18.2¢ each

Also available: 35 mm (1-7/8")

Lintless Super-D (R-205), 16mm (15/16") 23.3¢ each

Also available: 35mm (1-7/8") 70mm (3")

42mm (2-1/4") 70mm (4")

For information, write . . . Alex Bagdasarian B.S., M.S.

Sarian Engineering Associates

23 Tower Road, Arlington, Mass. 02174