THE FILM / VIDEO Interface

by Don Presant

Time code...is the one thing that can keep this industry together. It is the one thing that at the moment creates more confusion and more trouble than anything else and today, if nothing else, we can hopefully come to an understanding of time code and how it applies to film and video production."

With these words Patrick Spence-Thomas, president of the Canadian Film Sound Society, opened discussion on a series of interrelated topics currently affecting motion picture production.

The event was a seminar entitled "The Film-Video Interface," held at Ryerson Polytechnical Institute in Toronto on Saturday, May 24. The seminar was organized under the auspices of the formerly dormant CFSS by Bob Danylak of Discovery Productions in an effort to open a dialogue among the disparate and often competing proponents of the new technology currently sweeping the industry.

Over 200 cameramen, soundmen, producers, equipment manufacturers, editors, mixers, and members of related occupations came to hear each other attempt to define the current state of production techniques. Not everyone came away feeling totally satisfied, but the opportunity to hear opposing points of view regarding production procedure, educated hopes for the future, or even that others might be as confused as you are was a refreshing one.

While a manufacturers' display of the latest toys glittered in a nearby room, panel sessions throughout the day acted as points of departure for a discussion of film and video production techniques, how to deal with rushes, and audio and video post-production.

In the area of image origination, competing interests argued the relative merits of Betacam versus film, single system versus double system when shooting Betacam, 24 versus 30 versus 29.7 frames per second when shooting film, and Aaton's method of optically recording time code on film against that of Arriflex.

How to transfer film to video also turned out to be a subject of hot debate. Should you transfer everything at once as well as you can to 1-inch, or twice: once as a one-light "video workprint" on cassette and then, after the off-line, colour correcting select scenes to 1-inch? Should you use a flying spot or a CCD to scan the image?

"Then there's the sound. Dear God, the sound," as one panelist lamented early on and others must have mumbled all through the day. One soundman counted eight generations from original 1/4-inch to final edited master using the method of transferring the double system rushes colour corrected to 1-inch. Another compared the sound quality of 1-inch video to that of chromium dioxide audio cassette tape. Another bemoaned the results of recombining the sound with the picture through the video edit process with the resultant lack of attention to levels, the need for overlaps, and documentation.

The solution for some was to go digital between the original 1/4-inch and the 24-track lay-up to avoid generation loss. For others, a more economical approach was to use time code on the original 1/4-inch to lay directly to the 24-track for mixing.

Video post-production was the least contentious subject of the day. The function of this panel was to present the current state of the art as it applies to off-line and on-line editing. The pros and cons of control track and time code editing were compared as means of generating edit decision lists which could be used by on-line facilities for final assembly. Also described was the more traditional method, popular in the advertising industry, whereby the final video master is conformed to a film cutting copy. A method of finishing video originated material was another topic. Everyone stressed the importance of adequate preparation and consultation prior to the on-line. The automatic assembly of your show can be either a joy to watch or a nightmare, depending on how good your numbers are when you come in. In addition, many special effects are extremely difficult if not impossible to create if adequate allowance is not made for them during production. A quick phone call can often save a mountain of grief.

Audio post-production was both the most interesting and most worrisome subject of the day for many of those present. Sound editors are reeling from the revolutionary changes resulting from the influence of the ubiquitous time code. Old methods are flying out the window and new toys are proliferating at an alarming rate. One experienced sound editor said that he felt like a dinosaur and was only partly comforted when reminded that his skill, experience, and collection of sound effects were more important than any means of translating them to a finished film. Multi-tracking, along with its advantage of simultaneously hearing several tracks in conjunction with each other, also contains several pitfalls for the unwary, both in terms of deciding what hardware and software to buy and in how they are used.

One trend is to become your own complete audio post-production house, laying the original 1/4-inch all the way to the assembly of the 24-track and often beyond, to mixdown and layup to the finished picture. This, however, can lead to runaway capital investment and many are justifiably nervous at the prospect. And yet, if they do nothing, they risk being left behind. Some are considering a concept of off-line sound editing similar to that used for video using equipment originally developed for starving musicians.

Multi-track mixing of films and commercials has opened a new source of revenue for the traditionally music-oriented sound studio and has forced many sprocket and film mixing theatres to convert in order to keep up. Once converted, new advantages become apparent, like speed of access and greater edit capability, not to mention increased business.

For a producer faced with a budget and a deadline, the decision on which way to go is often difficult. On the one hand, a self-contained system of lay-up to 24-track offers the advantages of coherence and lack of confusion. On the other hand, it may be too sophisticated for his needs not to mention a restriction on his options once he is committed.

The solution for many lies in hybrid forms, involving both sprockets and time code.

This was the underlying message of the day. For the foreseeable future, no one method will be the right one to shoot and finish your film. Instead, there will be one mix of methods that is uniquely right for your production. What that mix will be will depend on the time frame, the budget, the amount and kind of footage, the deals you can swing on equipment and services, the people you want to work with, and how your production will eventually be distributed. Adequate thought and consultation before initiating production are vital, as is continuing communication among the various people working at the different stages of production in order to ensure understanding of the process and compatibility of its elements.

Anyone interested in obtaining tapes of the proceedings should contact the Canadian Film Sound Society at 50 Widmer Street, Toronto M5V 2E9. (+16) 590-8310.

Don Presant is a Toronto-based independent producer specializing in video post-production.