

Journal of the CINEMA AUDIO SOCIETY

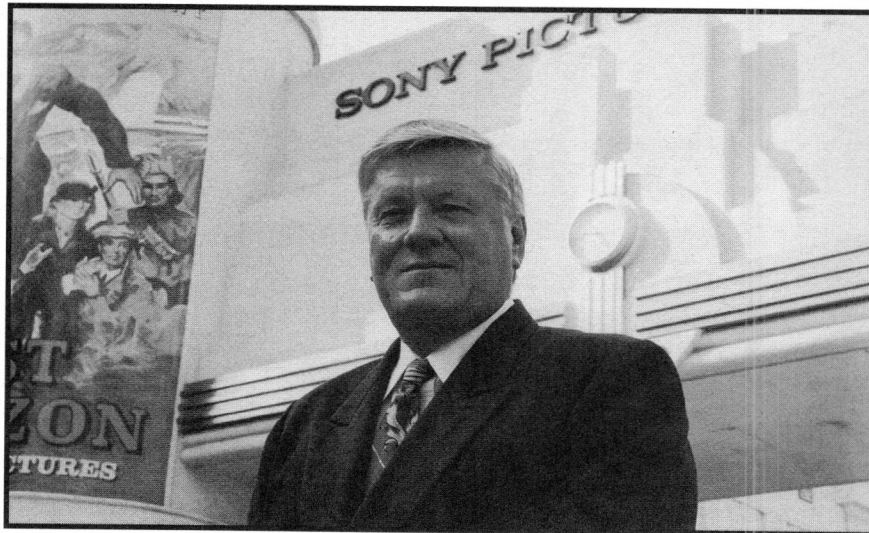
"Dedicated to the Advancement of Sound"

Kohut Named Career Achievement Recipient

The Cinema Audio Society has named Michael J. Kohut as the recipient of its 1995 Career Achievement Award, to be presented at the 32nd annual C.A.S. Awards Banquet on March 9th, 1996. Kohut is Executive Vice-President of the Post Production Facilities at Sony Pictures Studios. In this capacity, he oversees the studio's Post Production Facility group and is responsible for the Sound Editorial Services, Projection, Electronic Digital Sound Prelay, Video, Digital Picture Editorial, and Motion Picture Sound Editorial departments.

For 30 years, Mr. Kohut has worked consistently at this studio, starting with MGM in 1965 and

remaining through the facility's transfers in ownership. He originally was a production sound mixer prior to advancing to lead re-recording mixer.



He has compiled an extraordinary roster of over 80 feature credits, including "Basic Instinct," "The Prince of Tides," "War of the Roses," "Dead Poet's Society," "Rocky IV," "The Presidio," "Throw Mama From the Train," "The Sicilian," "Year of the

Dragon," "Old Gringo," "Crimes of the Heart," "Annie" and "The Goodbye Girl."

Mr. Kohut is a seven-time Academy Award nominee for Best Achievement In Sound for such films as "Total Recall," "Robocop," "2010," "Meteor," "War Games," "Fame," "Pennies From Heaven," and an Emmy nominee for Best Sound for "Roe V. Wade." He also holds two British Academy Awards for his work on "War Games" and "Fame."

Kohut is the inventor of Sony Dynamic Digital Sound (SDDS), a digital audio release format for motion pictures. He is also Managing Director and a member of the board

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NOTEWORTHY

C.A.S. GOES ONLINE

The Cinema Audio Society has taken the leap into the burgeoning computer communications network and established an internet address -- **CinAudSo@aol.com**. The recent sound directory questionnaire revealed that over 50 members have internet addresses, with the majority connecting through America Online. An e-mail poll of these members determined an enthusiastic interest in developing a C.A.S. on-line network.

Some of the ideas being considered are:

1) A C.A.S. Home Page, where information about the C.A.S., upcoming events, technical information, and *Journal* articles might be accessed.

2) Discussion groups where C.A.S. members can exchange information, ideas and viewpoints.

3) A C.A.S. network, offering on-line members the opportunity to communicate directly with each other.

We welcome any input from members -- contact the C.A.S. office, or e-mail us at **CinAudSo@aol.com**.

1995 C.A.S. AWARDS APPROACHING

It's time to begin thinking of your entries for the **1995 C.A.S. Awards for Outstanding Achievement in Sound Mixing**. Films and Television programs having their initial release or broadcast between January 1, 1995 and December 31, 1995 are eligible. Award selection is accomplished entirely by a vote of the Full Membership of the C.A.S. Relevant dates in the Award selection process are as follows:

Entry Submission Form mailed to membership **November 29, 1995**

Entry Submission Form must be received by **December 22, 1995**

Nominations Ballot mailed **January 8, 1996**

Nominations Ballot must be received by **January 24, 1996**

Final Five Nominees announced **January 30th, 1996**

Final Ballot mailed **February 14, 1996**

Final Ballot must be postmarked by **February 28, 1996**

Cinema Audio Society Awards Banquet to be held **March 9, 1996**
at the Beverly Hilton Hotel.

Upcoming Events

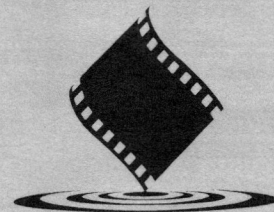
November 1995
**C.A.S. Sound Directory
Published**

December 22, 1995
**C.A.S. Award Entry
Submission Deadline**

January 24, 1996
**C.A.S. Award
Nominations Ballot
Deadline**

February 28, 1996
**C.A.S. Award
Final Ballot Deadline**

March 9, 1996
**32nd Annual
C.A.S. Awards Banquet**



Digital Multitrack Recording On the Film Set

by Richard Lightstone, C.A.S.

Digital is the buzz word of the nineties. There was a time, just a year or two ago, that you had to convince a producer or director to record their production tracks digitally. Now they're asking **you** first. As we all know, digital is all over the broadcast and film industry -- digital audio-recording, digital audio-editing, digital video, digital film effects, and now even film editors are cutting their films digitally, using systems such as the Avid and Lightworks. There are currently four professional 2-track R-DAT recorders--the Fostex PD-2, the Stelladat, the HHB Portadat, and the newest entry, the Fostex PD-4. Recently, however, there has been a new shift to using DMR; that is, Digital Multi-track Recording -- beyond two tracks.

The Nagra-D (which I wrote about last year) is a digital 4-track, open reel-to-reel recorder that has been embraced by mixers such as Kirk Francis, Chris Newman, Lee Orloff and Ed Tise -- to name just a few. (My apologies to any other Nagra-D mixers that I may have inadvertently left unmentioned.)

Now there is also a group who has begun to use the newer 8-track digital machines, such as the Tascam DA-88, the Sony PCM-800 DTRS, the Alesis A-DAT, or the Fostex RD-8. In this article I will relate the experiences of several DMR users including David

MacMillan, Jim Webb, Willie Burton, Ed Moskowitz and myself.

- Jim Webb -

Multitrack recording on production is certainly not a new thing. Jim Webb was recording 8-track analog for years for Robert Altman. Altman, who wanted the freedom to record his actors improvising and overlapping, decided that Jim was the right man for the job. Jim had previously mixed many concert movies in the 70's that were shot on 16mm, but recorded on multitrack analog. Just to jog a few memories, they were films like "Joe Cocker's Mad Dogs and Englishmen," "Elvis on Tour," and "Soul to Soul."

Jack Cashin worked on the initial design of the system for Robert Altman. Jack later went on to develop the Ultra-Stereo Motion Picture Sound Recording process. He and Jim Webb came up with the idea of laying down the tracks on a multi-track recorder and using wireless mics to capture the dialogue. They built some interface boards by putting two 4-track boards together, because in those days they couldn't get anything that was 8-in and 8-out. John Stephens built them a small 8-track reel-to-reel machine. Along with that, they constructed a crude monitor system, as well as a

dc to dc converter attached to a 12 volt motorcycle battery for powering the unit on location. The first film they used it on was "California Split" (1974). As Jim put it "It went everywhere, including a dialogue scene while we were rolling on board a Greyhound bus between Lake Tahoe and Reno."

In the nineties, Jim Webb has been working with the Tascam DA-88, mostly for music and effects. On "Exit To Eden," Jim used it to do a live recording of The Beverly Hills Jazz Band and again for some live music on "Boys On The Side" for director Herb Ross. Jim has some strong opinions on the use of multiple tracks -- even two tracks. He feels that there has to be a 100% commitment from the start -- "Get the editor, the director, the producer and post sound people to agree ahead of shooting that this is the way to go. The Lion's Gate Sound system was successful, because Robert Altman said this was the way he wanted it -- it was **his** system."

Jim feels that the post-sound people will be upset with multiple tracks, because it becomes so labor-intensive to sort out all the elements. As one post-supervisor told Jim -- "It may be better-sounding -- but it took longer and cost more."

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TECHNICALLY SPEAKING

by Steve Hawk, C.A.S.

- INTERFACING -

Murphy's first law of audio must be: "An interface **won't**." It seems one piece of equipment always works well inside its own box; problems only occur when you need to interconnect it to another device. It's not just whether pin #1 or pin #2 is 'hot' on an XLR, ¹ it's all the different formats, standards, and levels, be it analog, digital, or control signals.

How many of you use equipment that has various ins and outs that are unbalanced or semi-pro with only RCA jacks? Problems start to occur when you need to run cables a distance or tie into balanced Pro gear.

Let's first look at connecting a balanced audio output to an unbalanced input. The common method is to tie pin #3 of an XLR or the "ring" of a TRS to pin #1 (XLR) or the "sleeve" (TRS). Sometimes this can increase noise, distortion or even power consumption.

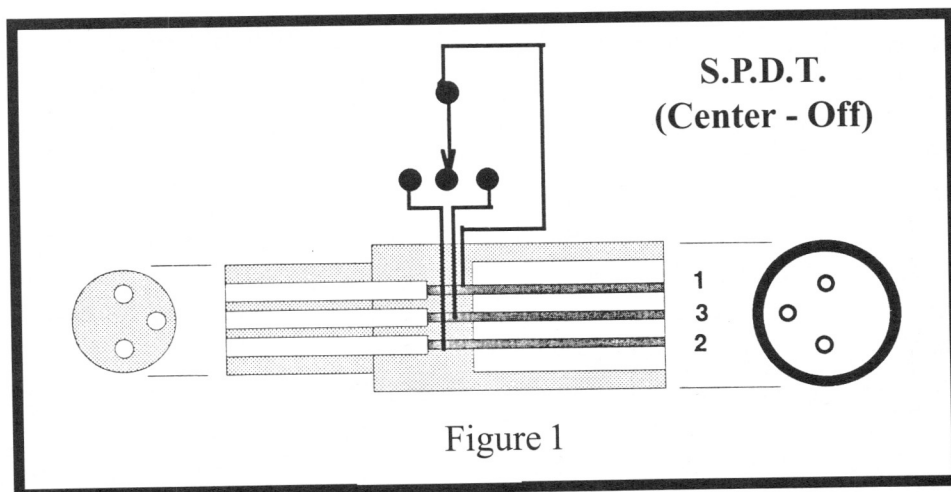
There are two types of balanced outputs: "Floating" and "Forced Balanced." You'll almost never find this info on a spec sheet, so you're on your own in determining which type you have. Figure 1 shows a simple balanced output tester to confirm output type. If the switch is thrown from center to either side and the signal drops 6 db or disappears, it is "Forced Balanced." Use only pins #2 and #1 or the "tip" and "sleeve" on

TRS; Pin #3 or "ring" should have no connection (N.C.). If the signal drops 1/2 db or less, it is a "Floating Output." In this case, tie pins 3 & 1 together or the "ring" and "sleeve." Either way, avoid using long cable runs or you might need to lift the shield at one end to eliminate noise or hum.

For you PD-2 users, the output is "Forced Balanced" and it will consume

Most unbalanced gear doesn't have a chassis ground lug or even a metal case that's grounded. In a permanent installation you might have the time or the engineering to handle it; out in the field, however, there never seems to be enough time to do things right. Besides, there's always a new "can o' worms" given to you at the last minute.

Transformers can be a big help in



even more power if you tie together pins 3 & 1. This is also true of the timecode outputs. In fact, if you tie together pins 3 & 1, you'll actually hear T.C. bleed into the headphone amp! Fortunately, this doesn't affect the recording path or audio outputs. To unbalance the T.C. output, use a ground lift or just use pins 2 & 3.

Now let's take a look at the opposite situation: you need to connect an unbalanced output to a balanced input. Problems arise due to the differences in audio shields and chassis grounds. You usually need to take the lid off to try and follow the grounding schemes in most equipment. Even if you have a schematic, it might not be wired the way the grounds and shields are listed.

getting an unbalanced output to a balanced input, especially for microphones. A transformer allows for impedance matching which can help maintain frequency response. The receiver's input needs to be equal to or have a higher impedance. Good quality transformers can be expensive, so this scenario is a good one to avoid. Stick with balanced equipment.

I mentioned last time about the June, 1995 issue of the A.E.S. Journal.² If you're putting together an installation, doing a studio from the ground up (no pun intended) or just interfacing some gear - GET THIS ISSUE! There are articles on power, grounding, shielding, transformers and a great one on interconnections by Stephen R. Macatee (p. 472).

Next time we'll look at some special interface cables.

¹ The A.E.S. standard for 3 pin XLR's is Pin #1 = shield, pin #2 = positive polarity (+), and pin #3 = return (-). For a complete list of 3 & 5 pin XLR audio standards, see Journal of the Audio Engineering Society, Vol. 40, no. 1/2 Jan./Feb. 1992. This includes balanced, unbalanced and mic-powering schemes.

² Back issues of the journal are available through the A.E.S. headquarter's office @ (212) 661-2355.



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C.A.S. DIRECTORY NEARS COMPLETION

The 3rd Edition of the Cinema Audio Society Sound Directory is nearing completion. It is a comprehensive listing of sound-related businesses, as well as a listing of C.A.S. Members (who completed the directory form) and their professional information. A November delivery is expected. Copies will be mailed to all C.A.S. Members free of charge.

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Gary D. Rogers, C.A.S., John Bickelhaupt

Individual Achievement in Sound Mixing For A
Variety Or Music Series Or A Special -

Barbra Streisand: The Concert -
Production/Re-Recording Mixer - Edward J. Greene
Re-Recording/Sweetening Mixers - Bruce Jackson, Bob Lamasney

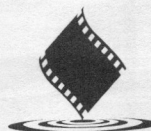
- Individual Achievement in Sound Mixing For A
Drama Series -

ER - "Love's Labor Lost" - Production Mixer - Russell Fager
Re-Recording Mixers - Allen L. Stone, Frank Jones, Michael Jiron

- Individual Achievement in Sound Mixing For A
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MICROPHONE SHOOT-OUT ON TAPE

By Steve Hawk, C.A.S.

Last May, a number of us microphone enthusiasts got together to try out and compare some new microphones as well as some trusty standards. Carson Hawk, Dick Arhlen, Chuck Everts and myself gathered at Chuck's studio in Laguna Niguel. There we recorded 3 voice-over artists, using 17 different microphones. All 3 artists (2 male, 1 female) read the same copy, which had been selected due to an abundance of "P's" and "S's," into each of the microphones.

We used some newer Neumann, Sennheiser, Schoeps and AKG mics, and also some vintage tube units. The mics were placed 12" from the talent, using only a "Popper Stopper" for a windscreen. They were fed into an Avalon discrete class "A" mic preamp and directly to a Panasonic 3700 DAT, using no equalization. This DAT master was later dumped into a DAWN 2 workstation where it was edited to tighten up gaps, and then transferred back to DAT.

The microphones are identified on tape only as "mic #1," "mic #2," "mic #3," etc. This allows the listener to pick and choose in a "blind test." Each mic is recorded by all the voice over artists in the same sequence and there's a new PNO number for the start of each mic.

You can get a copy of the lists of mics later on (which I recommend.) The mic list shows the mic, PNO number, and the "A" Time. This

allows you to shuttle around for comparison. All the mics sound quite good, but there are subtle differences. A mic that sounds good on a male might not sound so great on the female talent.

The tape is only about 20 minutes long and is well worth your time to take a listen to on your favorite speakers or headphones. A limited number of digital copies are available on a loan-out basis by contacting:

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"Kohut"

Continued from page 1

of directors for Sony Cinema Products Corporation (SCPC), as well as President of Sony Pictures Advanced Digital Systems, a research and development group, which will be developing new technologies for the motion picture and exhibition industries.

The C.A.S. Career Achievement Award is given to members of the sound community who have made outstanding contributions to the field of sound mixing. It is presented each year at the annual Cinema Audio Society Awards Banquet.



Improving the Status Of Sound In the Movies

by Randy Thom, C.A.S.

Let's say the director walks up to you, the production sound mixer, and says that he/she wants to brainstorm with you about ways to develop a story idea using sound. What would your reaction be? Obviously you would faint and have to be revived with smelling salts, but I'm talking about after that, when you're fully conscious again.

The cinematographer, production designer, and editor have analogous conversations with the director all the time. The composer sometimes has similar discussions, but usually way too late for the music to function as anything better than a nicely applied decoration to a fait accompli.

This piece is the first of a series of articles I intend to write for the C.A.S. Journal which look into the current status of movie sound, and suggest ways to educate ourselves and collaborators in other crafts about the underused potential of sound in film storytelling. The articles will contain plenty of griping, but I hope it's good-natured griping. One thing they won't be is cynical. Most of us love movies, and we refuse to give up hope that they can be made better with more imaginative use of sound.

It seems like the first step is to try to become more aware of the

ways sound can function in a movie. Most directors who like to think they appreciate sound still have a pretty narrow idea of the potential for sound in storytelling. They basically think that it's useful to have "good" sound in order to enhance the visuals. But that ain't collaboration, folks! It's essentially slavery. And the product it yields is bound to be less complex and interesting than it would be if sound could somehow be set free to be an active player in the process. Only when each craft influences every other craft does the movie begin to take on a life of its own.

A Thing Almost Alive

It is a commonly accepted myth that the time for film-makers to think seriously about sound is at the end of the film-making process, when the structure of the movie is already in place. After all, how is the composer to know what kind of music to write unless he/she can examine at least a rough assembly of the final product? For some films this approach is adequate; but doesn't it seem odd that in this supposedly collaborative medium, music and sound effects rarely have the opportunity to exert any influence on the non-sound crafts?

A dramatic film which really works is, in some senses, almost

alive, a complex web of elements which are interconnected, almost like living tissues, and which despite their complexity work together to present a more-or-less coherent set of behaviors. It just doesn't make any sense to set up a process in which the role of one craft, sound, is simply to react, to follow, to be pre-empted from giving feedback to the system it is a part of.

The Basic Terrain, As It Is Now

Feature film directors tend to oscillate between two wildly different states of consciousness about sound in their movies. On one hand, they tend to ignore any serious consideration of sound (including music) throughout the planning, shooting, and early editing. Then they suddenly get a temporary dose of religion when they realize that there are holes in the story, and bad edits to disguise. Now they develop enormous and short-lived faith in the power and value of sound to make their movie watchable. Unfortunately it's usually way too late, and after some vain attempts to stop a hemorrhage with a bandaid, the director's head drops, and sound cynicism rules again until late in the next project's post production.

What follows is a list of some of

the bleak realities faced by those of us who work in film sound, and some suggestions for improving the situation.

Pre-Production

If a script has lots of references in it to specific sounds, we might be tempted to jump to the conclusion that it is a sound-friendly script. But this isn't necessarily the case. The degree to which sound is eventually able to participate in storytelling will be more determined by the use of time, space, and point of view in the story than by how often the script mentions actual sounds.

Serious consideration of the way sound will be used in the story is typically left up to the director. Unfortunately, most directors have only the vaguest notions of how to use sound. And what little inclination they have to experiment with sound will be postponed until the last few gasps of post production.

Why not include composers and sound designers in pre-production discussions about ways to approach storytelling?

Production

On the set, virtually every aspect of the sound crew's work is dominated by the needs of the camera crew. The locations for shooting have been chosen by the director, dp, and production designer long before anyone concerned with sound has been hired. The sets are typically built with little or no concern for, or even awareness of, the implications for sound. The lights buzz, the

generator truck is parked way too close, the floor or ground could easily be padded to dull the sound of footsteps when feet aren't in the shot, but there isn't enough time.

The shots are usually composed, blocked, and lit with very little effort toward helping either the location sound crew or the post production crew take advantage of the range of dramatic potential inherent in the

"It is a commonly accepted myth that the time for film-makers to think seriously about sound is at the end of the film-making process."

situation. In nearly all cases, visual criteria determine which shots will be printed and used. Any moment not containing something visually fascinating is quickly trimmed away.

There is rarely any discussion, for example, of what should be heard rather than seen. If several of our characters are talking in a bar, maybe one of them should be over in a dark corner. We hear his voice, but we don't see him. He punctuates the few things he says with the sound of a bottle he rolls back and forth on the table in front of him. Finally he puts a note in the bottle and rolls it across the floor of the dark bar. It comes to a stop at the feet of the characters we see.

This approach could be played for comedy, drama, or some of both as it might have been in "Once Upon A Time In The West." Either way, sound is making a contribution. The use of sound will strongly influence the way the scene is set up. Unfortunately, sound isn't given this

sort of chance very often.

Post Production

Finally, in post, sound cautiously creeps out of the closet and attempts meekly to assert itself, usually in the form of a composer and a supervising sound editor. The composer is given four or five weeks to produce seventy to ninety minutes of great music. The supervising sound editor is given ten

to fifteen weeks to -- smooth out the production dialog -- spot, record, and edit ADR -- and try to wedge a few specific sound effects into sequences that were

never designed to use them. Meanwhile, the film is being continuously re-edited. The editor and director, desperately grasping for some way to improve what they have, are meticulously making adjustments, mostly consisting of a few frames, which result in the music, sound effects, and dialog editing departments having to spend a high percentage of the precious time they have left trying to fix all the holes caused by new picture changes.

Taking Sound Seriously

If your reaction to this is "so what do you expect, isn't it a **visual** medium?" there may be nothing I can say to change your mind. My opinion is that film is definitely not a "visual medium." That tired cliché was first spoken by someone with blinders on, and it is repeated every day by one of his idiot relations. I think if you closely look at and listen to a dozen or

Continued on page 10

"Status" - Continued from page 9

so of the movies you consider to be great, you will realize how important a role sound plays in many if not most of them. It is even a little misleading to say "a role sound plays" because in fact when a scene is really clicking, the visual and aural elements are working together so well that it is nearly impossible to distinguish them. Film-makers dream of creating those moments.

The suggestions I'm about to make obviously do not apply to all films. There will never be a "formula" for making great movies or great movie sound. My focus is dramatic films.

So, paying more attention to sound, what does that mean? Like everything else in film, it begins with the writer.

Writing For Sound

Telling a film story, like telling any kind of story, is about creating connections between characters, places, objects, experiences, and ideas. You try to invent a world which is complex and many layered, like the real world. But unlike most of real life (which tends to be badly written and edited), in a good film a set of themes emerge which embody a clearly identifiable line or arc, which is the story.

It seems to me that one element of writing for movies stands above all others in terms of making the eventual movie as "cinematic" as possible: establishing point of view. Nearly all of the great sound sequences in movies have a strong element of point of view. The audience experiences the action through its identification with characters. The writing needs to lay the ground work for setting up pov before the actors, cameras,

microphones, and editors come into play. Each of these can obviously enhance the element of pov, but the script should contain the blueprint.

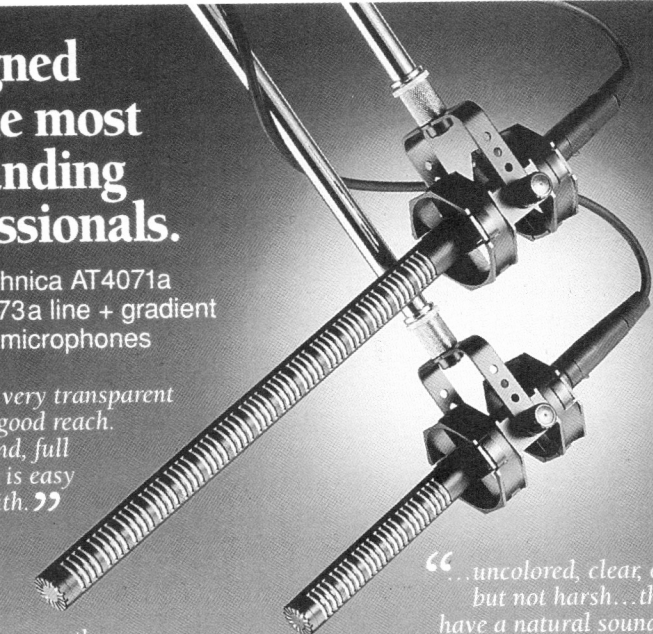
Let's say we are writing a story about a guy who, as a boy, loved visiting his father at the steel mill where he worked. The boy grows up and seems to be pretty happy with his life as a lawyer, far from the mill. But he has troubling, ambiguous nightmares that eventually lead him to go back to the town where he lived as a boy in an attempt to find the source of the bad dreams.

The description above doesn't say anything specific about the possible use of sound in this story, but I have chosen basic story elements which hold vast potential for sound exploitation. First, it will be natural to

tell the story more-or-less through the pov of our central character. But that's not all.

A steel mill gives us a huge palette for sound. Most importantly, it is a place which we can manipulate to produce a set of sounds which range from banal to exciting to frightening to weird to comforting to ugly to beautiful. The place can therefore become a character, with a range of "emotions" and "moods." And the sounds of the mill can resonate with a wide variety of elements elsewhere in the story. None of this good stuff is likely to happen unless we write, shoot, and edit the story in a way that allows it to happen.

The element of dream in the story swings a door wide open to sound as a collaborator. In a dream sequence



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we as film-makers have even more latitude than usual to modulate sound to serve our story, and to make connections between the sounds in the dream and the sounds in the world for which the dream is supplying clues.

Likewise, the "time border" between the "little boy" period and the grown-up period offers us lots of opportunities to compare and contrast the two worlds, and his perception of them. Over a transition from one period to the other, one or more sounds can go through a metamorphosis. Maybe as our guy daydreams about his childhood, the rhythmic clank of a metal shear in the mill changes into the click clack of the railroad car taking him back to his home town.

The imaginative use of time, space, and point of view, along with efficient and sparse dialog in a screenplay will tend to determine the degree to which sound can be a collaborator.

Opening The Door For Sound: Efficient Dialog

Sadly, it is common for a director to come to me with a sequence composed of unambiguous, unmysterious, and uninteresting shots of a location like a steel mill, and then to tell me that this place has to be made sinister and fascinating with sound effects. As icing on the cake, the sequence typically has wall-to-wall dialog which will make it next to impossible to hear any of the sounds I desperately throw at the canvas.

In recent years there has been a trend, which may be an insidious influence of bad television, toward non-stop dialog in films. The wise old maxim that it's better to say it with action than words seems to have been

forgotten.

There is a phenomenon in movie-making that my friends and I sometimes call the "100% theory." Each department-head on a film, unless otherwise instructed, tends to assume that it is 100% his or her job to make the movie work. The result is usually a logjam of uncoordinated visual and aural product, each craft competing for attention, and often adding up to little more than noise unless the director and editor do their jobs extremely well.

Dialogue is one of the areas where this inclination toward density is at its worst. On top of production dialog, the trend is to add as much ADR as can be wedged into a scene. Eventually, all the space not occupied by actual words is filled with grunts, groans, and breathing (supposedly in an effort to "keep the character alive.") Finally the track is saved (sometimes) from being a self parody only by the fact that there is so much other sound happening simultaneously that at least some of the added dialog is masked. If your intention is to pack your film with wall-to-wall clever dialog, maybe you should consider doing a play instead of a film.

Characters need to have the opportunity to listen. Each character in a movie, especially each of the principal characters, is like a filter through which the audience experiences the events of the story. When a character looks at an object, we the audience are looking at it, more-or-less through his eyes. The way he reacts to seeing the object (or doesn't react) can give us vital information about who he is and how

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Continued on page 12

"Status" - Continued from page 11

he fits into this situation. The same is true for hearing. If there are no moments in which our character is allowed to hear the world around him, then the audience is deprived of one dimension of HIS life.

Shooting for Sound, Camera and Microphone as Collaborators Instead of Master and Slave

Sound effects can make a scene scary and interesting as hell, but they usually need a little help from the visual end of things. For example, we may want to have a strange-sounding machine running off-camera during a scene in order to add tension and atmosphere. If there is at least a brief, fairly close shot of some machine which could be making the sound, it will help me immensely to establish the sound. Over that shot we can feature the sound, placing it firmly in the minds of the audience. Then we never have to see it again, but every time the audience hears it, they will know what it is (even if it is played very low under dialogue), and they will make all the appropriate associations, including a sense of the geography of the place.

The contrast between a sound heard at a distance, and that same sound heard close-up can be a very powerful element. If our guy and an old friend are walking toward the mill, and they hear, from several blocks away, the sounds of the machines filling the neighborhood, there will be a powerful contrast when they arrive at the mill gate.

As a former production sound mixer, if a director had ever told me that a scene was to be shot a few

blocks away from the mill set in order to establish how powerfully the sounds of the mill hit the surrounding neighborhood, I probably would have gone straight into a coma after kissing his feet. Directors essentially never base their decisions about where to shoot a scene on the need for sound to make a story contribution. Why not?

Starving The Eye: The Usefulness Of Ambiguity

Viewers/listeners are pulled into a story mainly because they are led to believe that there are interesting questions to be answered, and that they, the audience, may possess certain insights useful in solving the puzzle. If this is true, then it follows that a crucial element of storytelling is knowing what not to make

immediately clear, and then devising techniques that use the camera and microphone to seduce the audience with just enough information to tease them into getting involved. It is as if our job is to hang tiny question marks in the air surrounding each scene, or to place pieces of cake on the ground that seem to lead somewhere, though not in a straight line.

Let's assume we as film-makers want to take sound seriously, and that the first issues have already been addressed:

1) The desire exists to tell the story more-or-less through the point of view of one or more of the characters.

2) Locations have been chosen and sets designed which don't rule out sound as a player, and in fact,

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encourage it.

3) There is not non-stop dialogue.

Here are some ways to tease the eye, and thereby invite the ear to the party:

The Beauty of Long Lenses and Short Lenses

There is something odd about looking through a very long lens or a very short lens. We see things in a way we don't ordinarily see them. The inference is often that we are looking through someone else's eyes. The way we use the shot will determine whether that inference is made obvious to the audience, or kept subliminal.

Dutch Angles and Moving Cameras

The shot may be from floor level or ceiling level. The frame may be rotated a few degrees off vertical. The camera may be on a track, or just panning. In any of these cases the effect will be to put the audience in unfamiliar space. The shot will no longer simply be "depicting" the scene. The shot becomes part of the scene. The element of unfamiliar space suddenly swings the door wide-open to sound.

Darkness Around the Edge Of the Frame

In many of the great film noir classics the frame was carefully composed with areas of darkness. Though we in the audience may not consciously consider what inhabits those dark splotches, they nevertheless get the point across that the truth, lurking somewhere just outside the frame is too complex to

let itself be photographed easily. Don't forget that the ears are the guardians of sleep. They tell us what we need to know about the darkness, and will gladly supply some clues about what's going on.

Slow Motion

Raging Bull and Taxi Driver contain wonderful uses of slow motion. Some of it is very subtle. But it always seems to put us into a dream-space, and tell us that something odd, and not very wholesome, is happening.

What Do All Of These Visual Approaches Have In Common?

The conscious use of visual ambiguity is what they have in common. They all are ways of withholding information. They muddy the waters a little. When done well, the result will be the following implication: "Gee folks, if we could be more explicit about what is going on here we sure would, but it is so damned mysterious that even we, the storytellers, don't fully understand how amazing it is. Maybe you can help us take it a little farther." That message is the bait. Dangle it in front of an audience and they won't be able to resist going for it. In the process of going for it they bring their imaginations and experiences with them, making your story suddenly become their story. Success.

We, the film-makers, are all sitting around a table in pre-production, brainstorming about how to manufacture the most delectable bait possible, and how to make it seem like it isn't bait at all. (Aren't the

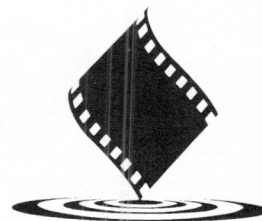
most interesting stories always told by guys who have to be begged to tell them?) We know that we want to sometimes use the camera to withhold information, to tease, or to put it more bluntly: to seduce. The most compelling method of seduction is inevitably going to involve sound as well.

Ideally, the unconscious dialog in the minds of the audience should be something like:

"What I'm seeing isn't giving me enough information. What I'm hearing is ambiguous, too. But the combination of the two seems to be pointing in the direction of a vaguely familiar container into which I can pour my experience and make something I never before thought possible."

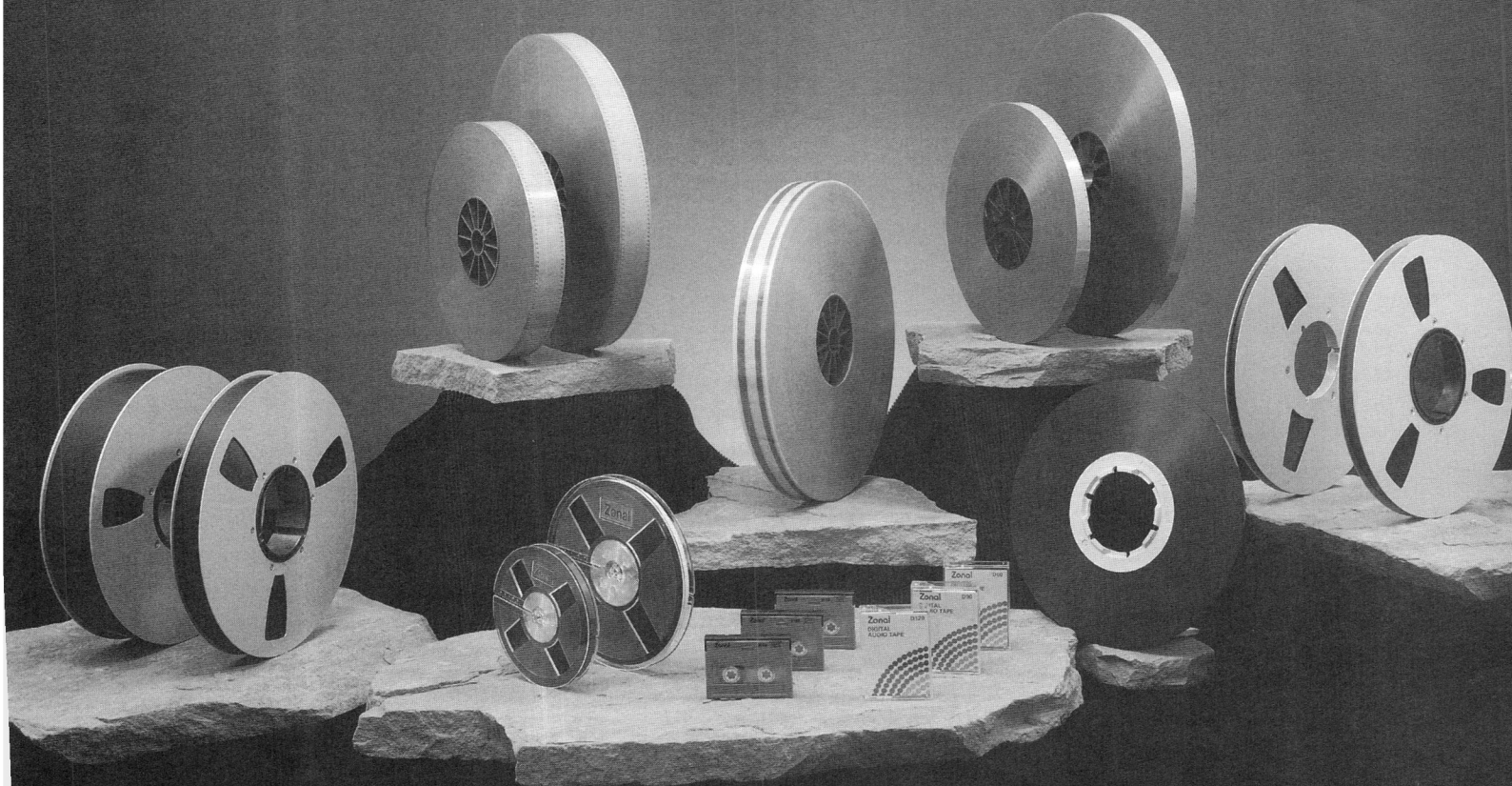
Isn't it obvious that the microphone plays just as important a role in setting up this performance as does the camera? If all this seems way too arty and European, let's see how it applies to a character who definitely ain't either:

Next issue: **Forrest Gump, A Case Study.** Til then, please be nice to me. My ear hurts.



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*"Digital" - Continued from page 3***- Richard Lightstone -**

I have used DMR on two features now. The most extensive use was on "Outbreak." This was a project where I felt that the use of an 8-track digital machine was obvious. There were extensive scenes in which the actors would be inside bio-safety suits, either talking to each other or interacting with others who were not in these suits. Fortunately, it was agreed that for the hi-tech look of the film, the actors would wear headset microphones, for communicating while inside their bio-safety suits.

I have to give thanks and credit to Tom Causey, who suggested the concept of headset mics. The headset mics were designed by PSC (Professional Sound Corporation) and modified to include the Sony MDR V-5 ear-piece. The microphones were wired for use with the Lectrosonic wireless, and the ear-pieces for Comtek receivers.

I realized that much of the film would have multiple audio perspectives. There was dialogue of actors close-miked from inside the helmets of their bio suits as well as the dialogue of actors from open boom mics. Then there were also the differing perspectives of how those talking inside the suits would sound to someone who was not, and the opposite sound to someone who was inside a suit. I wanted to preserve all of these aspects, since there were many dramatic, tension-filled scenes with as many as five actors in suits and three who were not.

I did a conventional 2-track mix to my Fostex PD-2 for dailies and editing, but at the same time I sent a

pre-fader output of each microphone to separate tracks of an Alesis A-DAT. I also fed the time code from the Fostex to the Alesis. The tracks on the Alesis were all "non-destructive" -- basically they could be pulled by the sound editors as clean dialogue stems, as well as any of the off-camera dialogue and the many ad-libs that were interjected by the

Production Multi-track and Editorial

One of the big arguments against the use of multiple tracks for production is the time and expense involved in sound editorial. However with the advent of excellent Digital Audio Workstations (DAW) -- such as Pro-Tools and Sonic Solutions to name just two -- this is rapidly becoming the way to go. Most mixers are recording "dailies" tracks on a DAT machine and laying down "non-destructive" tracks on their 8-track machines. Jim Webb feels that one area that has to be standardized is the A-to-D conversion. What converters are they going through? We are at the mercy of whatever they've got.

likes of Dustin Hoffman. More to the point, I wanted to make sure that there was going to be no excuse by the dialogue editors to do any ADR, because of an inadvertent fade or off-camera ad lib. (I refer to these rare flubs as a "short between the Mixer's headsets," or as they call it in the

military -- "a brain fart".)

The Alesis worked like a charm. I used it on over 50% of the film, both on the sound stage, as well as out in the open on location in Northern California and Hawaii. The post schedule on the film was greatly compressed -- we wrapped on December 16th, 1994 and the picture was released on March 3rd 1995! All of the A-DAT tracks were loaded, along with the 2-track DAT masters, into work stations, giving the sound editors ten separate production tracks to edit simultaneously.

My next opportunity came on "Mrs. Winterbourne." We had a playback scene in which Ricki Lake and Shirley MacLaine were to sing with a quartet of musicians in front of a live audience. We pre-recorded the vocals and music in a studio, and made 2-track dubs with timecode for what was supposed to be a standard lip-sync playback. However, at the last minute, Shirley decided she would rather perform the vocals "live" to the pre-recorded music track.

This time using a DA-88, I fed it the two live vocal tracks, the pre-recorded playback music, the pre-recorded vocals, a pair of audience atmosphere mics, as well as the playback timecode and the production time code from my Fostex. We had the scene in two takes, shot by four cameras. The beauty of it all was that the sound editors now had live and pre-recorded vocals, with audience effects and the music, all on one little 8mm tape!

- Willie Burton -

Willie Burton's experience with

Continued on page 16

"Digital" - Continued from page 15

DMR came on "Bridges of Madison County," where there was a scene with a 5-piece blues band from New Orleans. The decision to do the scene live also came up at the last minute. Willie used individual mics to separate the instruments and vocals and laid it all down onto the eight tracks of a DA-88. They shot the band doing two different songs. Willie sums it up this way: "Clint Eastwood was quite skeptical, thinking it couldn't be recorded live and would have to be re-scored in post. But he was thrilled when he listened to my playback and announced that he had a print." Willie is determined to use DMR again, on a heavy dialogue film.

- David MacMillan -

David MacMillan used a DA-88 on "Apollo 13" in the Mission Control Room set.

"In that set, there were many functions happening at any one time," David explained. "There were crane angles sweeping this very, very large area where technicians who were controlling the many functions of the space capsule were talking all together. As the cameras swept the room, it was impossible to know who was going to speak next, and a boom microphone wasn't even an option."

All of the technicians wore period plantronics or telex headset microphones and were wired into an RTS loop. For quality reasons, David also had the seven principals wired, with those mics being fed separately to the DA-88. He also used one of the channels as a combine of all of the headset feeds. He looped the principal radio mics back to his board, and combined them with two boom mics to create

a dailies mix onto his Fostex PD-2. Macmillan was kept pretty busy watching the video feeds from the two cameras and trying to mix all of this for dailies. However, as David put it, "Even if I missed something, such as an off-camera response that Director Ron Howard really liked, I knew it was there on the 8-track, and he could go back to it in post." David also felt that the non-principal actors' background dialogue was an important sound element to the scenes in Mission Control.

David posits: "I think of recording on an 8-track only as another tool for very specific occasions. After all, I am a Mixer, not a recordist, and mixing is what I do to add a certain transparency and ambiance to the sound track."

- Ed Moskowitz -

Ed Moskowitz has been successfully mixing 4-camera television sitcoms for many years. Traditionally the shows are recorded on two separate 4-track half-inch analog machines. One of the problems with this system was that one track of each machine had to be sacrificed for time code. Ed jumped at the opportunity to record the audio in digital on all eight tracks, with time code being laid down in the subcode data. He's been using a DA-88 for over two years. Last year he began using DMR on "The George Wendt Show" and "Pride and Joy." This year he's using it to mix "News Radio" and "Cybil."

There has been some confusion on other shows about the track assignments, leading some producers to abandon the digital multitrack arena entirely. Ed, however, has worked out the kinks, as he explains: "With

4-camera film shows, the telecine transfers are usually done to digi-beta for on-line editing purposes. The digi-betas have four usable tracks, so I have arrived at the following track assignments on the DA-88: Track 1 is dialogue, Track 2 is sound effects and/or music, Tracks 3 and 4 are stereo audience, Track 5 is the mix minus, Track 6 is mono audience, with Tracks 7 and 8 being 'discretionary,' for either a plant mic, or a microphone that is set pre-fader for ad-libs or off camera lines. Tracks 5 and 6 give the editors exactly what they need for the edit process, either on Avid or Lightworks."

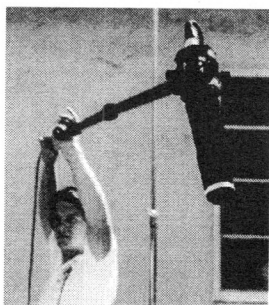
The producers love the idea of only having to deal with one tape per show that contains all the tracks. Ed adds -- "They have the whole season's sound in one attache case, instead of eight or more reels of analog tape per episode. The audio quality, naturally, is stunning, and there is no degradation as it goes from my mix, to re-recording, to transmission by the network."

So there you have it, five testimonials to the versatility of Multi-track Digital Recording. It would seem from those that I spoke with, that the DA-88 is the most widely-used machine, but just to boggle your mind, there are over 50,000 A-DAT (Alesis and Fostex) and DTRS (Tascam and Sony) machines currently in use worldwide. Either format offers the production sound-mixer a whole new approach to getting great tracks in the field - and saving costly looping.

I welcome your comments. All correspondence can be sent to me c/o: autone@earthlink.net.



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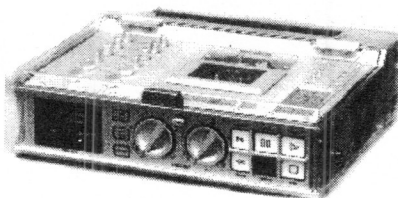
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BEEN THERE, DONE THAT . . .

Richard Lightstone, C.A.S., is back from 3 months on location in Toronto, Boston and New York for Tri-Star's "Mrs. Winterbourne." Sound Trax announces the completion of "HellRaiser IV: Bloodline," mixed by Jeremy Hoenack, C.A.S., John Anderson and George Groves. After returning from a well-deserved and long-awaited vacation, Terry Porter, C.A.S., Mel Metcalfe and Dean Zupancic began "Father of the Bride II" in Disney's Main Theater. Next door to them, "Things To Do in Denver When You're Dead" is being finished by Rick Ash, Andy d'Addario and Tom Dahl, while Doc Kane will be keeping busy with "Tom Sawyer," "Homeward Bound II" and "Mighty Ducks III." Speaking of Disney, Rick Alexander is on his way over to stage C and looking forward to a busy future. Up at Skywalker, Lora Hirschberg and Tom Johnson are re-recording "Home For The Holidays," while Gary Summers and Gary Rydstrom are doing double-duty on "Toy Story" and "Jumanji," with Randy Thom, C.A.S., joining them on the latter.

"Been There, Done That" would like to hear about the projects you've been mixing lately. Please write us c/o the C.A.S. Journal.



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Letters To The Editor

Dear Editor,

As a footnote to my article on the House Ear Institute in the July *C.A.S. Journal*, I wanted to share this information regarding the E.A.R. Hearing Protectors. After my fitting, I received them through the mail with the 25 db attenuators. This turned out to be a little drastic, so I returned them for the 15 db attenuators. They are inter-changeable, while still using the same custom ear molds.

This seems to be a good

compromise, as I feel I can mix comfortably with them. I have since worn them to a rock concert and actually enjoyed it for a change. However, if you work with gunfire and explosions all the time, the 25 db (or more) attenuators might be the ticket.

Sincerely,

Steve Hawk, C.A.S.

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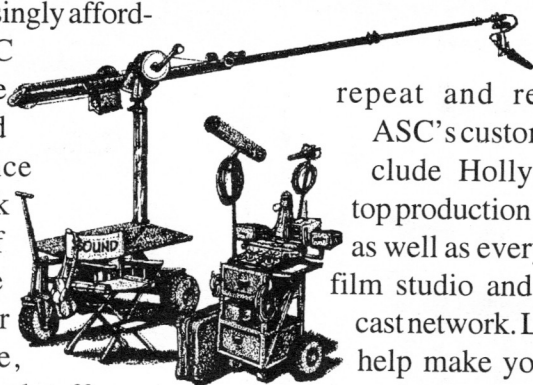
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