Film-Tech

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FILM NOTES FOR THE

REEL PEOPLE

H-50-18

A TECHNICAL SERVICE FOR FILMHANDLERS FROM EASTMAN KODAK COMPANY

"KEEP 'EM COMING BACK!"

PART IV

SOUNDS GOOD!

With heightened competition for the entertainment dollar, it is becoming increasingly important for us as exhibitors to emphasize the attractive attributes of our complexes. One of these areas that should be highlighted is sound. Every effort should be made to ensure the best possible sound is being heard by our patrons. This includes not only monitoring the sound equipment, but also eliminating any extraneous noise that could distract from the movie-going enjoyment.

We are at a critical point in swaying our customers in order to "Keep 'Em Coming Back." In this, our final installment of our four part series of "Keep 'Em Coming Back," we want you to do some soul-searching about your theatre's sound quality. You need to really listen to what your patrons are hearing when they visit your theatre.

One of the primary advantages that theatres maintain over home entertainment systems is larger-than-life sound. In customer surveys, enhanced theatre sound is high on the list of features that appeal to movie-goers.

In keeping with Kodak's Management by Observation traveling field seminar, we will look at the components which make for the best in quality sound. In addition, we will take a troubleshooting approach to remedy sound problems as they occur. It is essential to implement preventative maintenance practices to help reduce or eliminate

potential mechanical problems before they affect your customers.

We will take a look at a variety of sources which ultimately comprise the overall sound experienced in your theatre auditorium. They include:

The Sound Track
The Speakers
Auditorium Bleed-Through
Mechanical Considerations
Extraneous Noise

THE SOUND TRACK

The sound track is the medium that stores the sound signal.

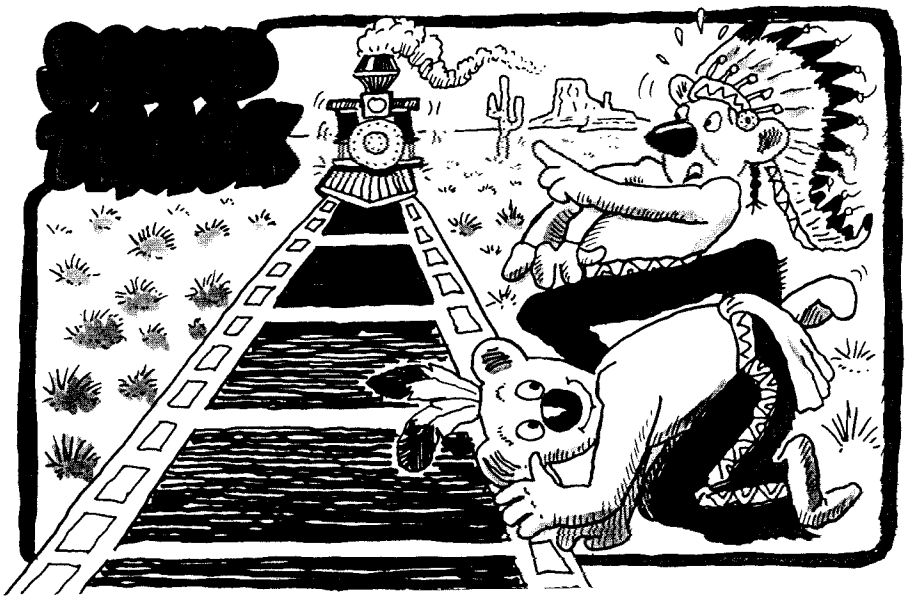
There are three types of theatrical sound tracks: digital, magnetic, and optical.

While digital sound currently is in limited use, it may prove to be the competitive edge for the future over home presentations.

The second type of sound track in use today is magnetic sound, which derives its sound signals from electronic impulses.

Optical sound is the third system being utilized. Optical sound uses a slit beam of light to modulate a photocell. The photocell amplifies the electric impulses to drive the speakers. Specific areas that can be potential problems with both magnetic and optical systems will be addressed first, followed by situations that are unique to each system.

A problem that shows itself immediately is no sound. The first check that should be made is to verify that the correct switches have all been turned on. If those switches have been turned on and you are still without sound, you then need to check the actual threading of the film through the projector. If the film has been threaded so that the sound track is facing the wrong way, you will be without sound. This is because the sound heads are unable to "read" the signal that has been encoded on the print. The sound head does not scan the entire width of the film, only the small area where the encoded signal has been imprinted on the film. If you find you have threaded the projector with the sound track facing the wrong way, the projector will have to be stopped and the feature rethreaded with the sound track in the proper scanning position.



You can significantly reduce or eliminate minor problems as mentioned here by instituting a few simple operational checks. First, you should thread the film well before the show is scheduled to start. Mistakes can be eliminated when you take the time to thread properly instead of having to rush your threading to get the show on screen in time.

When you are going into the projection booth, go to the main power supply for the room and turn on all of the circuit breakers in the breaker panel. After you have turned on the main power, go to the projector and make sure all of the switches on the control panel are in the proper position for going on screen when the time comes to start the film. If someone else threads the projector, make it a standard practice to double check the breaker panel, the switches on the control panel, and the position of the sound track.

If the operational procedures already mentioned have been followed and you are still without sound, you should check for some type of system error.

First, check to see if a breaker has blown. You will need to check the main breaker panel as well as the breakers on the projector control panel. If a breaker has tripped, re-set the breaker. If the breaker trips again you will need to check for shorts in the system. Breakers are blown as a means of shutting down the system to minimize damage to the internal wiring when there is a problem in the equipment. Spare circuit breakers should always be kept on hand at the theatre.

If all of the breakers are in working order you should check the speaker system. Speaker failure is commonly due to a speaker being unplugged or having loose wires.

Whenever you have service done in the screen area always check the speakers to ensure that they were not inadvertantly left unplugged after servicing. This can also occur when janitors are cleaning the auditoriums.

If you check the speakers and find no problems, then the trouble probably lies in the amplifier. If your amplifier has malfunctioned, a service call will usually be necessary to remedy the problem.

If you have poor sound quality or a loss of high frequency, you may have faulty connections at the sound head. If the connections are found to be in working order, you should again check the speakers. Unshielded wires are the first items to check. Unshielded wires act as an antenna and, as such, will pick up activity from other electrical sources within the theatre.

If unshielded wires are the problem, you will hear a low hum coming from the speakers. If you do not hear a hum, but instead hear a "crackling" noise, the problem most likely lies in one of two areas: 1) corroded socket or terminal connections, or 2) a cracked diaphragm or cone in the speaker. In any of these cases, the defective part will have to be replaced.

In order to enhance the sound quality at your theatre, two additional procedures should be established as

normal operating policy. Take the time to "bloop" all splices. A bloop is a small patch placed over a splice on the sound-track area to cover the noise of the splice.* This will eliminate unnecessary sound-track "clicks."

Most importantly, GO INSIDE THE AUDITORIUM AFTER EVERY SHOW START. Inside the auditorium is the only place you can accurately determine if the sound is functioning properly and at the proper volume level for your audience.

Before calling a service technician, make sure you have thoroughly checked all of the troubleshooting possibilities previously mentioned. Failure to do so could create wasteful repair bills, unnecessary down time, and customer dissatisfaction with your operation. It would be wise to contact the equipment manufacturer prior to calling a technician.

In addition to troubleshooting procedures previously discussed for both magnetic and optical sound, there are individual characteristics unique only to optical and others unique only to magnetic sound. These additional characteristics will also need to be checked.

OPTICAL SOUND

A burned out exciter bulb is one reason you may have no sound with an optical system. The bulbs are easily replaced. They are inexpensive, and you should always have spare bulbs on hand.

Since optical sound functions with a light beam directed at the sound drum, you must make sure the beam slit is aligned on the center of the sound track. Proper alignment of the fidelity focus and the lateral guides is accomplished with a tool adjustment, and realignment is rarely necessary.

Use of the SMPTE Buzz Track Test Film aids in making the proper adjustments. You will know if an adjustment is necessary if you hear a "motorboating" sound inside the auditorium. This motorboating sound is heard when the scanning mechanism is reading the sprocket holes rather than the sound track.

If it is misaligned in the other direction, onto the actual film frames, you may not get any sound at all.

If you have replaced the exciter bulb and the light beam is properly aligned and you are still without sound, you will next need to check for a faulty diode. To check the diodes you will need an ohm meter. If no electrical current exists, replace the diode. Spare diodes should always be kept on hand. If there is current, you will need to consult with a qualified technician.

If you are getting sound, but it is garbled, check your sound loop. The correct length of the sound loop for optical sound should be 19 to 21 frames from the aperture plate to the scanning beam. Always check the sound loop length before a show start so you will not have to interrupt the performance.

If the projector is running and the sound loop is too tight, you will have to stop the projector and re-thread using the above specifications. If the sound drum lever has not been pressed down on the film running over the sound drum, the loop will not remain the proper size once the projector has been started, and the film will not run smoothly through the projector.

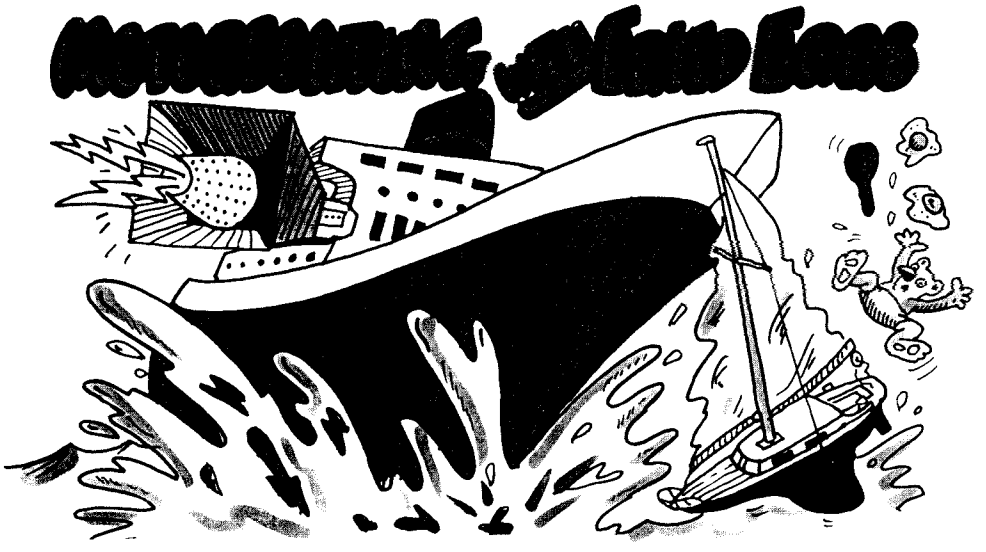
If you find the loop to be within the proper limits, the film running smoothly, and the sound is still garbled, you will need to make a roller tension spring adjustment. There are two types of adjustments: placement and pressure. Placement is adjusted with a tool; a pressure adjustment is made with a set screw. If you have a projector with a horseshoe spring, you may need to replace it to get the correct tension.

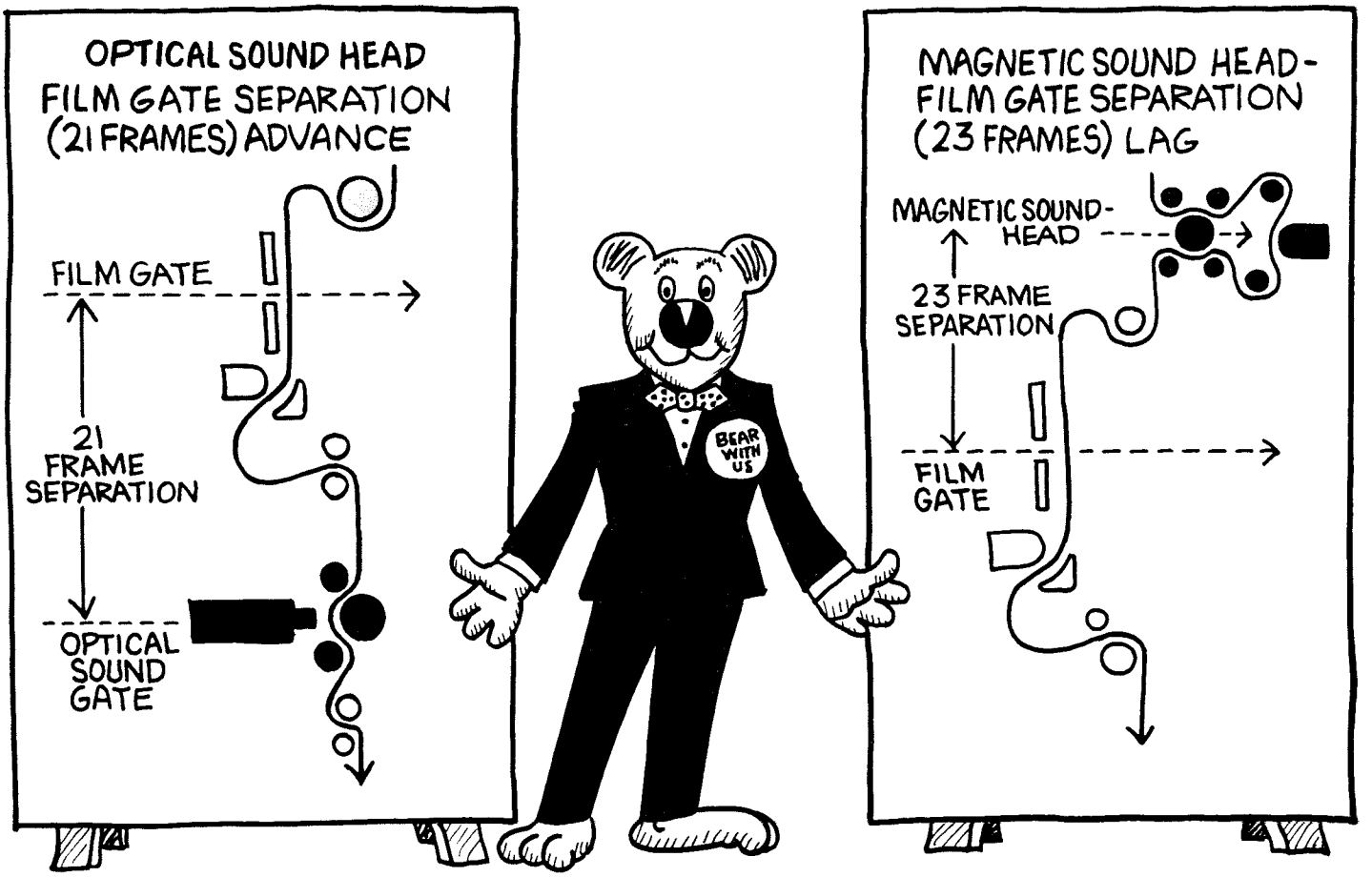
The effect of DIRT in the booth make it a well-known four-letter word. Dirt can affect the sound system as well as the projection system. When dirt and oil accumulate on the scanning optics, the result is a loss of high frequency sound or overall poor sound quality. The scanning optics should be cleaned on a regular basis with lens tissue.

Dirt may also result in scratches on the sound track. A "rain" or hissing sound is the result of a scratched sound track. Once the damage has been done, the sound track cannot be repaired. In order to offer the best possible presentation to your customer, you will need to exchange the print. However, make sure the sound problem is due to the print and not a mechanical problem. If you do not check this first, exchanging the print will not rectify your problem. In this case, the best remedy is prevention. If you receive a print that has scratches on the sound track, you should exchange the print before your customers have to hear the noise.

A final problem you may encounter is a loose element in the photocell. This will be manifested with a crackling or "frying eggs" sound in the auditorium. A solar cell (the element) is attached to the photocell with a bracket. If the bracket is loose you will need to tighten the bracket to the photocell. If the bracket and the element are detached, a service technician can repair the cell. If the element and the bracket are detached and the element is damaged, the entire photocell will need to be replaced.

*The patch is made with blooping tape. The tape is silver on one side with an adhesive on the other. A triangular piece is cut out of the tape. The tape is placed on the splice with the widest portion of the triangle placed over the sound track. When this patch goes through the sound head no sound will be reproduced.





MAGNETIC SOUND

Our attention will now be directed toward problems encountered while dealing with magnetic sound. A magnetic sound track is an electronic signal on an oxide strip or on a magnetic tape. The number and location of the sound tracks varies depending on the size of the print. 35 mm uses four heads, while 70 mm has up to six tracks and heads.

If you are experiencing a garbled sound, it could be due to insufficient tension on the heads. In order to achieve the correct tension, the sound loop should be 21 to 23 frames from the aperture plate to the scanning point. If the loop is the wrong size, stop the projector and re-thread. It is best to use television leader which has the frame numbers printed on the leader in order to give you a quick and easy check.

Poor sound quality or a loss of high frequency is due to oxide buildup on the heads. The sound heads should be cleaned on a regular basis as specified in your operation's manual. If the sound heads are free from oxide and you still have poor sound quality, check the pole pieces on the heads. If the poles are worn, you will need a service check from a qualified technician.

If your speakers emit "rain" or hissing sounds, the sound track may have been partially erased or subjected to spurious magnetic sources, such as cue tape or magnetic particles.

Pops and thumping sounds indicate a magnetic contamination. This can be due to stray magnetic fields in the projector or on the platter. To restore the sound track to its original state, it must be de-magnetized through a process called de-gaussing.

Heat without a humidifier or extreme air-conditioning can cause random static charges. If the source of the static charge is the projector or platters, you will need to contact a technician to de-gauss the equipment. Again, the emphasis needs to be placed on housekeeping practices.

Sprocket damage is a problem with all prints but increasingly so for 70 mm prints. With the sound tracks located between the sprocket holes and the edge of the film, any sprocket damage will eliminate the sound track. The only way to rectify this problem once it has happened is to obtain a new print. If you are constantly having this type of problem, you may be charged by the distributor for new prints!

DIGITAL SOUND

Digital sound reduces noise, giving a clearer, more realistic sound. This is due to it's on/off operation, i.e., there is either a sound signal or no signal at all. Digital takes the original sound signal, converts the signal into a numeric code, stores the code, and then converts the code back into the original sound signal.

A major benefit of digital sound is its error correction ability which compensates for damage, within certain limits, due to scratches, dirt, and extended use. With the installation of digital sound, the quality of the presentation can be greatly enhanced. Before digital sound can realistically be installed on a wide-spread basis, several areas still require additional attention. One of the priorities exhibitors should make is to upgrade the sound systems they currently have to better reproduce the superior sound

already being generated. According to John F. Allen, theatre sound consultant and developer of the HPS-4000™ theatre sound system, many theatre sound systems should be totally replaced. He states, "the theatre industry has not done nearly enough to equip theatres with readily available components for high-quality sound."

Digital sound is currently not available in the standard sound track format. To date, only two theatrical presentations of Walt Disney's FANTASIA have been presented in digital, one in Los Angeles and one in Washington D.C. A separate compact disk player has to be used to reproduce the sound.

Since digital sound will help keep theatres light years ahead of other entertainment venues, research and development is actively in process. Eastman Kodak Company and Showscan are jointly developing digital sound application with six tracks on the film itself. When this technology is accomplished, digital sound systems will be viable and superior alternatives. Cost should be reasonable with the introduction of a single system. It is believed that the digital sound system will cost the same or less than equipment currently in use.

Acoustical and extraneous noise considerations will become even more crucial with the advent of digital sound. It would be wise to start making changes now. In doing so, it will improve the quality of sound now being heard, as well as prepare us for the future.

Where do you want your customers to be watching movies five years from now? To make sure they are still your customers, every effort should be made to achieve the finest quality sound possible in your complexes. To do this, you must continually monitor the sound from the customers point of view—inside the auditorium.

SPEAKERS

Sound tracks have different types of signals encoded to be "read" by the sound heads: monaural (mono) or stereophonic (stereo). A theatre speaker system contains three basic parts—the woofer, the tweeter, and the crossover. The woofer reproduces the bass sounds, the tweeter reproduces the high-frequency sounds, and the crossover routes the frequencies to the proper part of the speaker for reproduction. For mono presentations, loudspeakers are used. If more than one speaker is used, they all carry the same sound. For stereo sound, three separate speakers are used with each carrying a different sound.

Stereo offers a more true-to-life listening experience. If your theatre is equipped with stereo equipment, every effort should be made to offer the customer the best possible presentation by playing stereo prints in the stereo-equipped auditoriums.

Surround speakers are used to additionally enhance the stereo effect. Surround speakers are placed along the sides and in the back of the auditorium to enhance the realism of the surround channel in the film. Surround speakers, if properly placed, are designed to uniformly cover the entire seating area of the theatre. The system relies on a large number of broadly dispersed speakers, instead of only a few speakers with large output capabilities.

If you are running mono trailers on a stereo print, you need to make sure the amplifier change-over is made from mono to stereo at the correct time. Allowing the stereo print to run in mono not only negates the benefit of stereo, it will create improper volume levels in the auditorium.

If you are working on the sound system in-between shows, you should make sure you turn off the power amplifiers to prevent loud "thumps" heard through the auditorium speakers.

As a guide in handling sound problems, if the failure involves only one speaker, check that speaker for a malfunction. If all of the speakers are not producing sound, the location of the problem is most likely in the projection equipment or the film's sound track.

TROUBLESHOOTING YOUR SOUND SYSTEM

What You Hear	What To Check
No Sound	• Are the switches turned on? • Are the speakers plugged in? • Are there loose wires on the speakers? • Is a fuse or breaker blown on the main circuit breaker panel or on the projection control panel? • Is the sound track on the right side when threaded through the projector? • Is the exciter bulb burned out? (Optical) • Amplifier malfunction?
Humming	• Unshielded speaker wires?
Motorboating	• Is the sound beam properly aligned? (Optical)
Garbled	• Is the lever placed over the sound drum to hold the film in place? • Is the sound loop the correct size from the film gate to the scanning point? (For Optical 19–21 Frames) (For Magnetic 21–23 Frames)
Loss of High Frequency	• Roller tension spring adjustment. • Is there dirt or oil on the scanning optics? (Optical) • Is there an oxide buildup on the sound heads? (Magnetic) • Are the pole pieces worn on the sound heads? (Magnetic)
Hissing	• Is the sound track scratched? (Optical) • Has there been magnetic contamination? (Magnetic)
Crackling	• Is there corrosion at the sockets or at the terminal connections? • Is the diaphragm or the cone in the speaker cracked? • Is there a loose element in the photocell? (Optical)

AUDITORIUM BLEED-THROUGH

Up to this point we have focused on sounds we are trying to generate inside the auditorium for the listening pleasure of our customers. We will now focus our attention on the unexpected sounds that may interfere with the total enjoyment of the film: noise.

A theatre can gain quite a reputation, and not a good one, for auditorium bleed-through. In a recent television film review, the critic began his review with the problem of auditorium bleed-through at the theatre where he saw the picture. He complained he could hear the sound from the film playing in the auditorium adjacent to the theatre. This exemplifies how irritating this problem can be and how important it is to prevent it.

Insulation is the main deterrent of auditorium bleed-through. If you are experiencing this problem, check the walls and the ceiling to see how much and what kind of insulation you have. It is believed that with the proper insulation of the auditorium walls and ceiling, the quietest and the loudest pictures can be played in adjacent theatres without interfering with each other.

Additional soundproofing is accomplished with the installation of soundfold. Soundfold improves the acoustical qualities of the theatre by reducing reverberations. Soundfold or other acoustical materials on the walls are an important part of the theatre's design. Designed and used properly, the soundfold should allow the film to be heard with the quality of the original recorded version, assuming the configuration of the theatre is also designed with acoustical considerations in mind.

Care should be taken in mounting speakers. Consideration should be given to the placement of the speakers in relation to the auditorium doors. If the sound from one auditorium comes through as noise in the adjoining auditorium when the door is opened in one of the auditoriums, the location of the speakers should be changed. When hanging speakers, space should be left between the wall and the speaker cabinet. If the speaker is mounted flush with the wall, vibrations can be felt and heard in the adjacent auditorium.

A final consideration is the volume differential between two theatres. If insulation is at the proper level, this is less of a problem than if the insulation is sub-standard. The volume should be set at a level to maximize the viewing pleasure of the audience without disrupting the patrons in the other auditoriums.

Observe. Listen. Go into the theatre to experience the sound as your customers do. Then ask yourself: Would I want to pay for this entertainment?

MECHANICAL CONSIDERATIONS

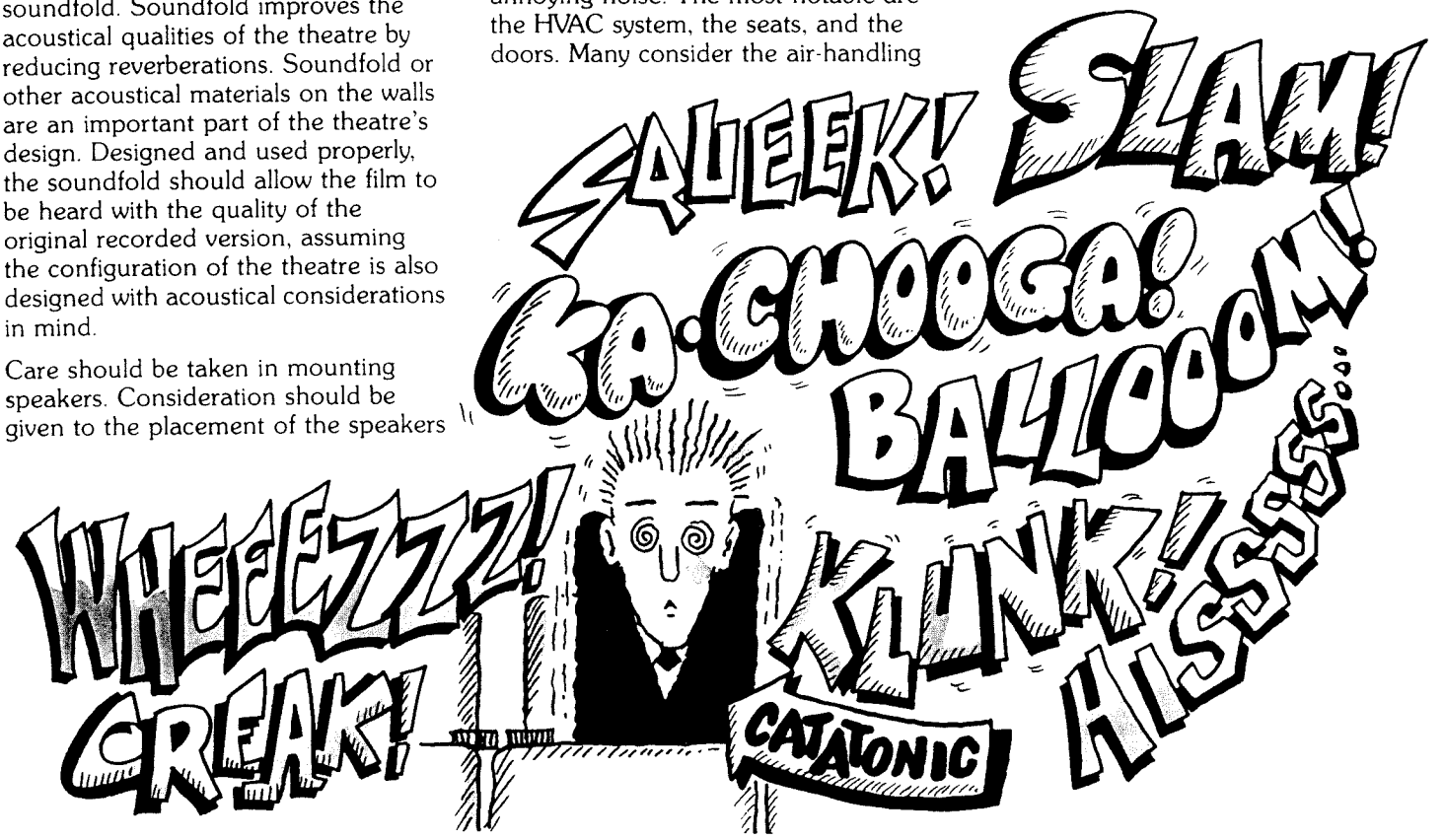
Noise can also be generated from sources other than those directly related with the presentation of the feature. These are mechanical noises.

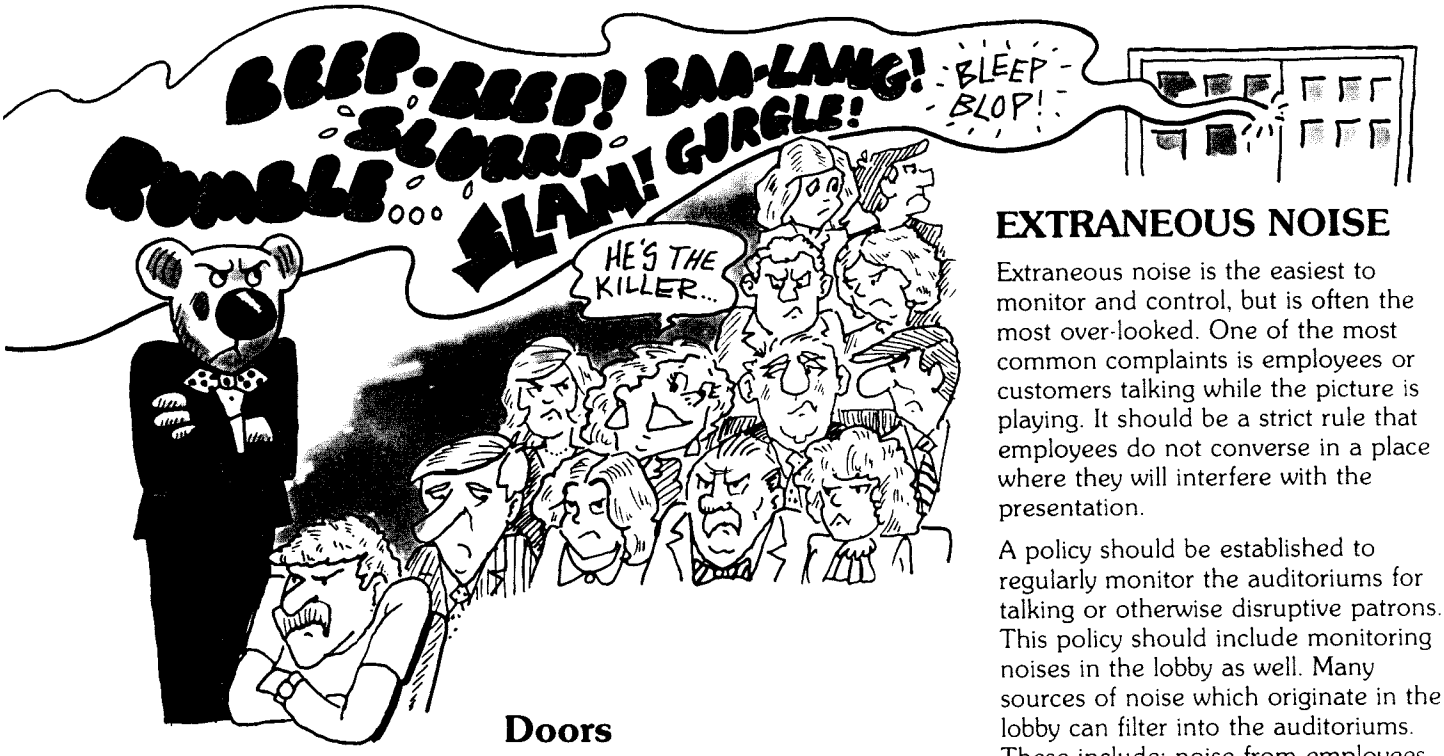
Many mechanical fixtures in your theatre can become sources of annoying noise. The most notable are the HVAC system, the seats, and the doors. Many consider the air-handling systems of the theatres the greatest offender inside the auditorium. The areas of the HVAC system that contribute to this noise are varied and often hard to correct after the construction of the theatre is complete. Some HVAC systems are extremely noisy on start-up. If your system is noisy on start-up you should turn the system on before opening so that it will not compete with the sound in the theatre. Turning the system on earlier will also allow the auditoriums to reach a comfortable temperature level before customers are seated.

Duct work is one of the main sources of mechanical problems. At the time a theatre is built, every effort should be made to check for squeaky joints. After the theatre is completed, many joints are inaccessible and will be impossible to repair. If you work in a theatre that has squeaky duct joints, you will need to caulk around the ducts where access permits.

Vibrations can also occur in the duct work from air-conditioning. Duct work should be insulated as much as possible with black foam rubber insulation. Vibration isolators should be put on the rooftop units if the problem still exists.

If you are in the auditorium and hear a rhythmic "clicking" from the HVAC system, check the fans for bent or broken blades. Broken fan blades will





need to be replaced and bent blades straightened. Noise can also be caused when a part is out of sync. An HVAC technician should be called to syncronize the system.

Seats

Seats can be the source of many annoying noises. Squeaking or banging seats can easily distract a patron whose attention is fixed on the screen. Seats can easily be fixed; however, it may be a time-consuming job if maintenance on them has been neglected.

Springs are a major source of seat noise. All of the moving parts, including the springs, should be periodically lubricated to prevent squeaking. Bumper pads attached to the end of the springs should be replaced when the seat "bangs" or flutters back and forth when a customer gets up.

Each seat is held together by several bolts. Some of these are designed to bolt the standard tightly against the floor. Others are made to hold the seat bucket to the standard. All of these bolts should be checked and tightened periodically. You should contact the manufacturer of your seats and ask for a detailed preventative maintenance schedule.

By following these maintenance steps, not only will you reduce disruptive seat noise, but you will also ensure your customer's safety.

Doors

Attention should be given to the auditorium door areas. Hinges should be checked and lubricated on a regular basis. Dirt and everyday use break down the oil in the hinges. When this happens, the oil must be replaced to avoid squeaking and irrepairable damage. If you lubricate the hinges and they continue to squeak, check to see if you can detect any movement of the door jambs themselves. It is possible the door jamb needs to be resecured to the frame. If the hinges still squeak they should be replaced.

Door closures are a source of squeaking and banging. Closures need lubricating on a regular basis. If your doors "bang" every time they are closed, the closure adjustment should be checked. The closure needs to be adjusted to a point where it does not take excessive effort to open the door. Conversely, you do not want the door to close so quickly that the only pressure exerted to stop its closing is when it hits the door frame. The adjustments are easily made at the top of the closure with a tool designed specifically for this purpose. Some also have an allen screw adjustment.

If the closure is adjusted properly and you continue to get a banging sound as the doors shut, look at the door frame. On most frames there are small rubber or felt pads. These act as an insulator between the door and the metal frame. If the pads are missing, you can get replacements through the door's manufacturer, a good locksmith, or in some cases a full-line hardware store.

EXTRANEOUS NOISE

Extraneous noise is the easiest to monitor and control, but is often the most over-looked. One of the most common complaints is employees or customers talking while the picture is playing. It should be a strict rule that employees do not converse in a place where they will interfere with the presentation.

A policy should be established to regularly monitor the auditoriums for talking or otherwise disruptive patrons. This policy should include monitoring noises in the lobby as well. Many sources of noise which originate in the lobby can filter into the auditoriums. These include: noise from employees, hold-out lines, and arcade games. Employees doing their jobs may not realize their close proximity to the auditorium doors or may lack the awareness of how their voices carry into the theatre.

Arcade games should be placed as far away from the auditorium doors as possible. It is not only the volume level of the actual games (which should be set as low as possible), but also the noise generated from patrons achieving high scores or exceptionally low scores which can disrupt the program going on inside the theatre.

If you are lucky enough to have four popular or blockbuster movies playing in your 4-plex, a pleasant noise will be generated in your lobby—noise of hold-out lines. As pleasant as they may be for us as exhibitors, if they are audible inside the auditorium, they will not be pleasant for those trying to watch a movie. Care should be taken on the location of these hold-out lines, to keep lines away from entrance and exit doors. This will reduce the chances of people knocking on the exit doors while waiting in line.

Noise generated from the street is also a problem. This noise usually enters through the exit doors. Cars, construction, and planes make up noises leaking in from outside. To reduce this type of noise, weather stripping should be installed on the edges and bottom of the doors or door frames. Not only will this reduce outside noise, it can also eliminate visually disturbing extraneous light.

LANGUAGE

Amplifier: An electronic device to increase the intensity of audio signals and provide sufficient power to drive speakers.

Bloop: A small patch placed over a splice on the sound track to cover the noise of the splice.

Buzz Track: A sound test film designed to determine the proper lateral placement of the scanning beam slit in relation to the sound track during film travel. Available through SMPTE.

Crossover: An electronic network that separates the amplifier audio output signal into the proper frequency bands to match the speakers, such as the woofer and the tweeter.

Digital Sound: A system that uses a laser beam to scan the recorded information.

Dolby System: Trade name for an audio noise reduction system.

Dubbing: Recording lip-synchronized dialogue against existing film picture.

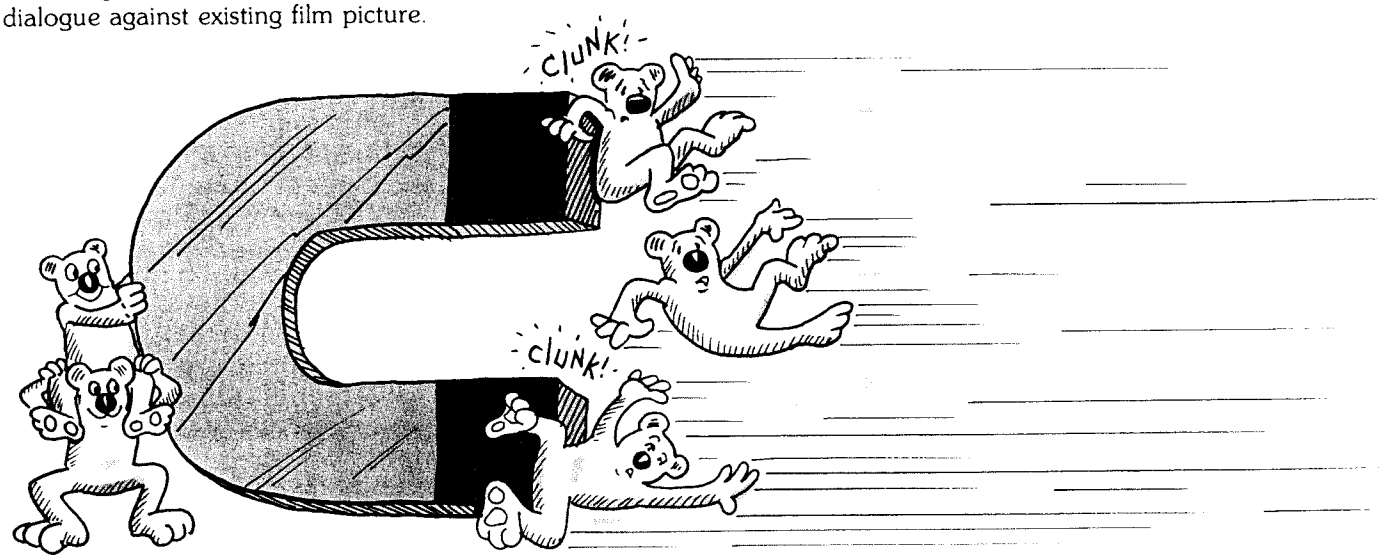
Fader: A device used to raise or lower the sound volume.

Magnetic Sound: Sound derived from an electronic audio signal.

Magnetic Track: The linear path of a magnetically recorded audio signal on a magnetic film strip or tape.

Mag-Optical Print: A print containing both optical and magnetic sound tracks.

Motorboating: The sound heard when the film becomes misaligned over the sound drum and causes the sound scanning beam to "read" the film perforations instead of the sound track.



Optical Sound: A system in which the sound track is scanned by a horizontal slit beam of light that modulates a photoelectric cell.

Optical Track: A sound track in which the record takes the form of variations in the width of the track to be scanned.

Penthouse: The popular name given to the magnetic sound head.

Perspecta Sound: A system of recording that produces a form of stereophonic reproduction by using a single optical sound track carrying three subaudible control tones that can shift the one track to the left, center, or right speakers with the appropriate reproducing equipment.

Photocell: An electronic device that, when modulated by visable light, produces electric impulses that can be amplified to drive audio speakers.

Preamp: The electronic equipment used for boosting very weak signals to useable amplifier levels.

Scanning Beam: A collimated narrow slit of light that scans the optical sound track.

Sound Drum: A flat roller in the sound head designed to keep the film precisely positioned at the point where the scanning beam slit scans the sound track.

Sound Gate: The gate is used in an optical sound head, instead of a sound drum, to keep the scanning beam and the sound track precisely aligned during sound reproduction.

Sound Head: The optical sound reproducer.

Sound Sprocket: Any sprocket that pulls the film past the sound scanning beam slit.

Sound Track: The track running lengthwise on the film adjacent to the edge of the picture frame and inside the perforations. There are two types of sound tracks: Optical, using a beam of light on the film which widens and narrows to indicate different sounds. And magnetic, which works electronically.

Stereophonic: Sound recording and reproduction using multiple microphones and speakers, designed to simulate live dimensional sound.

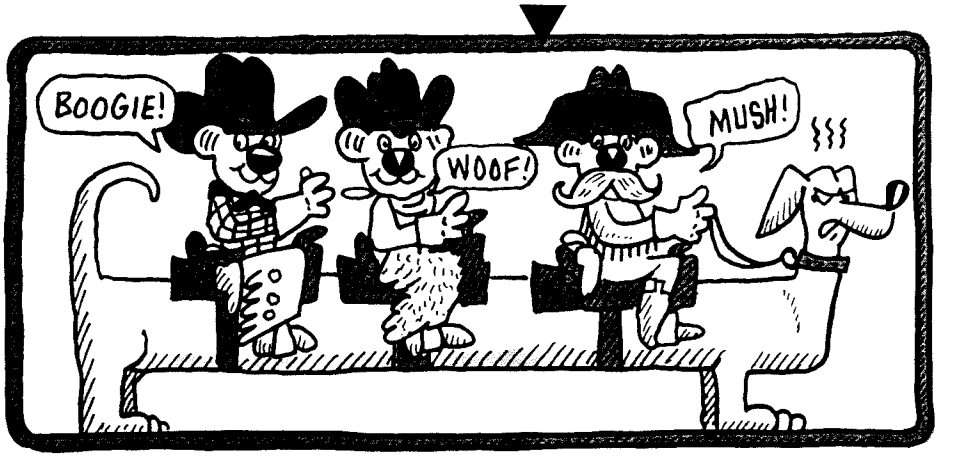
Surround Channel: The specific sound channel in a sound reproduction system directing audio signals to speakers placed at the sides and at the rear of the theatre to provide the added realism of surrounding area sounds.

Surround Speakers: The speakers placed at the sides and rear of a theatre to increase the realism of a stereophonic presentation.

Synchronization: A picture record and a sound record are said to be "in sync" when the action on the screen and the sound coincide precisely.

Tweeter: A device used to reproduce the high-frequency sounds.

Woofer: A speaker designed to reproduce the low frequencies of the audio sound.



FILM PIRACY

By William Nix,
Vice President and Deputy General Attorney of the Motion Picture Association of America, and Director of the MPAA's Worldwide Anti-Piracy Program

Suppose that during the engagement of a first-run release, you came in one day and noticed that the print had been left in an unlocked area—and a week later that movie was available as an "underground" video cassette?

Such a scenario is not uncommon as a prelude to piracy involving motion pictures unavailable in video cassette form at the time of the thefts.

Two days after the U.S. theatrical opening of RAMBO: FIRST BLOOD PART II, poorly reproduced video cassette versions of the film were easily obtained in the Far and Middle East. Neither the source nor exporter of the film has been traced.

In Nashville, prints of GOONIES and LIFEFORCE stolen from different theatres on the same day are still missing.

The Motion Picture Association of America (MPAA) believes that the video cassettes that form the basis for most domestic and international piracy are copied from prints stolen before or during the first two weeks of a film's release. Some come from the original prints in studio processing labs; many are "borrowed" either from a delivery truck or from projection booths.

You Can Help

There are ways to limit video piracy—means by which theatre employees themselves can help.

In 1975, the MPAA founded a Film Security Office (FSO) to combat print and video piracy. Using former special agents of the FBI and working with local police and FBI officals, the office has helped convict more than 350 pirates since its inception. In the first half of 1985 alone, there were 20 convictions. There were also seizures of more than 25,000 pirated video cassettes and 210 film prints. Notwithstanding these successes, the problem still exists.

According to FSO Director Richard Bloeser, one of the biggest continuing problems is effective preventive security at studios and in theatre projection booths. "We have determined through experience, unfortunately, that most piracy of prints or video cassettes is caused by dishonest employees within the industry. It could be someone from the studios, the film laboratories, video laboratories, film-transport companies, film exchanges or a theatre. In security, the bottom line is always the integrity of the employees."

Piracy is Big Business

With nearly 20 million VCRs now in U.S. homes, video piracy is big business. Many of the major studios are implementing new security measures to meet the increasing threat. Two of the most successful at this task have been Paramount Pictures and Warner Bros. Security programs at these studios include such precautionary measures as sealed film cans, print coding, in-house couriers to deliver screening prints, and computerized tracking of every stop a film makes on its way to the theatres.

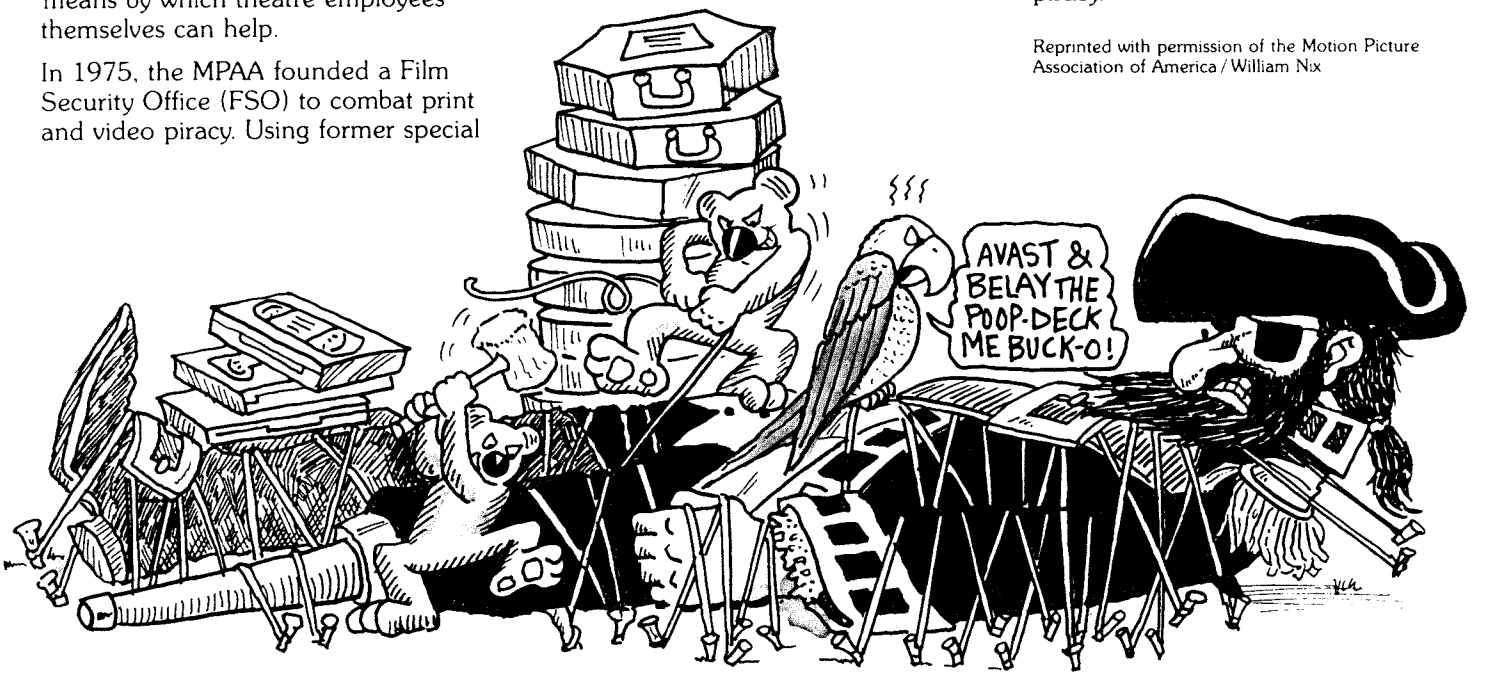
One illustration of the effectiveness of such security is that for an unprecedented seventeen weeks after the film's release, the FSO had not been able to purchase illegal copies of INDIANA JONES AND THE TEMPLE OF DOOM (which Paramount had coded) anywhere in the U.S. and Canada—despite numerous attempts to buy it through their usual pirate sources. More recently, Warner coded GOONIES. Ten weeks after the release date, it had still not been reported pirated. Other motion picture companies are now instituting similar preventive security as standard industry practices.

Projectionists can support the industry's anti-piracy programs with their own security measures. Two specific suggestions are:

1. Keep film prints in a safe or secure storage area; and
2. Do not leave unguarded prints in lobbies for pick up and delivery.

Finally, if you know of a crime committed, of a print suspiciously lost or mislaid, call either the Film Security Office in Sherman Oaks, California, at (818)995-6600, or in New York at (212)840-6161. To further such cooperation, the MPAA offers rewards of up to $5,000 for information leading to the capture and conviction of pirates.

With our united efforts, we can have a measurable impact in the war on piracy.



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