

TECHNICAL NEWS

"It Might be Done With Mirrors" The Mirrophonic Story

As a film industry grows in Canada, supportive technical resources must appear and grow along with it, and those resources must keep up with the state of the art to be of the ultimate advantage. There are filmmakers who contend, and I've heard it personally a number of times, that all those supportive services in Canada on which filmmakers depend, are strictly second-rate compared to what can be done in the Big Apple and all those places in the romantic Southwest. But let's take a stand on that kind of thing right here and now and say that this is absolute crap.

All of the professional labs, sound studios, optical houses, editing houses, and most of the rental houses maintain standards as high if not higher than those anywhere. They may not make as big a show of it, and those of us at Cinema Canada only wish that some day they will all decide to take advantage of our pages to run glossy colour ads showing us all just how well they do their jobs like the folks to the south do. But we are sympathetic that because we are in a young industry, much more of the time and money must be devoted to internal development, and there cannot be much left for tooting the old horn.

It is always interesting to have a talk with the people that are making the attempt to develop something new. The example that I will deal with this time is the most modern, efficient and productive sound studio in North America, Mirrophonic Sound, a division of Quinn Laboratories. Quinn Labs is another story in itself, and while that story should make good reading, let's just have the background as Findlay Quinn spending several years as lab manager at the National Film Board, then several more at Film House, and then branching out for himself and establishing an independent lab. Quinn Labs has become widely respected for the quality of work they turn out, and for the outspoken and well-respected reaction of Quinn himself to the state of the industry.

The logical expansion for an operation like Quinn Labs was to become involved in a modern sound studio, one capable of providing a complete sound service, from transferring right through to mixing and ending up by making the

optical track. All this work is done under the strictest supervision of some of the most qualified and experienced film sound people in the world. And they work on the newest available equipment which allows them a superb creative capability.

It started a few years back, when Ken Healey Ray was producing sound for *The Neptune Factor* and the first Ontario Place Imax film, *North of Superior*. By the way, Ken was responsible for the design of the sound reproduction system at Cinesphere, and although he has never been completely satisfied with the way it turned out, it's generally recognized as a major achievement in the world of film sound. Both the above films required very special creations for their sound tracks, and Ken soon found that there was not a facility here to accomplish the effects he needed. Two years ago there was nowhere to get a variable speed dubber, no chance of finding sufficient mixing facility to put together the multiple tracks for *North of Superior*, short of phone lines between Cinesphere and Film House and a couple of other studios. There wasn't a house that could

provide the effects from a library. The variable speed dubber that was needed for *Neptune Factor* was eventually built as a breadboard operation by a staffer at Pathé, Bill O'Neill, the kind of guy who knows that nothing is impossible, especially those things that most people think *are* impossible. It turned out to be the start of a most beneficial team.

Healey Ray and O'Neill got together with Quinn, and the idea of a sound studio was born. Magna-tech had in the very first stages the plans for sound mixing system that uses computer-controlled dubbers that can run in sync at 6 times sync speed, or 144 frames per second. (That's 216 feet per minute in 16mm, or 540 feet per minute in 35mm). This is in either direction! The advantage of course, is that if an error happens during a mix be it the fault of the mixer, or of the sound editor, or if the director just doesn't like what the thing sounded like, the roll-back to start, either of the reel or just the scene, takes almost no time at all. And the equipment is, of course, capable of making a pick-up in the mix with no audible difference in the track.

The other capability of the Mirro-

Multiple floor surfaces under the carpet in Studio B, to replace the movement sounds.



Harris Kirshenbaum

phonic system is perhaps the most fascinating. There aren't words to describe what goes on in the machine room when up to 28 35mm dubbings are running at 90 fpm, and they suddenly stop, reverse at 540 fpm, then roll forward again. The projector does the same thing, naturally. But if you can take a stroll into Studio B, where dialogue replacement goes on, you begin to see that things are certainly different here at Mirrophonic. First of all, those new tracks that are being recorded are not done to loops cut out of the slash print. Only the reel of film itself is taken in. Then it's put on to computer control, and the computer console beside the mixing board takes over. The operator dials in the footage, right down to the frame number. Then by manipulating the console, and hitting the start button, the film runs through the scene, rewinds at high speed, and starts again. If the performer is ready to record, he selects one of the three tracks on the 35mm mag, and as the film rolls, it shunts into record at the frame where the dialogue starts. The actor records it, the system shuttles back to the beginning and plays it back. If it's alright, the next scene is dialed in and they move on, or if they want to do it again, just push the button.

What does that mean to the filmmaker? Simply this — if it's necessary to replace dialogue on a film, it is not necessary to spend any of the time usually involved in making loops, lacing them up individually, matching them with the master track, breaking them down, and laying them into the original material. The reel that comes off the recorder when the dubbing session is over is ready to use as a dialogue track. This should result in a saving of at least 1/3 the time involved, and up to 2/3. As an example, currently dialogue for the film *Gabriele* is being replaced. This will *Ken Healey Ray (centre) and staff preparing tracks, in one of the Mirrophonic Editing Rooms.*



involve some 2/3 of the entire track, and will take no more than 10 days. This is the third feature film to get the Mirrophonic system work-over. Only *God Knows* and *Black Christmas* were the earlier two. In the last little while Robert Shaw was flown into town, picked up at the airport at 9 A.M., taken right to the studio where he replaced dialogue on his entire film, and caught the 5 P.M. flight back to New York. If the actors are good enough, there is no reason why this can't happen on every film.

To see what the Mirrophonic gang can do, it's only necessary to have a look at *Black Christmas*. While we have no intention of using this column for a critique, it can be generally agreed upon that the most interesting part of that film is its technical resources. The manufactured sound effects and amazing quality of sound right through speak for themselves. And the quality of the pictures is as good as any. This is certainly thanks to the beautiful work of Reg Morris CSC, as D.O.P. on the shoot, but also the very fine lab work that went into the piece deserves its credit. A conversation with Findlay Quinn reveals that there was no CRI involved in the process. *Black Christmas* is a two-generation film, direct from 5247 to Interpos/Interneg and then to release prints. If you haven't seen it — you simply are not aware of the state of the art in motion picture production in Canada.

Bill O'Neill, Ken Healey Ray, and Nolan Roberts (recently imported from the post of chief of sound at Sheppardton Studios) are more than happy to discuss the available resources at Mirrophonic Sound. In case there is any doubt, the rates for work at Mirrophonic are competitive, and although the 16mm facility is not complete yet, it will be in a month or so with the addition of high speed reversible 16mm projector. Right now they have to make do with conventional 16mm facility. But they also have, right on the premises, a huge stock of FX cartridges that can fill most needs. When those run out, just turn the boys loose, and they'll make anything else you need.

You'll find Mirrophonic in a plain unmarked brown building at 409 King Street West, near Spadina in Toronto. (416) 869-1781. □

For Sale: Uher 1000 Pilot Model Recorder, crystal-sync control, with rechargeable batteries, AC Power Supply Battery Charger and leather case. Pilot system is compatible with Nagra. In like-new condition. \$800.00. Contact Paul Tayler, (416) 270-2264.

STEENBECK EDITING ROOMS: 16/35 available at lowest Toronto price. Also night-owl shift for bargain hunters. The Cutting Corner, 43 Britain Street, Toronto (416) 361-1664.

EDITING: Do you need an editor for your film — or an assistant editor? The Canadian Film Editors Guild can find you one. Contact John Watson at (416) 535-2167.

FOR SALE: Magnasync/Moviola portable 16mm Recorder/Dubber. Includes all electronics in 2 cases. Nearly new. (416) 863-1113.

Producer interested in scripts for short (20-30 minute) fictional films. Please write: Quarry Films, 154 Stuart Street, Kingston, Ontario K7L 2V8.

Wanted: Good, experienced cameraman, assistant cameraman, sound recordist; with left-wing political beliefs, interested in working on films about social issues. Write to Box 161, Cinema Canada, 6 Washington Ave., No. 3, Toronto

FOR SALE: Canon FT/QL 35mm still camera. Good condition. Also includes 28mm f/3.5, 50mm f/1.8, 135mm f/3.5. Write Box 162, Cinema Canada, 6 Washington Ave., No. 3, Toronto M5S 1L2.

Mixing Board and Announce Booth in Studio A

