

# TECHNICAL NEWS

116th S.M.P.T.E.  
Technical Conference  
November 10-15 in Toronto

There will be an untold number of fascinating technical papers presented to the Society of Motion Picture and Television Engineers' conference in November, not to mention a social programme designed to keep the proceedings from becoming overwhelming for those who want to soak up as much of the news as possible. While we can't list the whole agenda, it should be well worthwhile to select highlights from the advance list, even though more papers are expected to be added.

Registration begins at 12:00 noon on Sunday Nov. 10 at the Four Seasons Sheraton Hotel, and Kodak of Canada will sponsor a Novemberfest evening for registered invited guests. Two series of presentations happen Monday morning, concurrently. The one on Television Systems will cover *The Design and Construction of the CN Tower, The Multiple Antenna System* on that structure, *Digital TV Image Enhancement* by J. Rossi, CBS Laboratories, and a *Comprehensive Special FX Generator*. At the same time the session on Laboratory Practices will discuss *Microdemand Drive: A Key to Cost Effective Film Processing, L.A.D. - A Motion Picture Laboratory Control System, Chemical Solutions in View of Chemical Shortages*. These Sessions will be followed by a get-together luncheon and presentation of the SMPTE awards. Monday afternoon the two series will continue with *Automated Network Control Centres, Automatic Microwave Control Systems*, and others going on in Television Systems. The Laboratory Practices session will deal with *Lab Control of Duplicating, Colour Image Analysis*, and a paper entitled "*Our Shrinking Film Heritage*" will be presented by Arnold C. Schieman, of the NFB, Montreal.

The Equipment Exhibit will open at 5:00 P.M. on Monday until 8:00, open Tuesday from 10:00 to 7:00, Wednesday from 9:30 til 4:00, and Thursday from 11:00 to 6:00. More on that later.

On Tuesday, the Sound session will hear papers on *Computer Simulation of Photographic Sound, The Design, Installation and Operation of a High-Speed*

*Film Rerecording Complex* by Bill O'Neill of Mirrophonic Sound.

Meanwhile in TV and Film In Education, Ralph Curtis of the NFB will present a paper on *Measuring the Performance of AV equipment*. Tuesday afternoon the competing sessions are to be Lighting and Small Format. In Lighting, T.C. Nutt and C. William Shearer of CBC Montreal will present *Television Lighting Control; Manual or Memory?* with other papers on various lighting sources while the Small Format workshop announces only one presentation, the *Report of the CBC Toronto Study Group*. Super 8 news, anyone?

Tuesday Evenings' social event is a visit to Ontario Place sponsored by Photo Importing, for cocktails, food and movies in that largest of formats.

Wednesday morning offers "Television Film" and Photo-instrumentation". Fritz Spiess starts the day with a paper on *Suggestions for a New Standardized Three-Dimensional Test Chart for Colour Films*, and later N. Burtnyk, R. Jodoin and M. Wein of the National Research Council will present *Computer Animation: NRC/NFB Collaboration*. That session winds up with Jim Murray of CBC discussing Production of The National Dream.

Wednesday Afternoon will have a presentation of *Modern Working Technique for Editing Tables* by Gunter Bevier of W Steenbeck & Co. Also we can look forward to a presentation of *Gevachrome II: A New Colour Reversal System*.

Wednesday Evening features a cocktail party, banquet and dance, and advance word is that part of the evening's entertainment will include a 5 voice barbershop group lauded the Ontario District Champions.

Thursday morning will deal with Satellites in Broadcasting, and a Symposium on Television Broadcast Monitoring dealing with subjects like *Coding Concepts, Ad Agencies Evaluation, Broadcaster Applications, and Performers' Guild role in Proof-of-Play*. Thursday afternoon, while the Broadcast Monitoring Symposium carries on, there will be a paper on the *How and Why of Electronic Motion Pictures*.

Friday morning will deal with Cable Television and Engineering Management.

All in all, there are plenty of presentations to satisfy the curious and interested in all fields. The equipment show, going on as stated above, should also feature lots of new items to ogle and handle for the first time. Some of the things that stand out: Braun Electric's display including the Arri and Nagra lines and also the AKAI 1/4" colour VTR, and Ianiro lighting equipment. The single system Canon Scoopic 200 SE, and DS-8 for Double Super 8. A display by W Carsen Co., which will doubtless include the Moviola & Magnasync editing and dubbing equipment. Cinequip will demonstrate the Swintek Wireless Microphones and Continental Helicopter Mounts. Alex L. Clark should have the Atema Editing Table in their corner. Eclair Corp. will show a new single system sound module for the ACL. The list goes on to cover the Compact Source Iodide (CSI) Lights from Jack A. Frost Ltd., a display by Kem, the compact 16mm Steenbeck from Kingsway Film Equipment, as well as the Bauer P6 Studio Double System projector. Mackenzie Equipment will have the Showcron Expandable flatbed.

In terms of Technical end of film and visual presentation in general, the SMPTE conference has it covered from every angle. For more information, contact publicity chairman, Harold Eady of Bonded Services International, 201 Richmond Street West, Toronto, (416) 363-6414.

## NFB Technical Bulletin on Metrification

The National Film Board has published its twelfth technical bulletin, *A Brief Look at Metrification in Canada Today*. The booklet contains a set of conversion tables that are most commonly used in the film industry. It contains charts reading metres, feet and frames, minutes and seconds, for Super 8, 16mm and 35mm formats. Also screen sizes in feet and metres, some common metric units and the International System of Units. For free copies of this bulletin, write Jean Trudel, Technical Research, Box 6100, Montreal H3C 3H5.

## Light-Beam

Here in the *Technical News* department, we rarely run across an item involving an independent inventor who has developed a revolutionary item for motion picture production, and has had enough success with the idea to get the wheels in motion on it. But here's one that should find plenty of use on those location shoots.

Toronto lighting-cameraman Jock Brandis strolled into our office not too long ago with a home-made equipment case in hand, and proceeded to construct a lighting beam across our office which was capable of supporting a couple of hundred pounds of lighting gear without making a mark on the wall. Not only that, but the entire thing weighs less than 20 pounds.

The "Light-Beam" is a series of aluminum channels that slide together from 18" long segments. The end supports push out against facing walls and are tightened by a screw system which makes it very secure. A larger version is planned to have 30" long segments.

The Light-Beam is certain to find application in those situations where it is impossible to support a backlight without stands showing, and those lights can now be hung above view lines by not using stands.

The Light-Beam will be displayed by Cinequip at the SMPTE equipment show, or may be seen at their offices, 41 Scollard Street, 920-5424. Mr. Brandis may be found in his basement, hand-assembling these highly practical and useful items.

## Video Viewfinder

We've seen them in the ads from the States for some time now, and finally Canadian camera crews have access to one of the most up-to-date accessory systems for 35mm photography. The Mitchell BNC/SPR with a reflex video viewfinder and portable support video equipment is now available for rental from P.S. Production Services.

The video viewfinder system places a video camera in the viewfinder optical system so that what is seen by the operator is also fed by a single cable to a rack-mounted Camera Control Unit, which includes a waveform monitor, a 9" Conrac monitor, and an IVC 1" video tape recorder. An additional small

monitor may be mounted on the viewfinder side of the Mitchell's magazine. The Mitchell's operation is completely unaffected by the video system, and P.S. has a large selection of lenses in stock, led off by a set of Super Baltar primes, and also including a 25-250 Angénieux and the amazing 25-120, T/2.8 macro-focussing Canon zoom.

The system has all the features of the BNC/SPR camera plus instant reflex video monitoring and recording. While the operator views the image normally, the director, producer, DOP, and/or the client can watch the video picture during filming. The camera can also be used normally without the video rig. The video rack measures 19" wide by 4' high, and will roll through a standard doorway. The video monitors can be placed any distance away from the actual shooting location, (in a client's lounge, for instance).

The system, of course, allows the director to work with actors while viewing instant replays of preliminary takes. It allows the DOP to double check the operator's work. It allows the director to see exactly what is going on film. The additional equipment is minimal in terms of size and weight, and would only add one additional crew member.

As this issue goes to press, reconditioning of the system has just been completed at P.S., and we hope to carry articles on actual shoots making use of the facility at some future date. In the meantime, for a demonstration and firsthand look at a most interesting piece of equipment, call Brian Greenspan at P.S. Production Services, 43 Britain Street, Toronto. (416) 368-1161.

## Showcron Editor Makes Long-Awaited Debut at Mackenzie's

Bob Mackenzie announces with pride the arrival of the Showcron Editor, the first expandable editing table that can be built up with the addition of extra modules. The possible track configurations are six-plate, one picture two sound; eight-plate, one picture three sound; eight-plate two picture, two sound; or eight-plate three picture one sound.

The machine is built by Honeywell in the U.S. and uses high grade compon-

ents to achieve a stable, solid system that, although it takes some getting used to, is a well-designed editor's tool.

There are many small conveniences built in that should come to be recognized as editors spend more time at the machine. The picture is flicker-free, and the sound head is placed inside a sprocket wheel to allow "one-Sprocket" lace up on each track. Tracks may be inched, run at sound speed, or high speed in either direction, in sync or individually. Electro-magnetic brakes on each pan allow fast stops from very high speed rewind or fast forward. The bottom of



the screen features a digital display for time, footage in feet and frames, and a read out of the sync relationship between picture and sound tracks. Further there is a memory in the read out which allows the machine to be shut off, and the same figures will appear when power is turned on again.

One of the many nice features that will attract attention to this machine is the fact that once all tracks are locked in sync, turning any one sprocket by hand will move the others in sync. There is a suitable-sized work area at the front of the machine, with operation controls at the right hand, and sound controls, including equalization, at the left.

A complete demonstration is in order. Contact Mackenzie Equipment Ltd., 26 Duncan Street, Toronto (416) 364-2266.

## Studio 523

In this issue, Robert Rouveroy CSC reports having great success with Ronald Niecke's new 110 volt A.C. battery belt and mentions how pleased he is to see Canadian equipment being developed to compliment our growing production industry. Keeping up with the state of development in this area is difficult, but the work is always exciting and the results rewarding.

The story opens inside the front door of a new facility in downtown Toronto called Studio 523 — a place for shooting either film or tape. The studio is owned by Bomac Batten, operated and represented by Sher and Sinclair, who are a story in themselves. Their new offices are located on the second floor of Studio 523, at 523 Richmond Street East. Downstairs is the 35 by 80 foot sound stage, indoor parking for a mobile video van with all power hook-ups, a kitchen equipped to handle food commercials, dressing rooms, a lounge/conference room, and various rental offices.

The stage itself is equipped with a lighting grid that can be walked on, and set at a height of 14, 18 or 23 feet from the floor. All lighting equipment in the studio is supplied by P.S. Production Services. A lock up room is provided for film equipment.

At this writing, shooting in the studio has been completed by both Rabko and Southam Videotel, and many future bookings appear to be in the works. So far, only commercials have been shot on the premises, but use of the studio will probably open up into other areas as well.

The studio is located at 523 Richmond St. E., Toronto, near Sherbourne Street, the phone number is (416) 862-0523.

## Image Matte

This item also involves Sher and Sinclair, who were originally involved with Image Transform, the company that developed a method of performing extremely high quality tape-to-film transfers at their California laboratory. Image Transform is still very much in business, although the costs involved in shipping and duty have made it rare that

Canadian productions go through the process. Image Transform was responsible for the development of the Image Improver that allowed NASA to telecast live pictures from space to the TV networks, and the transform process was an offshoot of that. Sher and Sinclair still represent Image Transform in Canada.

Jack Sinclair is the engineer in the company, and he is hoping to get into a position to act as consultant on tape shoots that will be Transformed into film, as he is well acquainted with the intricacies and limitations of the process. But his own work in the video field is wide-ranging as well, most notably with another device which might be called a second generation Chroma-Key, but is in fact dubbed Image Matte.

The old problems with Chroma-Key all stemmed from the system's dependence on a switching function, where the logic circuitry was forced to decide whether or not the matte colour, usually blue, was present in the particular bit of screen information or not. It would either switch on the background input or that of the object to be matted in. But problems would occur whenever some confusion developed, as around the edges of items where blue light was being reflected from the background, or when blue could be seen through a transparent object like a pitcher of water or a puff of smoke. And, of course, shadows would tend to be lost from electronic matte shots, damaging the possibilities of the scene being accepted as natural.

Image Matte is the answer to all these problems. Instead of working on a switching function, it uses a mix function that is much more selective, and can form a smooth edge on the matte shot with such perfection that it's almost impossible to tell a matte shot when you see one.

The system was used on the *Starlost* series at CTV, and although that series suffered from other problems, the electronic mattes were excellent. Image Matte is installed at Glen Warren Productions in Agincourt, where it's affectionately called "Super Matte", and is finding plenty of application in commercials and dramatic productions. Glen Warren sales manager Wilf Copeland is quick to point out that the new matte system is not capable of creating an image, but it certainly is an improve-

ment in the area of electronic mattes, and is being put to good use.

The sophistication of the system allows greater use of models in various production, especially when used in conjunction with a "snorkel lens", a periscope-like device that can shoot right inside small areas on models and miniature sets.

Apparently before it was discovered that there is about to be an anti-freeze shortage this year, one large manufacturer produced a commercial with the salesman sitting on the lip of a car radiator discussing the benefits and quality of the product, and at the end of the script, he stands up and neatly dives into the radiator. Even the splashing water is neatly matted into the shot. This commercial will probably not make it to air this season, but the concept has the idea of what can be done with Image Matte.

There is some extra set-up time involved with the matte, and it is an expensive unit to purchase, so it has not yet seen use in any but the more sizable productions.

There are plans to present Image Matte at the SMPTE in November, where more technical details will be available.

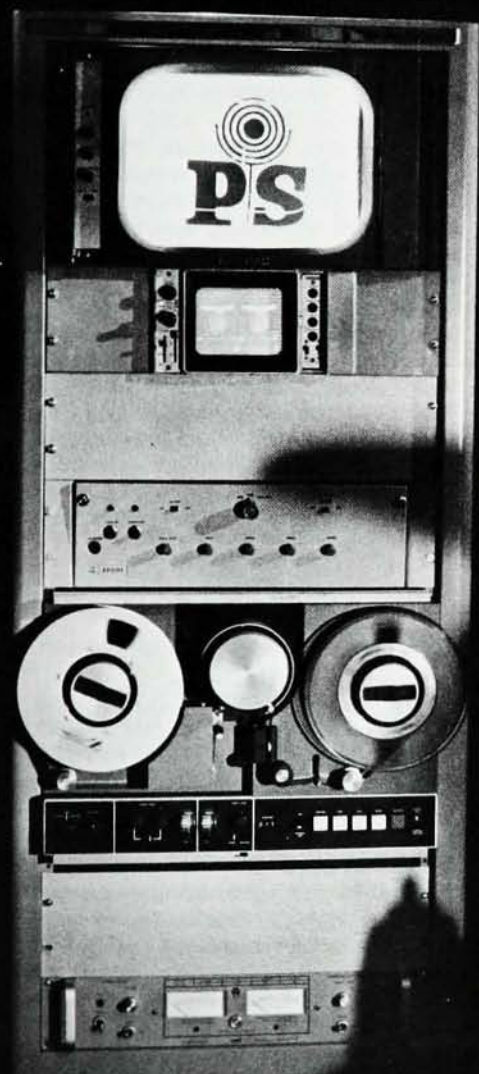
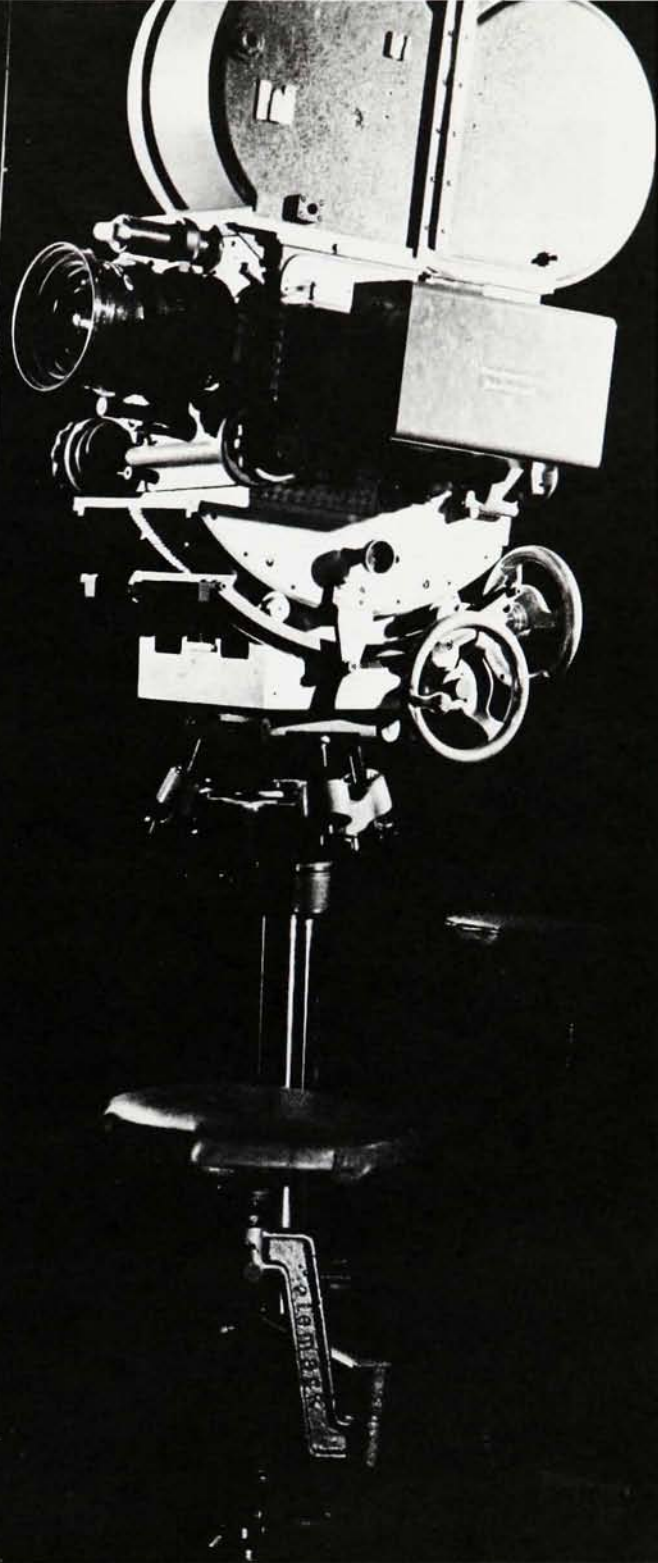
## C.R.I. Available in Vancouver

Alpha Cine Service Ltd. announces immediate availability of 16mm colour reversal intermediate printing and processing. C.R.I. is a film designed for making duplicate negatives from Eastman Colour Negative originals in one printing step.

After extensive testing and development, Alpha Cine has begun regular production of C.R.I.'s, a procedure generally considered one of the most technically difficult and therefore not available from most labs in North America.

Their first major job, involving 40,000 feet of C.R.I., has been completed to complete client satisfaction.

For further information, contact Mike Collier at Alpha Cine Service, 1195 Richards St., Vancouver, B.C. (604) 688-7757. □



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