

Film-Tech

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FILM NOTES FOR THE
REEL PEOPLE

H-50

A TECHNICAL SERVICE FOR FILMHANDLERS FROM EASTMAN KODAK COMPANY



Now Playing

100 years of THRILLS • CHILLS • SPILLS


PIECES of SILVER

A black and white movie poster for the film 'Pieces of Silver'. The title 'PIECES of SILVER' is rendered in large, 3D block letters. Above the title, the text 'Now Playing' is written in a cursive font, and '100 years of THRILLS • CHILLS • SPILLS' is written in a bold, sans-serif font. The central image shows a man in a dark suit and hat and a woman in a dark dress and hat, both looking upwards with expressions of awe. Several film reels are shown floating in the air around them. The background is dark with some light rays emanating from the bottom left corner.

FILM NOTES FOR THE
REEL PEOPLE

H-50-22
H-50-23

A TECHNICAL SERVICE FOR FILMHANDLERS FROM EASTMAN KODAK COMPANY



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EDITOR'S MAILBOX

This letter is to correct your statement that the MOVIE MOVER is "over 4 feet in diameter and weighs over fifty pounds... and can be quite cumbersome," which appears in the Spring 1988 edition.

The MOVIE MOVER is exactly 38" in diameter, and with 12,000 feet of film, it weighs 65 pounds. Most people agree: it is not cumbersome, but fairly easy to carry because of the convenient center hole.

We are currently developing the injection-molded SUPER MOVER, a flush-locking high-tech shipping unit. We also have in development a flatbed buildup/inspection machine.

Many Regards, *Steven Klindworth, S. Bose Inc.*

I received one of your "Reel People" editions entitled "Troubleshooting for the Projectionist." Both the title and the information stirred up some recent angry feelings I have had when viewing films in my home town—New York City.

I find that the care and quality of prints that I have seen, both recently and throughout my adult life, has been very poor. I constantly have to leave the theatre to request a focus check, and most prints are horribly scratched throughout, and unintelligible at the changeovers. I find that my requests for refocusing are largely ignored and my criticism of the bad quality of the prints are greeted with a polite passing of the buck to the distributors. Are movie theatres under any obligation to show quality prints?

I have worked as an assistant film editor and sometimes sound editor under the jurisdiction of IATSE Local 771 since April of 1975. I know the extreme, sometimes painful care to which editors go to make sure every aspect of a film is in perfect order, both visually and audibly. It seems an insult to this work to project it in a theatre that does not care about the quality of what it projects or how it projects it.

I am wondering if anyone in your office has any suggestions as to how one might go about improving the quality of prints and projection.

Thank you for your time and consideration of this letter.

Sincerely, *Christine Cameron*

Editor: It is disheartening to most of us in the industry that a customer finds presentation quality in such dire straits.

Since 1983, Eastman Kodak Company has conducted our projection seminar "MBO: It's Your Image" for more than 10,000 projectionists and managers internationally. We are very happy to report that, obviously, most of these seminar participants share your concern and have manifested a strong desire to upgrade presentation quality. We sincerely hope that the fruits of all of our labors evidence themselves in the theatre.

100 YEAR SALUTE TO FILM



George Eastman (left) delivers the first roll of motion picture film to Thomas Edison.

The ribbon of silver halide crystals that is the basic thread of the motion picture tapestry is, of course, film. Moving picture film was invented 100 years ago in 1889 in Rochester, New York by George Eastman.

There were other, earlier entries in the field, but none could move through a camera in a continuous flow. Eastman's did, especially after Thomas Edison invented sprockets for the holes in the film.

The motion picture industry would be nothing without this wonderful stuff. It records both visions dreamed and natural events in all the shades of color and black and white ever seen.

How do you compress the 100-year history of the moving image into seven minutes of film? That was the first question Chuck Workman asked himself when he accepted the challenge of producing **Pieces of Silver**.

Pieces of Silver is a free-form composite of images culled from movies, animated cartoons, commercials, newfilm, documentaries, and TV programming. It incorporates newfilm from the Spanish-American War shot in 1896, turn-of-the-century footage of sporting events with hand-painted frames, and a 1912 corset commercial which played in theatres. There is documentary footage from **Nanuk of the North**, images from **Ecstasy** and other vintage movies, early television clips from **I Love Lucy**, and glimpses of current music videos.

"Movies are memories of the way reflected light was focused through a camera lens," Workman said. "Latent images are captured and stored on tiny pieces of silver which are amplified during processing.

"But the real magic occurs when moving images are viewed by an

audience in a darkened theatre. We don't know how or why it happens. But we do know that the moving image recorded on film has the ability to temporarily suspend reality and transport us to a fantasy world which exists only inside of our own minds. It is a dream-like quality. The impact can be profound and lasting."

Pieces of Silver speaks a universal language. There are no words to explain the images. Just music which complements and embellishes the pictures. There is a certain irony in that many of the images will be seen like no audience has ever seen them before. This can be attributed to improvements in the technology for making and projecting prints.

Workman was a natural choice for producing this film because of his unique background. Workman produced **Precious Images**, which commemorated the 50th anniversary of the Directors Guild of America, for which he won an Academy Award.

Pieces of Silver is a rich and nourishing visual potpourri of moving images which documents our ability to express ideas by writing with light. "This is still a very young art form," Workman said. "We started with peep shows, advanced to movie theatres with hand-cranked projectors, and now have big screen formats like Showscan and IMAX. I'm certain the moving image will continue to evolve in ways that we can't even anticipate."

Prints of **Pieces of Silver** are shown as part of Kodak's new seminar, **Film from Start to Finish**. For more information about **Pieces of Silver**, contact Terri Smith or Barbara Stokes at (213) 464- 6131.

INTERVIEW WITH DIRECTORS OF EXHIBITOR RELATIONS

Reprinted with Permission from the AMC West Division Reporter

Steve Ellman, Universal Pictures

Madelyn Fenton, Columbia Pictures*

Ted Hatfield, MGM/UA Communications

* Since this appeared in the "West Division Reporter" Madelyn Fenton has joined AMC Theatres. Exhibitor Relations for Columbia are now handled by Dawn Dubovsky.

Q: Exhibitor relations was formed as an entity within distribution for what purposes?

COLUMBIA: At Columbia, it was formed to be an excellent resource for exhibition in terms of supplying materials, answering questions, and providing last-minute items for theatre openings and other important events. I'm the one person that exhibitors can call for anything except to buy film. It's one-stop shopping.

UNIVERSAL: One day the people at Universal sat down and said, "We're spending hundreds of thousands of dollars on trailers, one-sheets and standees. We have no idea what trailers are on screen, we don't know what managers do with standees, and we don't know where our one-sheets are." Columbia had just appointed their first director of exhibitor relations. Universal had a meeting, decided it was a great idea, and that they should also have someone to concentrate on theatres. I was approached to take on the assignment, and I really had no parameters. I was told the primary purpose was to obtain space on screens for trailers and see that one-sheets and standees were up. But from there I was given a free hand, a mandate to go out and create good will, local level promotions, and anything I thought would help our releases.

I think the *trailer* and everything else made for use inside the theatre is the basis of our jobs.

MGM/UA: With the reorganization of MGM/UA, we ended up with the United Artists side of the family in Beverly Hills, the MGM side in Culver City, and distribution in Los Angeles, which creates communications problems within our company to begin with. It was determined by MGM, UA and MGM/UA Communications, as a corporate company, that we really had no one to do, in layman's terms... customer relations.



Ted Hatfield, MGM/UA Communications

I work with all facets of the theatre companies, sending our product reels, fielding calls on marketing plans, answering such questions as, "What are you going to do on network television?" and "How is this picture going to open?" I interface with the marketing side of both MGM and UA, attending weekly production meetings as well as distribution meetings. It gives me a wide background so that I may better answer questions and filter information just as my associates do at the other companies.

Q: What do you feel is the most important service you provide in your job capacity?

Hatfield: “...you can wrap up our job in one word — *communication.*”

MGM/UA: I think between distribution and exhibition you can wrap up our jobs in one word...communication.

UNIVERSAL: Historically there had existed hostility between exhibition and distribution. When I entered exhibition in 1960, the distributor wasn't exactly a friend. There was mistrust between exhibitor and distributor. The distributor had large field departments with maybe 15 to 25 people. With the lessening of the number of people in the field, which happened at about the same time exhibitor relations came into being, we tried to talk exhibition into hiring their own people who would then oversee and supervise the dissemination of information to their respective theatres. As these things started to be reshaped, there had to be someone at the studio who was a support system for exhibition.

Ted said it was communication, which I think is an over-simplification of what was really done. But he makes another point. In our background we've done co-op advertising, we've been in the field, we've done publicity, we've done action promotion. In doing this, in being able to understand exhibition problems, we are able to represent the exhibitor's viewpoint to our own marketing and distribution departments.

We also have to decide what's important, and that is, we've got to promote and protect the product for all of us.



Steve Ellman, Universal Pictures

When my 10-year-old son comes home from a theatre and gives me, frame by frame, a rundown of five trailers he saw, and I see the excitement in the kid's eyes...well, that's the motion picture business. That is an integral part of the movie-going experience...something we have to remember.

Q: Why is it that all film companies don't have a director of exhibitor relations in place?

MGM/UA: It's important what you said earlier, Steve—that back 10 years ago we had some 30-odd branches, and if you needed a radio spot or another ad slick, or there was a big problem, there was a branch in New Haven. There was a shipping depot in Butte, Montana. There was someone you could call and say “I'll meet you at Joe's Cafe in Omaha because I didn't get my trailer.”

Those days are gone. There's no supply room back at the branch. Exhibition has done the same thing. You had offices, here, there, and yon. All of a sudden it's the days of computers.

UNIVERSAL: The hubs.

Ellman: “...we don't believe in screen advertising because we think it has a negative impact...”

MGM/UA: We don't have branches anymore. We have regional offices. When that started to happen there was this gap with all of us. Someone at our company said: “Hey, who takes this guy's phone calls? Who takes this gal's complaint?” That 's partly where our company stepped in and said, “Somebody has to do this.”

UNIVERSAL: But operation in exhibition generally did not progress at the same rate that film buyers and marketing did. Marketing became more important with exhibition, but it happened very slowly. There are still people in operations in exhibition today who are doing things the way they did them 40 years ago. Their priorities are on everything BUT marketing support. In contrast, other companies are very sensitive to the promotional needs of theatres. In some companies there are people who may be great operations people, but you'll never convince them that what we're talking about is meeting a primary objective. Their objective is to open the theatre, collect box office receipts, and keep the concession stand running. Everything else is secondary.

Q: While film companies seek placement of their product trailers on theatre screens, theatres are also looking for a constant supply of new trailers to fill their needs. Where do you think this breakdown between supply and demand occurs, and how might this situation be avoided?

COLUMBIA: I want to know where those theatres are. Because boy, I can fix them up real fast!

MGM/UA: I think the answer in helping the circuits and managers to advertise six pictures at one time is the teaser trailer. It's only 90 seconds, and is a lot more passable than some trailer that's four minutes long. With the 90-second trailer, the manager can put it for a variety of distributors.

We're all looking for screen time, and exhibitors are looking to promote as much as they can. Everyone has a multiplex these days, so you're not only promoting the next picture, you're also promoting the one on Screen #4 down the hall. I think the 90-second trailer is all-purpose: the teaser, the cross-plug, everything.

Dubovsky: “... (exhibitor relations is) one-stop shopping.”

COLUMBIA: Columbia is getting into making a number of 45-second trailers. You just give them a little taste of what's coming, and I have a much easier time persuading the exhibitor to put them on screen. It is short, and with a teaser, that's fair because it's something that, (A) you don't know if it's booked into the theatre because it may open four or five months down the road, (B) it allows more screen time for other people who may have the next picture booked, and (C) it's easier on the managers for programming.

UNIVERSAL: Going back to the managers, and without naming circuits...when we opened *Biloxi Blues*, we had a trailer attached to the front of all prints. I can tell you that letters went out with specific instructions regarding the programming of those trailers. So, why was the trailer not put on screen? The manager's reply: “Well, I had too many trailers so I cut off the attached trailer.”

This drives us up a wall at Universal. We cannot understand why a manager will cut off an attached trailer when it is a corporate policy to run it.

Then we've had situations where we would have a screening with an attached trailer and the manager is told about the trailer. So he writes trailer A, B, C, on his report, but never bothers to check the show. We

also have theatres that run commercials, which cuts into screen playing time, and they figure that the few bucks a week more than compensates for patrons who won't go to their theatre because of the commercials. But we in distribution cannot tell exhibition how to run their theatre. We can only say we don't believe in screen advertising because we think it has a negative impact on movie-going.

MGM/UA: You feel like you're preaching to the people who have been saved already. If the managers of all of the circuits can understand, and you can get this from the MPAA or any of the other industry research departments, the single most important thing to motivate a body into that theatre seat is the trailer. And that is why I think we should go back to the 90-second trailer...any way that we can get three or four trailers on, and not the screen ads. I think mainly the managers with a lot of circuits just haven't been hit in the head yet to know that those trailers are vital.

UNIVERSAL: I would like to see every first-run theatre in the country running three or four trailers on screen, be it 90 seconds, 60 seconds, or 45 seconds.

COLUMBIA: But there should be a time limit. There are some trailers out there that are way over two minutes, and I think that's just too long.

UNIVERSAL: I fight the battle, Madelyn fights the battle. But if your creative people insist on a longer trailer, that's just what you're going to end up with.



Dawn Dubovsky, Columbia Pictures

FROM PRODUCTION TO THEATRE: THE ROLE OF THE LABORATORY

The laboratory is generally involved with a motion picture from the first day of shooting through the delivery of the release print to the film exchange. Listed below are some of the principle services offered by commercial motion picture laboratories. Few laboratories will offer all the services listed but most of them will provide a major portion of them.

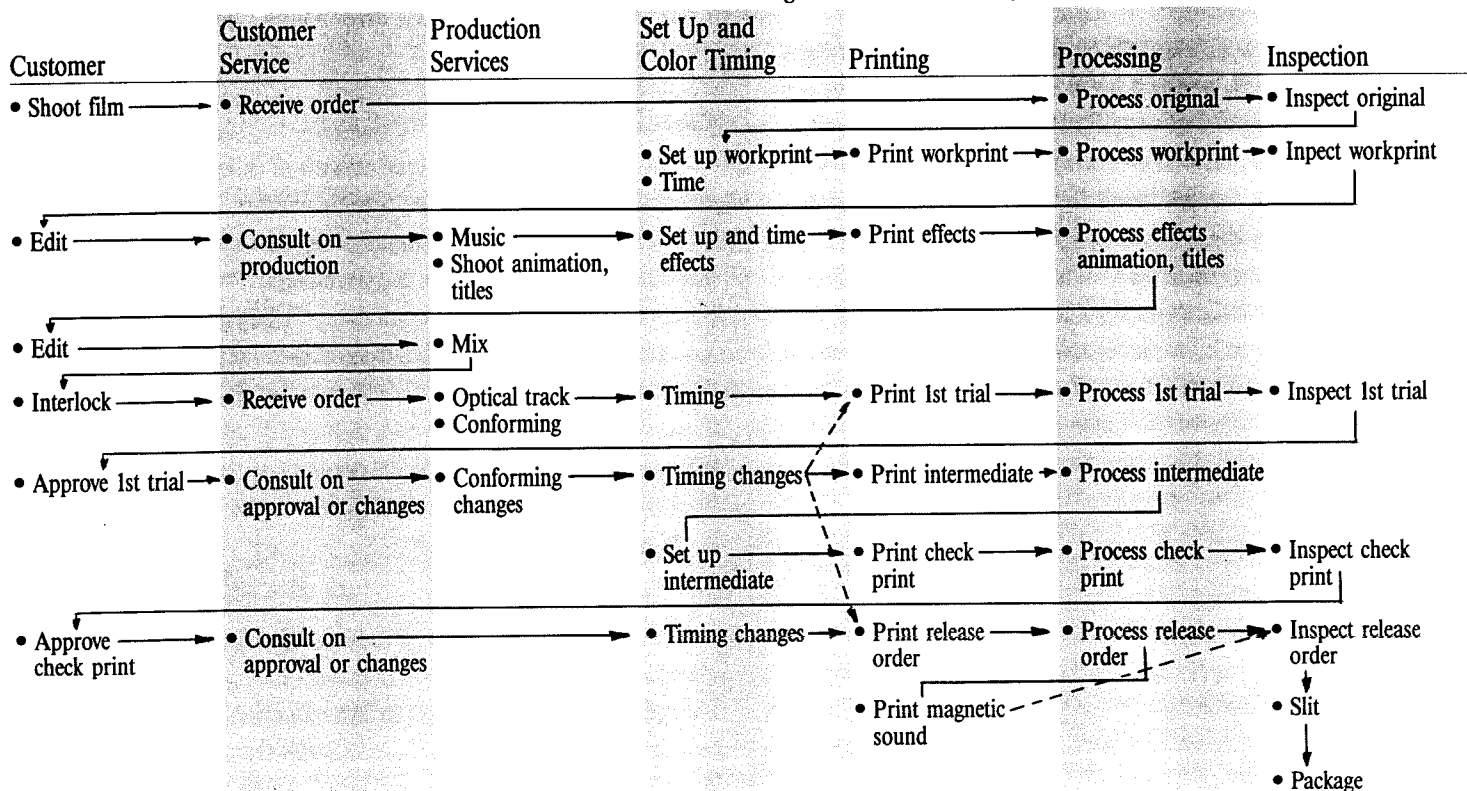
- **Processing.** Developing camera, intermediate and print films (black and white as well as color).
- **Advice.** Furnishing advice on technical or even aesthetic problems.
- **Printing and Duplicating** from camera films for workprints or release prints. Most laboratories will print or duplicate the camera film after it is processed. They may also hold the original in their vault and forward the print for use as a workprint. Thus the original is protected from damage in handling until it is needed for final conforming.

- **Edge Numbering** of originals and workprints to facilitate editing.
- **Editing,** cutting, splicing, and assembling as directed by the producer.
- **Conforming.** Matching the original camera film to the workprint as edited by the producer.
- **Optical Effects.** These include dissolves, wipes, fades, freeze frames, etc.

Laboratory Services: A Walk Through

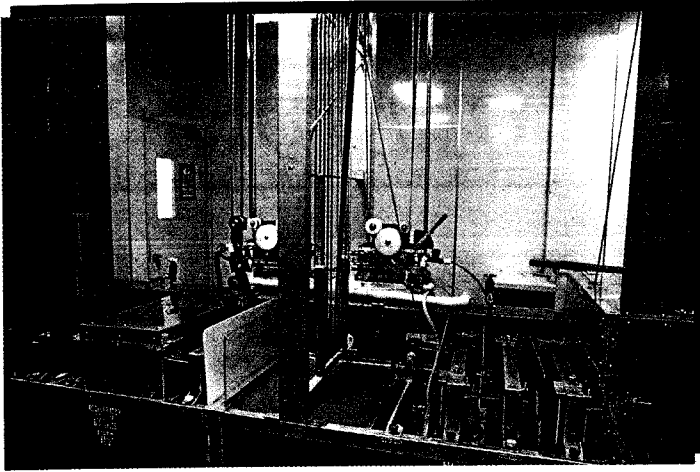
To help you visualize the way a laboratory's operations interact with the film production. This schematic provides a graphic description of the services and work flow in a typical major motion picture laboratory. Close communication between lab, cinematographer, and director is required to produce a satisfactory final print.

Services and Work Flow Through the Film Laboratory



LABORATORY OPERATIONS

One way to better appreciate the sophisticated technology that turns exposed camera film into good projection prints is to understand the processes and equipment in the laboratory. Below is a description of the operation and equipment involved in processing and printing of the film.



The continuous processor allows for the economical development of long lengths of film.

PROCESSING

The motion picture laboratory uses the continuous processor, a machine that provides the most efficient way of handling long lengths of film. In essence, the continuous processor moves film through the appropriate sequences of developers, fixers (or stop baths), washes, and dryer at a carefully controlled speed. The processor also controls solution temperature and agitation to produce optimum results for the particular kind of film being processed.

Transport Design

The film follows a helical path through various solutions being transported by banks of submerged rollers. Squeegees or wipers located between the different tanks remove most of the liquid from the film surface. The most common method of moving film through a processor is by friction between the rotating spools and the base side of the film.

The film path through the processor wet section permits only the base side of the film to contact the rollers. In this way, the emulsion is protected from possible physical damage that might occur if the soft, wet emulsion came into contact with the plastic spool surfaces. However, in the dry sections (feed-on and take-off) of some processing machines, there may be emulsion-side rollers. These are usually undercut in the image area, similar to those used in the theatre.

Time and Temperature

For color films, specified temperature tolerances, particularly those for the developers, are critical. Appreciable deviation from these limits result in speed and color balance changes.

Controlling processing time is also critical with color film because any changes that occur in color emulsions may not be equal in all layers. Improper color reproduction can result from speed shifts, contrast changes, increased fog, etc., in any of the layers.

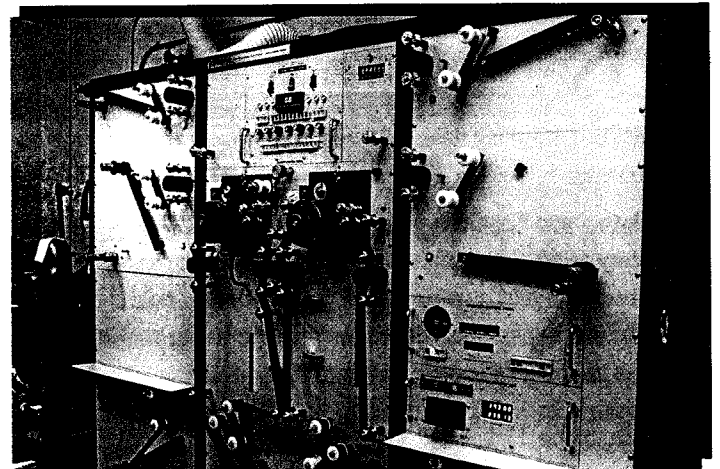
Agitation

If exposed photographic materials are placed in a developer and allowed to develop without any movement, the action soon slows down because the developing chemicals in contact with the film surface become exhausted. An equally important effect of agitation is prevention of uneven development that may result in mottle, a nonuniform density in the print that makes it look blotchy. During the initial development step proper agitation is especially critical.

Process Control

The degree of development in a negative-positive process or first development in a reversal process is the most important factor in determining the final image quality.

PRINTERS



Continuous-contact printers are used to print films from the same size negatives.

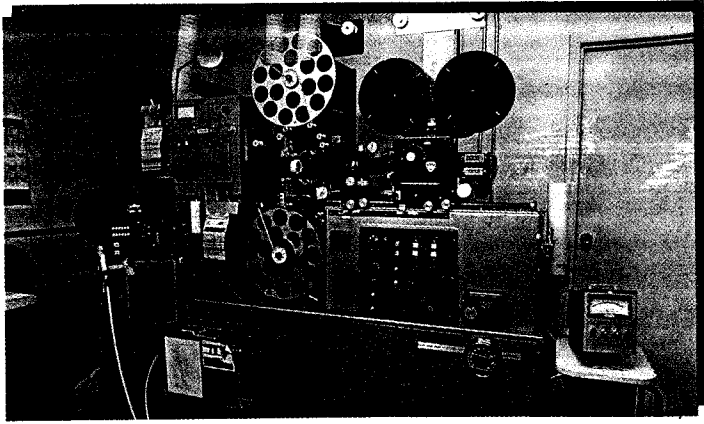
Continuous-Contact Printer

In its simplest form, printing consists of exposing the raw stock to be printed to an "original" or "printing master." This forms the image using a light source which produces the exposure. When the image size of the print is the same size as the original (i.e., 35 mm to 35 mm), the printing is usually done in a continuous-contact printer.

The large printing sprocket advances both the original and the print film at a constant rate past the printing aperture. The original and print films are usually positioned emulsion-to-emulsion with the light passing through the original and exposing the stock to be printed. Depending on the application, these contact printers may operate from 15 to thousands of feet per minutes.

Optical Printers

Whenever the image size of the print is different from that of the original or certain special effects are desired, an optical printer is used. The optical printer can be thought of as a projector on one side and a camera on the other. The image produced by the projector is focused at the plane of the film in the camera gate. Optical printers can be quite



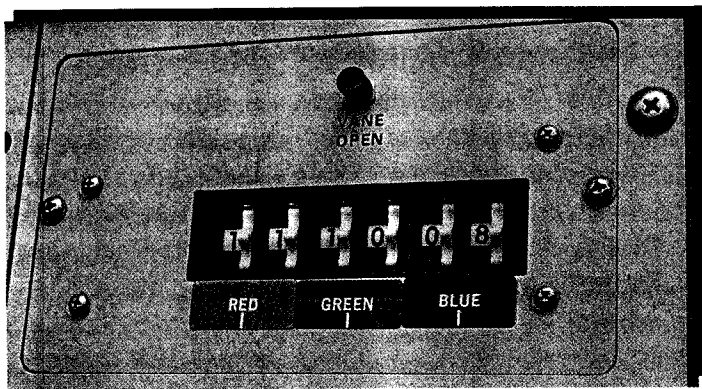
The optical printer is used for special effects and when blowing up 35mm negatives.

providing such effects as blowups, reductions, skip frames, anamorphic compression, zooms, mattes, etc.

Wet Gate Printing

One of the most troublesome problems encountered by motion picture laboratory personnel are scratches sometimes encountered on film from which prints must be made. Release prints are printed from a duplicate negative in order to protect the original negative from potential damage. Duplicate negatives are generally produced on Estar base stock and treated with "Photogard." This combination is utilized to produce a great numbers of prints with superior image quality.

When scratches exist, a "wet" or "liquid" gate is used to minimize their effect. A scratch on the support of the negative acts as a secondary diffuser that scatters light. Scratches on the emulsion side of color negative films may appear colored on the print, depending upon how deep the scratches are and whether image-bearing layers have been disturbed. In a wet gate, liquid having a refractive index close to that of film is applied, by immersion or with a wick, to both sides of the original. The liquid fills the scratches and reduces the light scatter. Wet-gate printing is applicable to any of the printing configurations, step or continuous, contact or optical.



Printer color correction controls.

Additive and Subtractive Printing

Whenever color printing is involved, the printer or, more exactly, the printer lamphouse must be able to control the red, green, and blue components of the white-light source.

The most commonly used printing method is additive printing. For

color-correction (changing the relative amount of red, green, and blue light), three separate color sources, red, blue, and green, are combined to form the light source that exposes the film. Scene-to-scene color correction can be handled on the additive printer. Consequently, almost all intermediates, answer and release prints are printed on additive printers.

In a subtractive printer, color-correction is achieved by inserting color correcting filters between the light source and the printing aperture. Subtractive printing is used primarily for titles and optical effects.

Color Timing

In printing color originals onto color print films, a small difference in overall printing exposure may be detected. When shooting a film, scenes are shot over the course of months, or even years. To make the action in the film appear to take place within the time-frame of the story, the lighting from reel-to-reel and scene-to-scene must be taken into account. Color timing balances the cyan, magenta and yellow lights to achieve an overall look for the entire feature.



Electronic color analyzer.

One effective way to color-time originals is to use an electronic color analyzer. This instrument displays a positive video image of the original, from either color negative or color reversal, and allows the operator to select color-printing information.

Soundtrack Printing

During production the sound is captured magnetically on a Nagra recorder. An "optical recorder" is the instrument used by the laboratory to transfer the magnetic information to an optical image on the edge of the film.

Variable-area soundtracks are made up of dense and clear area. In an ideal track, the dense areas would be completely opaque and the clear area completely clear. Each laboratory determines a density setting for the films they print. If the dense part is not opaque, there is a slight loss in the signal-to-noise ratio. Ideally, the track would have perfectly sharp edges between the dense and clear areas.

The frequency response of the soundtrack is also determined at the lab. During printing, contact must be maintained to ensure presentation sound quality.

As the reels are printed they are taken up on cores. The five or six reels that make up a standard feature are compiled and sent to a film exchange for mounting on 2000-foot shipping reels.

SCREEN TECHNOLOGY

TØRUS™ Screen

**E.V. EJ-1 Pataxial
Loudspeaker
W TL3512 Subwoofer.
Triamplified.
Active Crossover
Points @
150 Hz. 600 Hz**

Light Distribution

Non-Perforated

TØRUS Compound Curved Screen

The projection booth may bustle with technically advanced equipment, but the final result of the presentation can be substandard if the target of the whole projection system, the screen, is ignored. The screen is the only surface intended to be viewed by movie-goers for the entire time they are in the theatre; yet little has been done in the way of advancing screen technology. The Sigma Design Group is changing that.

Approached by Anheuser Busch in 1985 to design "the best" theatre possible for their visitors center, the partners of the Sigma Design Group developed concepts for a revolutionary new screen. Deviating from the typical flat or single axis curved screen, in place in most theatres, a dual axis curved screen was developed.

The reasons for screen curvature are many: to disperse the light very evenly over the screen surface, to minimize light radiated onto the walls, and to channel the light from the screen into the audience.

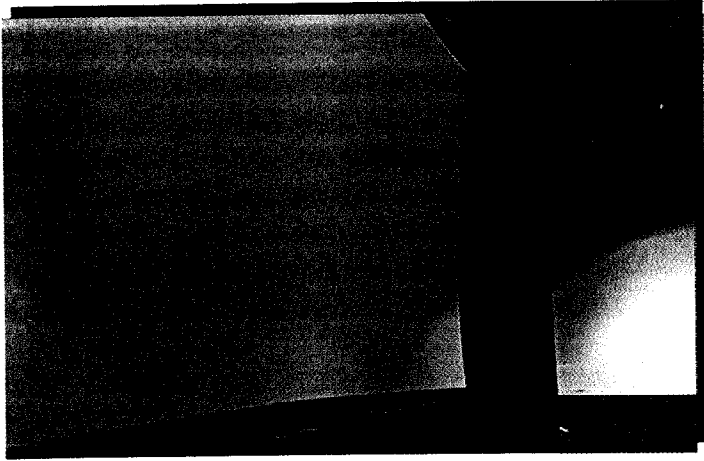
Curving the screen is not a new idea. Every special film development from Hollywood has had some sort of curved screen; these systems

include Cinemascope, Todd-AO, the Disney circular theatres, Cinerama™, D-150™, and Showscan™. The record of past events seems to point toward curving the screen.

Sigma designers say that the TØRUS Compound Curved Screen significantly improves luminance efficiency, produces uniform light return, and increases the rejection of ambient and stray light. The high contrast ratios possible also enhance the color saturation and fine-line resolution.

In the initial proposed Anheuser Busch project the designers considered a number of constructive techniques but finally determined that a single non-perforated sheet of seamless screen material would provide the desired results when mounted on an airtight box frame. A mild vacuum would then pull the screen material into correct form. Scale models (1/12 and 1/4 of the proposed 20' x 48' screen) proved the concept to be workable with predictable results.

During 1986, American Multi Cinema changed their screen from flat and perforated to single axis curved and non-perforated. Of course, a



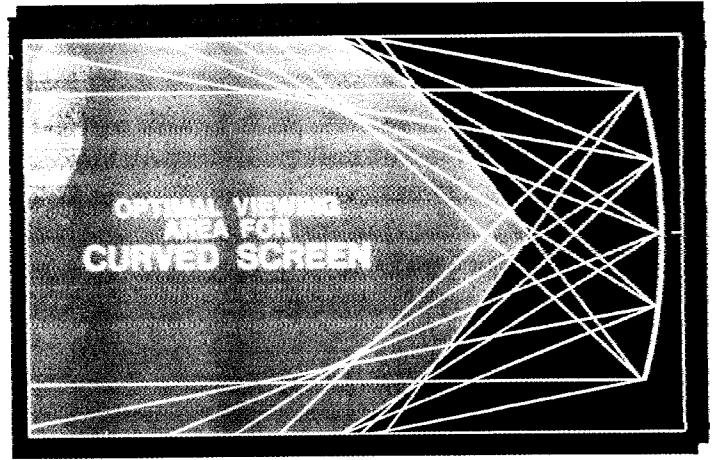
Curved screens provide enhanced image quality over a larger section of the auditorium.

perforated screen sheet reduces the reflectivity of the screen by 8 to 15 percent. When placing an order for screens with Stewart Filmscreen Corporation (one of the partners of the Sigma Design Group) AMC was shown a model of the TORUS Compound Curved Screen and was immediately interested in the possibilities. The first installation (January 1987) was at the AMC Rolling Hills 6, followed by one at the Century 14, and later yet at the Burbank 10, all in Southern California.

Through the use of proprietary design methods, and computer programs, each screen is individually designed for the specific projection and seating geometry of the auditorium, so that the screen will focus light from the projector onto the primary seating area.

A vacuum unit is utilized to draw the screen material into its specified curved shape. A sensor behind the screen is used to maintain the curvature with accuracy of plus or minus 1/8". By cycling on and off, the unit modulates the vacuum behind the screen thereby setting the curvature of the screen. The vacuum unit has redundant multiple fans in case one fan should fail. Should total system failure occur, the screen material will "belly" outward slightly but is still usable. After being held in the concave shape for many weeks the screen prefers to nearly hold its shape.

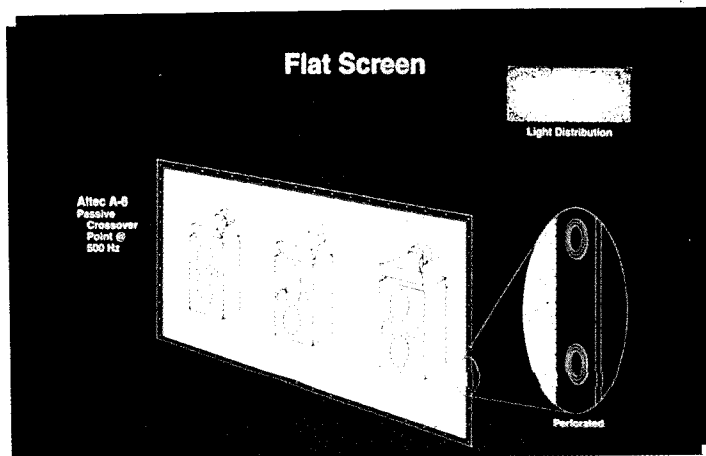
An important hurdle to be overcome was speaker placement. Typi-



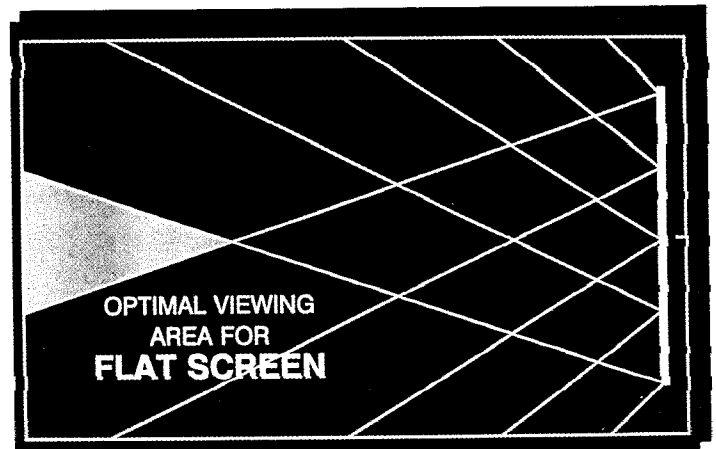
cally speakers are placed in the space behind the screen to give the illusion of sound coming from the projected scene. This option was not feasible with the unperforated sheet. According to Larry Jacobson, AMC Vice President Purchasing and Facilities, the placement of speakers for the solid screen is an area that has been met with skepticism. To complement the solid sheet a specially designed speaker system, placing speakers above and below the screen, was developed by noted sound expert Dr. Eugene Patronis of Georgia Tech. The speakers were designed to maintain the illusion of sound originating from the images on the screen.

AMC has been so impressed with the TORUS Compound Curved Screen, coupled with the Electro-Voice speakers, that the package has become the official presentation system for all of their theatres. Many new complexes have the TORUS CCS in every auditorium. In June of 1988, the Colorado Plaza 6 in Denver became the first theatre to have all auditoriums equipped with the system. Retro-fitting will occur in the AMC theatres across the country on a continuing basis. As of November 1989, 72 AMC auditoriums will be equipped with the screens.

The TORUS Compound Curved Screen is designed and licensed by Sigma Design Group and manufactured exclusively by the Stewart Filmscreen Corporation.



Speaker placement and design have been altered to accommodate the solid screen.



**MOTION PICTURE AND
AUDIOVISUAL PRODUCTS DIVISION
EASTMAN KODAK COMPANY
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