

ROUGH CUT

by Robert Rouveroy C.S.C.

To all of us in the film world, electronic news gathering or ENG represents a threat to our livelihood. Of course the old adage still holds value: If you can't lick them, join them — and to tell you the truth, I've joined them sometimes. After all, bread, death and taxes is what it is all about in the end and I'd rather die rich, if at all possible.

ENG represents the first step in the steady devaluation of chemical image gathering, and this is the film industry's fault. Just imagine! In a hundred odd years, nothing has really changed in the field of recording material. It still takes a considerable time after shooting before the image can be viewed. It has to undergo repeated dunkings in all kinds of highly corrosive liquids, has to be handled in total darkness, and no correction is possible on the original material. Even the origin of color perception on film is buried in the depths of photographic history. Our cameras, however sophisticated, have the complexity of a safety pin compared to the intricacies of a \$10.95 hand calculator.

Opening Credits

So, on a recent assignment to the American Southwest, I had the fortune to sit beside an engineer of the Texas Eastman Corporation. Delta was flying us to Houston or somewhere — I can't remember anymore. Such trips are a blur, what with the extreme hospitality encountered on such flights.

Texas Eastman is part of the Eastman Kodak family and is mostly into chemicals. I suffered through a long description of manufacturing processes when I picked up a faint whiff of something new. It had to do with ion-exchange chemistry and I remembered something about Polaroid chemistry so I started pumping him. Well, to tell you the truth, I couldn't follow much of what he told me, but the essence is that Kodak will probably unveil a new self-developing color film at this year's Photokina. Sure enough, when I came back to Toronto I asked some people I know who work

for Kodak Rochester and got the run-around. At first I took the denials seriously, but then their denials became so emphatic I started to think otherwise. We live in a post-Watergate atmosphere where the rule of thumb is that any loud negation is a sign of the affirmative. Frankly, the development of instant film is reasonable to expect, because the ENG movement in the US must hurt the 16 mm film market considerably.

Now we have to remember that most improvements are first sighted in the amateur market which is much larger than the professional market. But in this case there is no rush to 1/4-inch videotape for home entertainment. The best entry into that market seems to be the AKAI and you'd still shell out close to 8,000 bucks for that one. No, what is needed is an image storing device that is relatively cheap compared to the ENG camera (like any 16 mm camera), the ability to retrieve the image almost immediately (like self-developing film) and a broadcast link back to the studio as is used now in ENG.

The drawbacks of ENG are well known. The cameras are incredibly complicated and do not have the portability and exposure range of color film. Editing is still a headache but the most difficult part is the storage and retrieval problem. It does not wash that you can erase and re-use the tape. The whole point of news gathering is that the event occurs only once and that therefore the image must be preserved for later use.

To illustrate this: a few months ago I was at the film library of CTV on 45 Charles Street and the head librarian told me with pride they'd just sold \$7,000 worth of stock shots out of the *Canada — Five Portraits* series I'd shot several years ago. By the way, he had another problem. He was looking for a storage-retrieval system for 2-inch videotape. It seems that all TV networks are interested in this problem. Videotape has to be stored at certain temperature/humidity levels, away from strong magnetic fields etc. CBS alone has to shell out close to \$14,000 a month for storage facilities. The problem is that tape and film are not truly compatible. The only way at the present is to transfer the tapes to 16 mm film. The best system available costs

about \$60 a minute and retrieval is not good enough for standard broadcast quality.

One solution could be to think of very fine grain black and white Super 8 film as a storage medium for digitally processed electronic pulses derived from the videotape. Not pictures, just signals, recorded on transverse or helical scan. Such film would be of archival quality and no signal deterioration would be encountered upon retrieval. Of course, developing such technology would cost a few million dollars but it is well within the capability of present-day technology.

It sure would save an enormous amount of storage facilities and would make retrieval infinitely easier and cheaper. But as I said before, this is just one of the possibilities that probably never will be explored because electronic engineers have a natural aversion to film. Just reflect on the position that film cameramen have in this video world. No self-respecting tape-recording crew will uncup their Plumbicons on a remote without having every nook and cranny lighted properly, without plenty of set-up time, without warmed-up cameras, without superb back-ups of gaffers, gophers, assistants and cable pullers, in short, without having the assurance that the recorded image is up to the highest standards.

Film cameramen are expected to produce the same high standards with the minimum crew that the station can get away with and usually under circumstances that defy the imagination. But still, stations are enthusiastically throwing out their film crews and converting to ENG, because they expect great economic savings from the system. And it is true, the savings in film stock and processing are enormous. The capital expenditure can be written off in a few year if, and that is IF, the gear will stand up to the rigors of news gathering (which it does not) and if they re-use the tape many times (which they do not). The time factor is not even that important. Very few news events happen at the news deadline. Someone has computed (based on two years' experience) that maybe 2% of the news events are of sufficient urgency to demand immediate air time. The ultimate decline of the news film ca-

Toronto's "gimmick man", Robert Rouveroy C. S. C. is president of Robert Rouveroy Films Ltd. and shares ownership in Cinimage.

meraman is indeed directly attributable to the time-lag between recording the event and the hands-on availability to the news editor. And here is where the film manufacturers have failed the industry miserably, to their own detriment.

Main Track

So, with Kodak denying vehemently any interest in self-processing film, I turned to some friends who work for G.A.F. and Polaroid. First, naturally, no dice. Nothing was further from their collective mind. But I found some pretty interesting patent applications and sure enough, a pattern appeared that strongly suggests that within a very short time, most probably at the Photokina this September, several developments in self-processing film will be exhibited.

Two of the systems will be compatible. That is, no changes are anticipated in the film camera. The film is exposed normally and processing is accomplished in a very simple processing chamber in the filmtruck. One entails the peeling off of a negative layer, the other is developed by introducing a gas to the emulsion during a high-speed rewind.

The third system is based on a moderate modification of the film camera. The film, after exposure, passes a small, very intense ultraviolet light and is heated up considerably. Development occurs and the film passes immediately through a cooling chamber where development is arrested and fixed.

Some of you may recognize the principle of the last system. It is very reminiscent of the MetroKalvar system of about 15 years ago. We used it for making slide copies in B/W. Incidentally, all three systems are color. Now, all color systems are based on three colors, as we all have been taught. Well, in at least one proposed system it is based on two colors, the third one being supplied by your own eye. Don't ask me how, I don't know, but years ago I saw a demonstration of color slides, admittedly rather primitive, that was rather interesting. Only two colors were present and it took a while to get used to it, when all of a sudden the third color appeared. We were told we just imagined the third color, so there. I haven't the slightest idea how it works, but it looked very good indeed.

Side Track

Anyway, the battle is probably lost. The main TV networks in the States are not about to give up their ENG. But if the self-processing film is of sufficient quality and, more important, if it is less expensive than the current film stock/process combination, film will have its own place a little while longer. It is unrealistic to believe that TV film production as we know it will stay around for a long time. As integrated circuitry gets more sophisticated, electronic TV cameras will be so simplified that they will acquire the simplicity and ruggedness of today's film cameras. And the film cameraman would do well to acquaint himself with ENG, because if he doesn't, he will be quickly sidetracked. But in the end don't ever forget that, however the image is captured and preserved, it is the nut behind the camera that counts, not the nuts in it.

Scratch Print

Like most working cameramen here in town, I often get calls from people who like to get "into" film. Many of them have had film courses and are looking around to find an opening. Unfortunately, there are very few such openings, as anybody knows. There is a big difference between the garbage most schools and universities see fit to unload on their students, and the hard, cold business world of filmmaking. When I, most often gently, remind them that there are only so many positions in this film world, I am reproached that I'm an old fogey and that I'm not willing to give them a chance. Well, giving those chances is not up to me. I have to compete every day out there, just like everybody else. The film producers have more than sufficient choice to complement their staff with highly skilled and highly competent people. So then the unions get their share of criticism for keeping young people out. This is patently unfair too, as very few union members have sufficient work themselves to make a decent living and most if not all union members I know will scabble around doing non-union work at the drop of a hat. So then the Canadian Society of Cinematographers gets the collective knife for not doing anything to help young would-be filmmakers. Well, here is where they're wrong. It is probably not too well known yet that the C.S.C. has a course for camera assistants

several times a year. George Balogh ESC runs the course and he invited me last week to sit in and watch. So up to Don Hall's Cinequip, a large rental house in Toronto.

About 12 people were listening intently to Peter Luxford extolling the virtues and vices of the Arriflex 35BL. Peter is a very experienced assistant cameraman and has been involved in most of the large-budget feature films in Canada. Both he and George carry the bulk of the training, sometimes helped by other professionals dropping by to help out. I was finally able to pry George loose from the intently questioning audience and got the following observations.

G.B.: *"We started last year and had 84 applicants and we quickly found out it was impossible to give any meaningful training to so many people, so this year we carefully sifted 12 persons from an estimated 40 applicants for the second course. We do not take any students unless they are, if possible, in their last year at school. Some of these 12 are already working in film-related jobs; like, here we have a secretary with Rabko Advertising who is very keen to get behind a camera. We charge 25 bucks for the six-week course just to make sure they'll show up every week. They get "hands-on" training on every piece of equipment that is normally used by the cameraman. For homework they are welcome to go to Cinequip and to Cinevision (now Panavision) to look around and ask questions of the service personnel. After the six weeks we give them a 15-point questionnaire as an examination and then they're on their own."*

George doesn't muck about and has some pithy observations on the film world he knows so well.

G.B.: *"I was trained in Hungary and it took me four years before I was allowed to shoot film. At night I also worked in the lab. I was lucky. I worked hard and became a cameraman through sheer hard work. I worked in France for fourteen years before I came to Canada. In Europe you see 60-year-old camera assistants or operators. It is a job classification and that's what they want to do. Here in Canada, there is much less delineation. Everyone wants to be a cameraman and sees the role of assistant or operator as a stepping*

stone, to be discarded at the first opportunity. I went back last summer to Hungary and found that the film school there had stopped training cameramen until 1980. This was to ensure that work opportunities would exist for a graduate. Of course I don't advocate such a system for North America, but it seems to me that there is somehow a rip-off situation with the film schools here. More than 600 students a year are processed through the film schools and there is simply no way that more than, say, 2% will ever come close to a film camera. Even these 12 people here, I tell them right away, the first day they come, that maybe two will ever make it. Frankly, the advantage of the assistants' course is more for us C.S.C. members than for them. We need a small pool of trainee assistants once in a while. That is all."

I concur wholeheartedly with his observations. On an impulse I ask

him if he is happy with his craft. George smiles.

G.B.: "You see, if had been wiser I should now have been a bank manager, turning down loans to aspiring filmmakers. And yet, to be truly happy, well, I only feel happy when I'm on the set, when the camera starts rolling. No doubt about it, it's the only thing that counts."

Answer Print

From J.R. on the West Coast a query about the use of an 85 on ECN '47 stock. Why not do away with it as the labs can color-correct it anyway? Well, that is true, up to a point. The blue layer is then overexposed relative to the red and green layers. But the 85 will also screen out ultraviolet. As a result you reduce the latitude of the blue layer and normal scene-to-scene grading gets very dicey indeed. Because of the grading, image resolution is often impaired. Now if you shot the whole film with-

out an 85 the labs could save you. It'd cost you plenty extra, I can assure you. But if you happen to shoot only part of the film without the 85 you will get a color mismatch for sure. Sorry J.R. Nice try...

Some of my faithful readers have inquired how my black cat is doing. A few issues back I mentioned how I felt this cat was doing me a lot of good, workwise. I'm happy to report he's still at it and work seems to be coming my way a bit, here and there. However, the cat being in his formative years and part Siamese he regularly woke up the dead with his squalling so I took him to the vet and had him altered. He's home now, rather subdued.

I think I have an idea how he feels, lately. The first reactions to last month's article on the CBC film service are coming in from some CBC film brass and I can see that damn scalpel glinting... I hope I can run fast. Listen, this ain't no joke! □

F
PROFESSIONALS
in all phases of special
photographic effects
film opticals of canada ltd.

410 adelaide st. w. toronto (416) 363-4987
vancouver (604) 687-4491
montreal (514) 937-2336

More than just an audio/visual house
More than just an animation house
Ms art services ltd. toronto m5v 8s1

410 adelaide st. w. 363-2621