

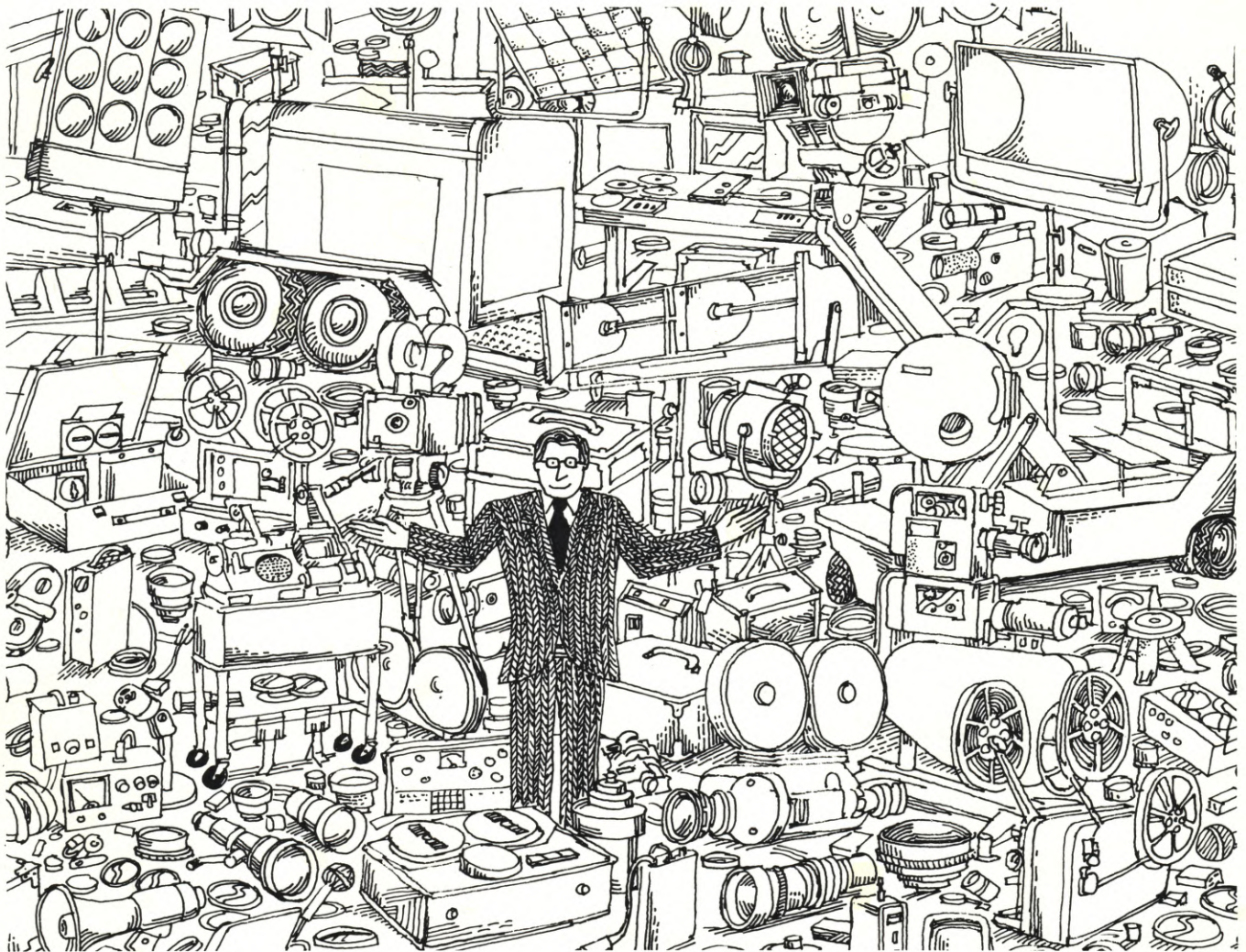
American Cinematographer

International Journal of Motion Picture Photography and Production Techniques

MAY 1974/\$1.00

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Annual
Academy
Awards
Presentation**





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It seems that the more customers who get comfortable with

the way I do business, the more uncomfortable my competitors get. So if you're a legitimate competitor, I'll be happy to send you a Sy Cane dart board (at cost, of course). It'll help you get rid of some tension.



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American Cinematographer

International Journal of Motion Picture Photography and Production Techniques

MAY, 1974

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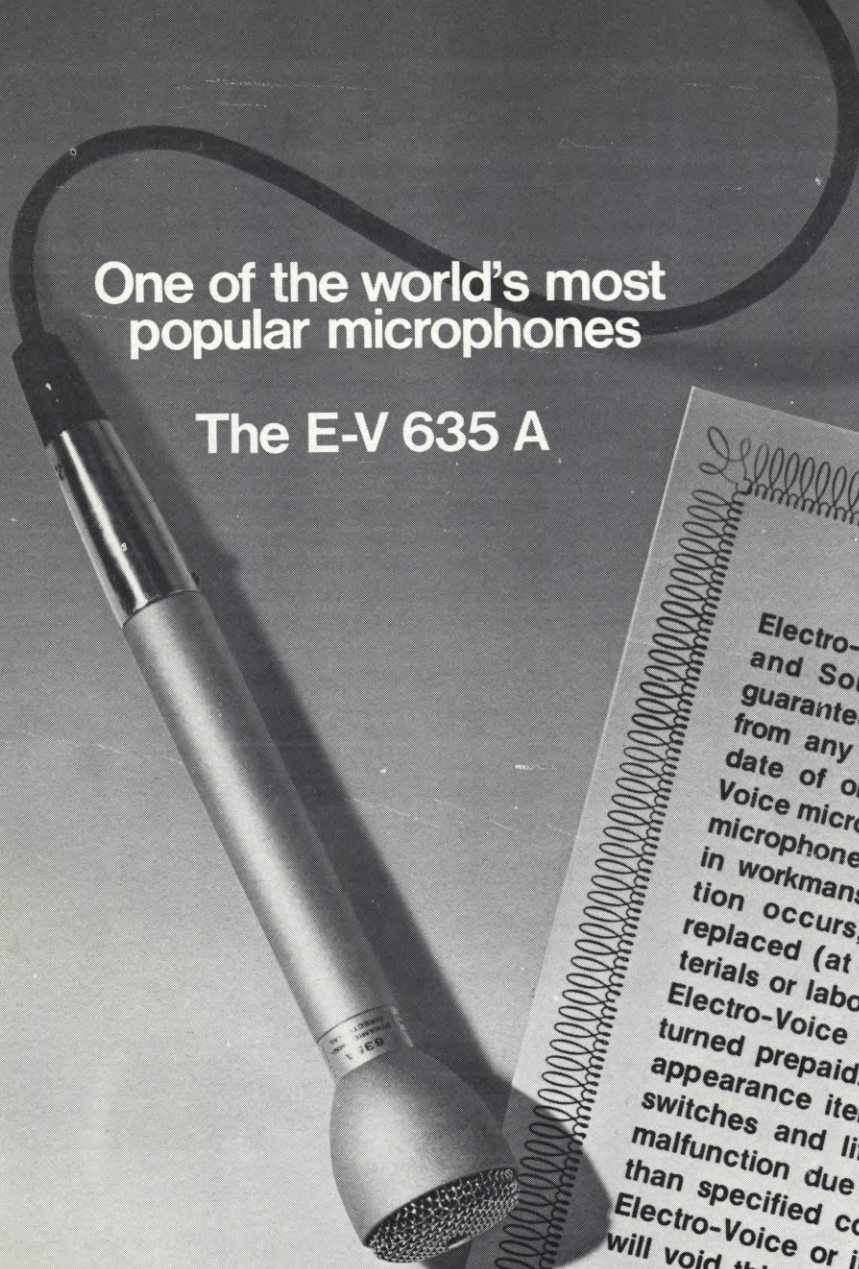
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ON THE COVER: A highly imaginative infra-red rendition of the coveted "OSCAR" Statuette, presented at the Annual Academy Awards Presentation to artists and technicians of the motion picture industry who have achieved the ultimate in their respective crafts. Cover design and photograph by DAN PERRI.

The American Society of Cinematographers is not a labor union nor a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as Directors of Photography and have demonstrated outstanding ability. Not all cinematographers can place the initial A.S.C. after their names. A.S.C. membership has become one of the highest honors that can be bestowed upon a professional cinematographer, a mark of prestige and distinction.

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Colorado Outward Bound offers one of the world's most rugged courses in wilderness experience and mountain climbing. Its basic philosophy: to take a person beyond his imagined physical and emotional limits.

With that in mind, a group of adventurous filmmakers set out to document the physical and emotional development in a diverse group of young people, from their initial training at Outward Bound's Red Cloud base camp in Colorado to the summit of 18,700 foot Santa Rosa in Peru. The result: Journey to the Outer Limits—an hour-long special produced by the National Geographic Society in association with Wolper Productions, aired on ABC.

If the film's subjects tested their outer limits, no less can be said of the production crew. Over 70,000 feet of color film raced rock-steady, through the gates of their Eclair cameras without a single 'jam.' Shot from the most precarious angles, where the only 'foot-hold' was a single rope, anchored to sheer rock above. And the only link between cameraman and assistant, a rope that bounced and bumped

from outcropping to outcropping.

Swinging to and fro in the thin mountain air, below difficult overhangs; treading gingerly across frail rope bridges; and clambering from piton to piton, cameramen Mike Hoover, Charles Groesbeck, Tom Frost and Rick Robertson literally 'risked it all' to provide Journey's dramatic on-the-mountain 'takes.' Rapelling and traversing to get 'camera's-eye' views whose authenticity can best be appreciated by experienced climbers, the team credited ACL's light weight, natural balance and steady, one-hand operation as an important factor in their success.

High marks were also given ACL's large, bright viewfinder, quick-change magazines and "human-engineered" design by Associate Producer Peter Brown who wrapped it all up by saying "When you're fighting the mountains, the elements and the unforeseen—holding your breath as much from how you're filming as what you're filming—the last thing you want to think about is camera problems!" Which is a good thing to think about when you're buying a camera, as well.

For more information about Eclair cameras, and how they can expand the outer limits of your creativity, please write Mr. Eric Falkenberg, Eclair Corporation of America, 62 West 45th Street, New York 10036 (212) 869-0490, 7262 Melrose Avenue, Los Angeles, California 90046 (213) 933-7182 Telex: 14-7208

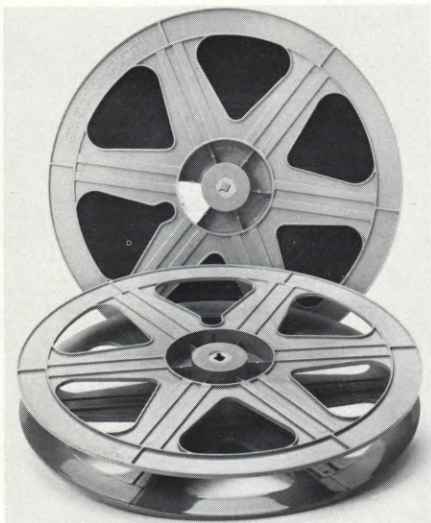
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WHAT'S NEW

IN PRODUCTS, SERVICES AND LITERATURE



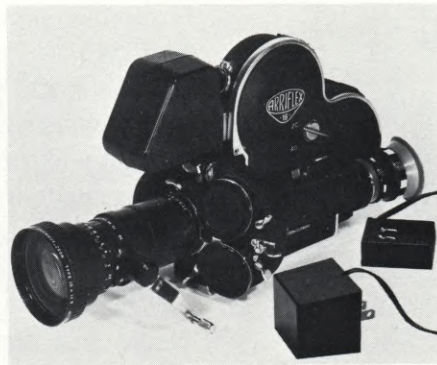
NEW PLIO-MAGIC 35mm 2000' SHIPPING REELS SAVE 7½ POUNDS IN WEIGHT

Plastic Reel Corporation of America has just introduced a new 35mm 2000 foot shipping reel designed to drastically reduce freight costs for the feature film industry. The new reel, made of Plio-Magic, is as tough as steel but 60% lighter in weight. Where a 2000 foot steel reel weighs 2½ pounds, the Plio-Magic reel weighs only one pound. This translates to a 7½ pound saving in freight costs every time a feature film is shipped.

According to Plastic Reel's computations, a 5-reel feature film shipped coast-to-coast on steel reels by air express would cost \$33.19. The same film shipped on the new Plio-Magic reels would cost \$29.98. This represents a savings of 10% or 80¢ per reel. Multiplied by the volume of feature film shipments made each year, the light-weight reel offers distributors an important cost-cutting economy.

The reels incorporate all the advantages for which the exclusive Plio-Magic name is known. They are practically indestructible and highly resilient which makes them resistant to bending, breaking, and binding, warping and chipping. As a result, film is protected against the creasing, tears and cuts experienced with metal.

The new Plio-Magic 35mm, 2000' Shipping Reels are priced to pay for themselves in just three to five shipments, depending on distance. Full information is available directly from Plastic Reel Corporation of America, 640 South Commercial Avenue, Carlstadt, N.J. 07072.



ARRIFLEX ANNOUNCES NEW MINI-CHARGER

The Arriflex Company of America has announced a new Mini-Charger as part of their recently introduced Miniature Duro-Pack Nickel Cadmium Battery System for Arriflex 16S cameras. The new charger features small size, light weight and economy; it measures only 2" x 2" x 2-5/8" and weighs barely 9 ounces. The new charger is shown in the foreground of the illustration.

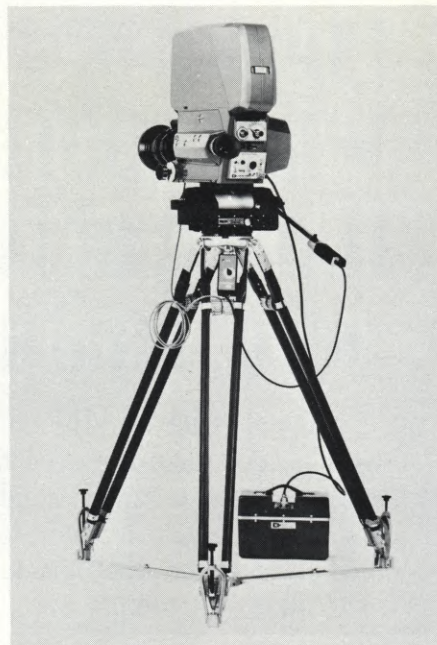
The Miniature Duro-Pack Battery itself combines with the 16S in a way that makes the camera and the battery into a single assembly, as illustrated. It eliminates the usual, separate power cable, and makes the Arriflex 16S handier than ever.

The new charger adds to the versatility of the Miniature Duro-Pack Battery System. There are now two chargers from which to choose: the new Mini-Charger with its economy and essential simplicity, and the original deluxe Auto-Charger. The Mini-Charger takes a single battery and timing is manual. The Auto-Charger takes up to four batteries simultaneously and timing is automatic. Complete literature on Chargers and Miniature Duro-Pack Batteries is available from Arriflex Company of America, P.O. Box 1050, Woodside, New York 11377. The new Mini-Charger is priced at \$25.00 list.

NEW 150XR FLUID HEAD AVAILABLE FROM CINEMA PRODUCTS

Cinema Products Corporation is pleased to announce the availability of the new ultra-smooth *150XR Fluid Head*.

Designed and manufactured by world famous O'Connor Engineering Labora-



tories for exclusive world-wide distribution by Cinema Products Corp., the new 150XR Fluid Head accommodates studio-type motion picture cameras and television cameras weighing up to 150 lbs. Ultimate smoothness in both panning and tilting is achieved by the use of Timken bearings plus O'Connor's exclusive fluid action, acknowledged to be the most dependable ever developed.

Made of magnesium and weighing only 25 lbs., the new 150XR Fluid Head features completely independently variable pan drag adjustment and tilt drag adjustment, with separate dial indicators showing the amount of drag on each movement. A 5" X 6" removable camera mounting plate, which can be permanently mounted to the camera, permits the camera to be snapped instantly in place on the 150XR Fluid Head and adjusted forward or backward to accommodate different lenses and film weights.

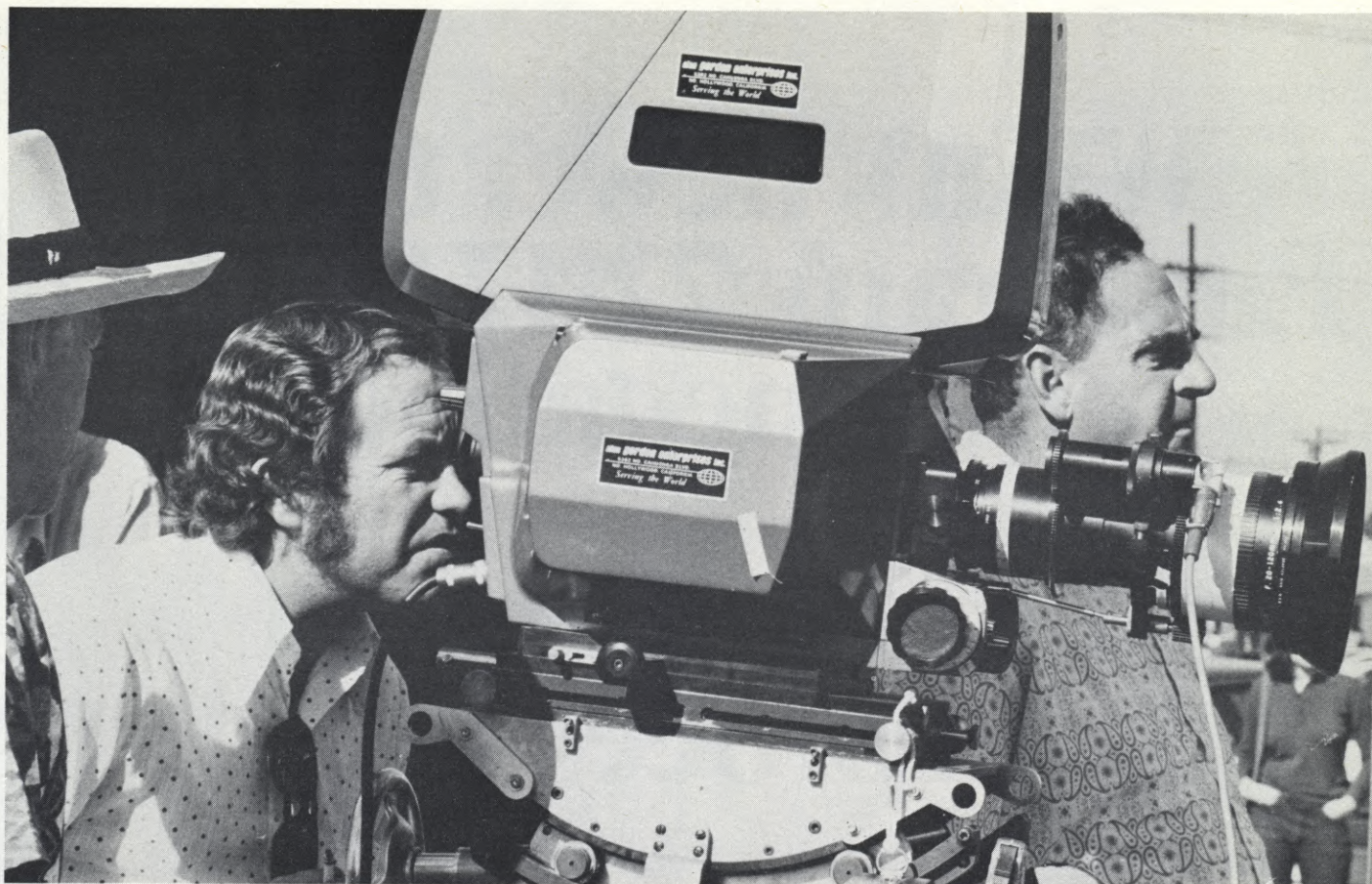
The 150XR Fluid Head is supplied with a standard torsion bar which will completely counter-balance or neutralize the weight of a 100 lb. studio-type camera. An optional torsion bar is available on special order for cameras weighing up to 150 lbs.

The 150XR Fluid Head (with *standard* torsion bar) is priced at \$2400.00.

The 150XR Fluid Head (with *optional heavy-duty* torsion bar) is priced at \$2500.00.

For further information, please write to Cinema Products Corporation, 2037 Granville Avenue, Los Angeles, California 90025.

Continued on Page 574



XR-35 in use on the AIP feature, "Act of Vengeance." Photo courtesy AIP.

PRO-DUCTION is Alan Gordon Enterprises

PRO is a three-letter word meaning EXPERT. For this reason, we at Alan Gordon Enterprises have worked diligently to become the best-known three-letter word in Hollywood when it comes to offering you rental motion picture equipment. AGE equipment is up-to-date, dependable and meticulously prepared to meet your specific needs while still staying within your budget allocation.

SERVICE is **not** a three-letter word, but to us it is three-sided: pre-production, production and post-production. May we suggest the ultimate three-letter word for you is AGE — Alan Gordon Enterprises — where you can rent with the confidence that you're getting the best equipment backed by the best service in the industry.

AGE Inc. is the one complete source for all your motion picture equipment rental needs, including complete production packages, Dynalens, BNCR, Arri 35BL and XR-35 cameras, hard-front Arris, wireless microphones, Nagra recorders . . . everything and anything you need for feature film production.

Some recent productions which used AGE Inc. equipment include:
"Sugar Hill" — American International Pictures, Robert Jessup, director of photography.

"A Message to My Daughter" — Metromedia Producers Corp., Richard Glouner, director of photography.

"Foxy Brown" — American International Pictures, Brick Marquard, ASC, director of photography.

"It's Good to Be Alive" — Metromedia Producers Corp., Ted Voightlander, ASC, director of photography.

"Fer De Lance" — Leslie Stephens Productions, John M. Stephens, director of photography.

"Get Fisk" — Centaur Productions, Timothy Gelfas, director of photography.

"Melvin Purvis, G-Man" — American International Pictures, Jacques Marquette, ASC, director of photography.

"Punch and Jody" — Metromedia Producers Corp., Robert C. Moreno, ASC, director of photography.

"In Tandem" — D'Antoni and Weitz Productions, Dennis Dalzell, director of photography.

"Act of Vengeance" — American International Pictures, Brick Marquard, ASC, director of photography.

"Aces Up" — Metromedio Producers Corp., Brick Marquard, ASC, director of photography.

"Four Deuces" — Ameri-Euro Productions, Steven Katz, director of photography.

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\$240 will pay for a year's foster care for a Vietnamese baby.

And \$500 will find a home in the U.S. for a rejected Korean child.

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Among the eleven grades of diffusion included in the Rosco Cinegel Light Control Media, three are *not* used directly on lights. In all three cases, the materials are only moderately heat-resistant and must be used a short distance from artificial light sources.

These Diffusion Media are often applied to permit the use of multiple sources for lighting an area without producing strong multiple shadows. Refined control, with any one of these, of the "shadow-casting" properties of the source or sources used, can be had by varying the distance between the diffusion and the light source.

The densest of the three is ROLUX. This stiff, parchment-like material is the most dense of all the Cinegel Diffusion Media. It makes the illumination from an intense point-source look like "shadowless" light. It is used in applications ranging from tents for the photography of specular items (jewelry, appliances and the like) to covering the windows on natural locations so that the sun produces only a soft, diffuse glow.

The two other degrees of diffusion are produced by SOFT FROST and 1/2 DENSITY SOFT FROST. Both of these are stretchable. They are often mounted on frames, or directly applied to sets, doorways or other openings. Side or top lighting is then put through them to produce soft overall fill.

SOFT FROST is about 1/2 to 1/3 the density of ROLUX. The 1/2 DENSITY SOFT FROST is about half of that. Together these three diffusion media represent a graded solution to a particular group of light control problems faced by cameramen everywhere.

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QUESTIONS & ANSWERS

Conducted by CHARLES G. CLARKE, ASC.
and WALTER STRENGE, ASC.

(Inquiries are invited relating to cinematographic problems. Address: Q. & A., AMERICAN CINEMATOGRAPHER, P.O. Box 2230, Hollywood, Calif. 90028.)



Q We are producers of advertising and instructional motion pictures and presently are using 35mm film from which we ultimately obtain optically-reduced 16mm copies. As a general rule, these are printed on positive stock which already carries a magnetic sound stripe. We would like to change our procedure and shoot directly on 16mm, but the laboratory that handles the processing and printing of our films has advised against it, for the following reasons. 1. They claim they cannot properly contact-print 16mm negative to positive stock having a sound stripe as this would cause the magnetic stripe to be inverted and the print, therefore, will not pass correctly over the playback head of our projectors. 2. The laboratory further claims that it would not be advisable to reverse the negative and print through the base of the film (to enable us to retain use of the magnetic sound stripe) as they believe this would cause serious losses in light transmission and would vitally affect the quality of the release print.

We agree with the first claim but doubt very much that the second is correct. However, in view of the fact we are not technical people, we are not sure of our ground and therefore would like your professional opinion on this matter. If the laboratory is correct in its claims, will you please let us know what procedure would be best for us to follow to enable us to print 16mm negative directly to 16mm positive film pre-stripped with magnetic track? Would special printing equipment be necessary for this? The laboratory serving us has a Bell & Howell 16mm continuous printer. The use of film with magnetic sound is vital to our business as our mobile units operate in areas where the problem of multiple language exists, and for this reason we feel very strongly about retaining this in our films.

Can you tell us also if there is available a film stock having magnetic stripe laid on the emulsion side instead of on the base side of the film?

A You have pretty much answered all your own questions. If you intend to shoot your productions on 16mm film, we suggest you use reversal

film—either color or black and white—and have a dupe negative made from same which can then be printed on the stock you are presently using, which is striped on the base side.

Q Is a color temperature meter essential to good cinematography for 16mm industrial productions?

A In black and white photography, three measurements are necessary to assure a good negative: 1. illumination, 2. lighting contrast, and 3. brightness ratio. In color photography one more measurement should be taken—that of color temperature in Kelvin degrees.

It is noted from your question that you are shooting 16mm industrial productions and it is presumed that you make prints from the original. Small differences in color temperature can be taken care of in the processing laboratory. Big differences, however, should be corrected before you start to shoot. A good color temperature meter is just as essential as an exposure meter when shooting color films.

Q The most difficult problem I have when shooting fast action subjects is sighting through a conventional viewfinder, such as those on small, portable cameras. It is necessary for me to wear glasses at all times and this makes it difficult for me to get close enough to the finder eyepiece to obtain a clear view of the image or scene. The result is my shots are jerky, off-center, and I am invariably unable to locate a fast moving subject in the finder in time to photograph it. (My most recent experience: filming the Navy's Blue Angel aerial team demonstrating its flying skill.)

What type finders are used by professional cinematographers to photograph fast action, especially where camera must be panned with the action?

A Bell & Howell Company makes a tracking finder. However, some modification probably would be necessary to adapt it to your camera.



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December 31, 1973

Craige Munsch
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Hao Elio
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Thank you!

We're proud of winning an Academy Citation for our Cinegel light control media. We just want to acknowledge that we didn't do it alone. We had a lot of help from a great many people.

The Cinegel range developed from conversations with cine-

matographers about their lighting problems. We see this process as a continuing one. Keep bringing us your problems. We'll keep working on solutions. And we'll help each other do a better job.

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Before our "two-way" development, whenever one end of the frequency range was expanded the other end lost. And there was often trouble in-between.

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There are other AKG "two-way" mikes, plus boom mounts, stands and adaptors. And a full line of other AKG mikes including dynamic and condenser shotguns. And an entire range of accessories. AKG mikes make every word uttered on your set easily sound even truer to life.

Speak to your professional equipment supplier. Or write to us for complete details.

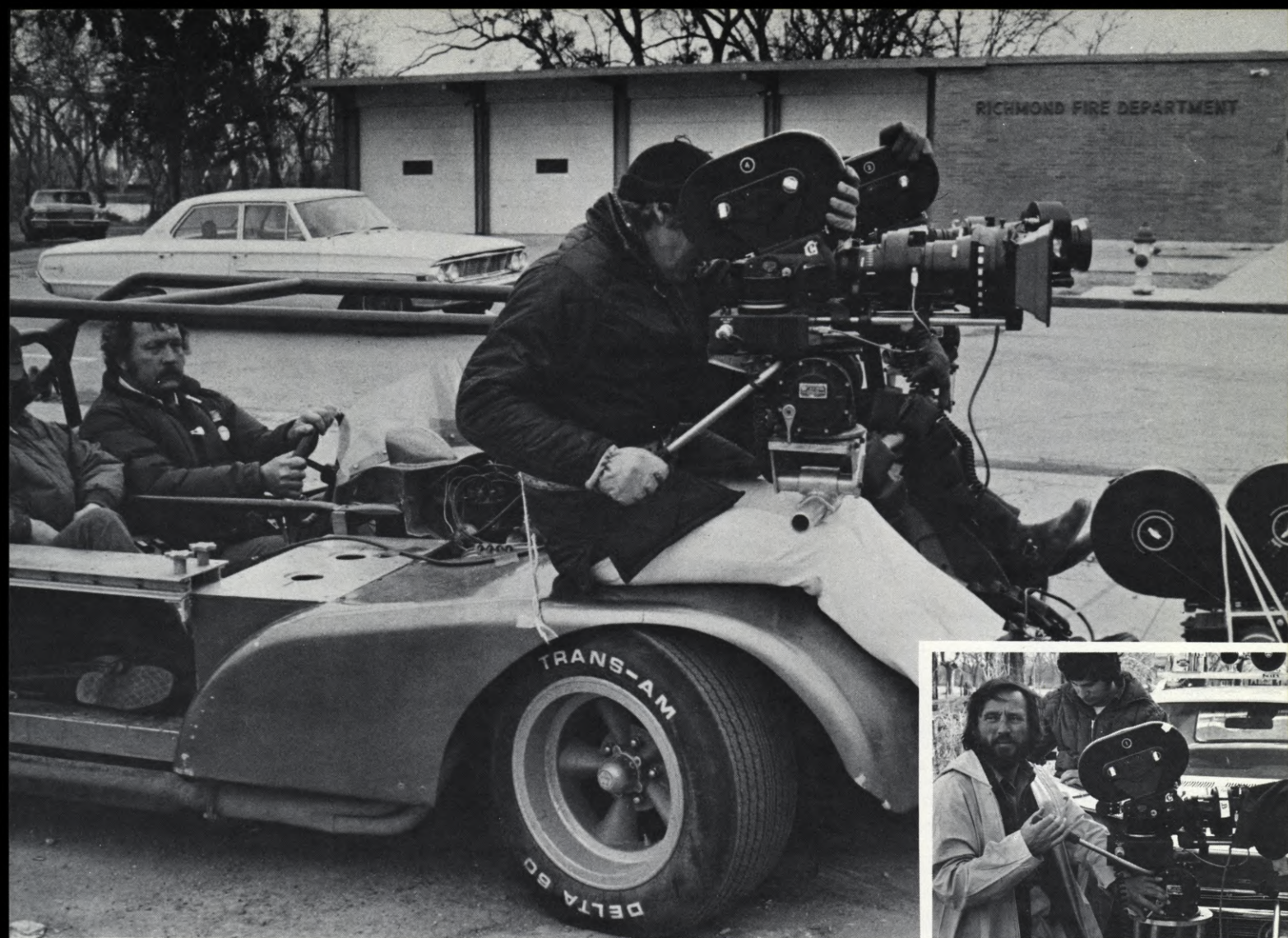
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**We patented a way to make your
cinema sound a little more verité.**





Operator Jack Richards (forefront) and Director of Photography, Vilmos Zsigmond behind the two fender-mounted Arri 35 2C's, prepare for a wild-run sequence in Universal's "The Sugarland Express."



Zsigmond checks out the Arri 35 2C mounted on platform extending from front of police car.

"lights...camera...*action!*"

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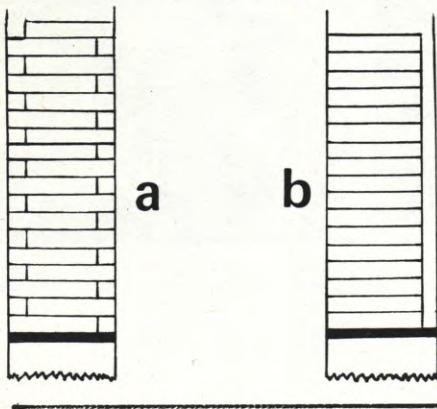
By ANTON WILSON

FILM: CORES AND SPOOLS

Almost all motion picture camera stocks are available on both cores and spools. In the 35mm format, film is almost always ordered on cores, as spools are usually available only in 100' lengths. Raw stock in the 16mm format, on the other hand, comes in a wide variety of core and spool sizes.

There are several points to consider

FIGURE 1—Film at the factory is wound with a reciprocating motion so adjacent layers are butted against opposite walls of the spool (a). However, film wound on the take-up spool in a camera usually winds up as in (b) with the film all against one side of the spool.



before deciding on a core or spool. Most obvious is the fact that certain magazines will only accept core loads. All Arriflex 200' and 400' magazines as well as Bolex Rex V 400' magazines are "displacement" magazines (or single-compartment magazines). These magazines are more compact than the more conventional Mitchell-type magazine (double-compartment).

The displacement magazine achieves its smaller size by utilizing the center space of the magazine twice. That is, when the roll is started, the center portion of the magazine is being occupied by the large feed roll of film. As the film is used, the feed roll gets smaller and the take-up roll gets larger. By the end of the roll the center space is now occupied by the take-up roll. Thus, the distance between spindles in a displacement magazine can be almost half that of a double-compartment magazine. It should be obvious that one drawback of this system is that it is impossible to employ daylight spools; there just isn't any room. Thus, core loads must be employed with all Arriflex magazines.

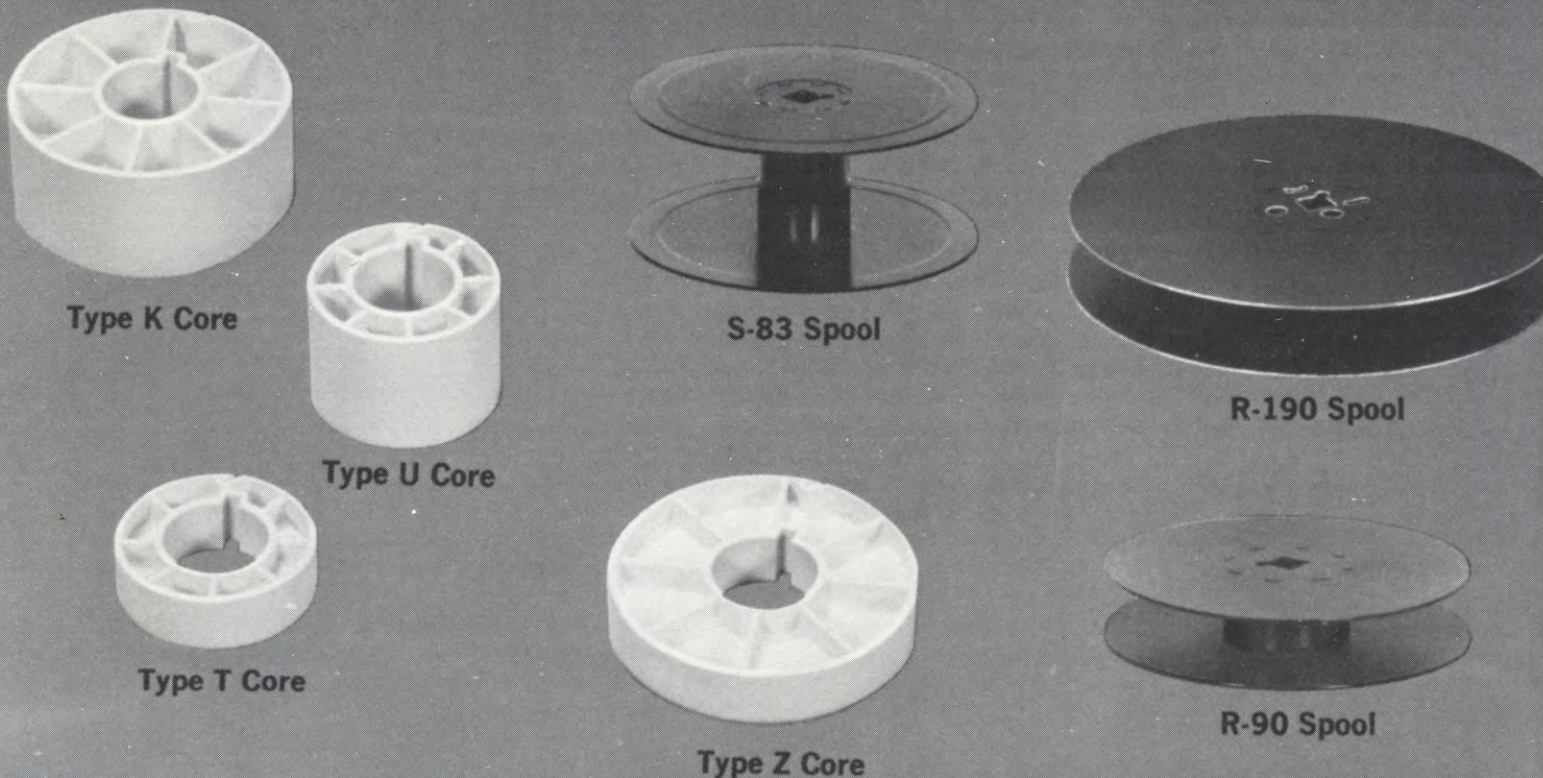
There is one exception to this rule. Daylight spools of half the rated maga-

zine capacity may be used in most displacement magazines. Thus 200' spools can be used in 400' mags and 100' spools will fit the 200' magazines.

Double-compartment magazines, such as the Mitchell type or the newer co-axial styles, will usually accept either cores or daylight spools. Daylight spools have obvious advantages, most notably the ability to field-load without a changing bag. There are several precautions to consider however. Spools should be loaded under very subdued light. This is even more important when *unloading* spools. The film is wound onto the spools at the factory with a reciprocating motion (see FIGURE 1a), adjacent layers being butted against opposite flanges. This forms a fairly light-tight seal that prevents ambient light from seeping past the first layers of film. FIGURE 1b illustrates that this is not the case when the film is wound in the take-up spool in the camera. The film usually winds up against one flange, making the roll more susceptible to edge-fogging. For this reason, more care must be taken when unloading a spool. The camera should be unloaded in the darkest possible location and *never* out-

Continued on Page 604

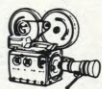
FIGURE 2—Some of the more popular core and spool types used by Kodak



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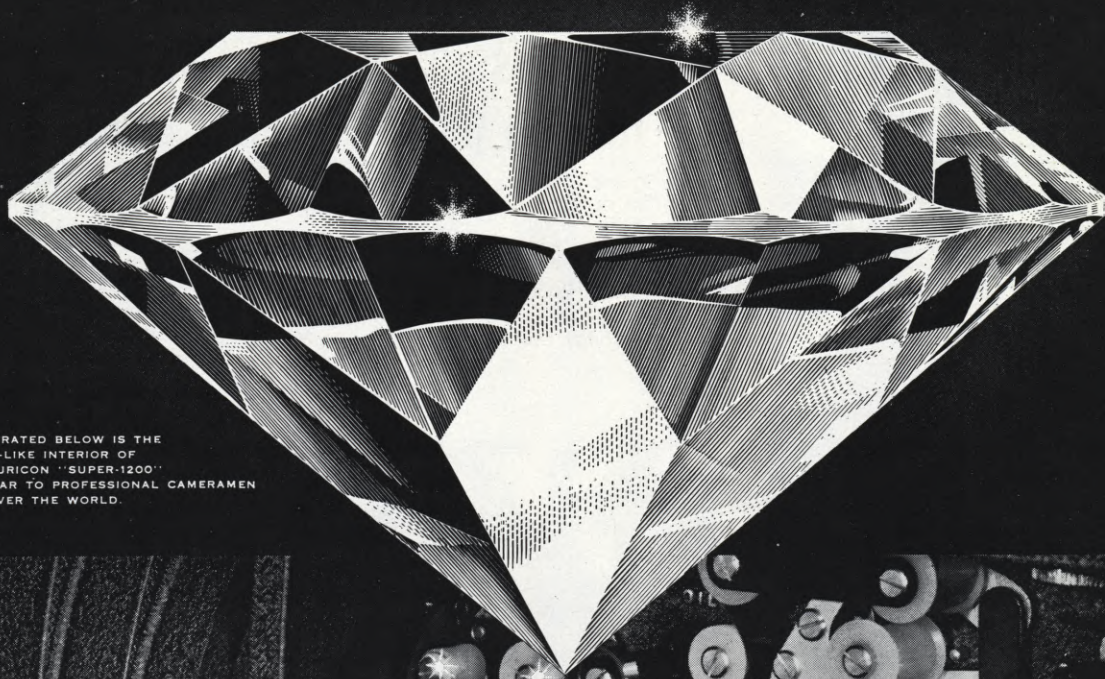
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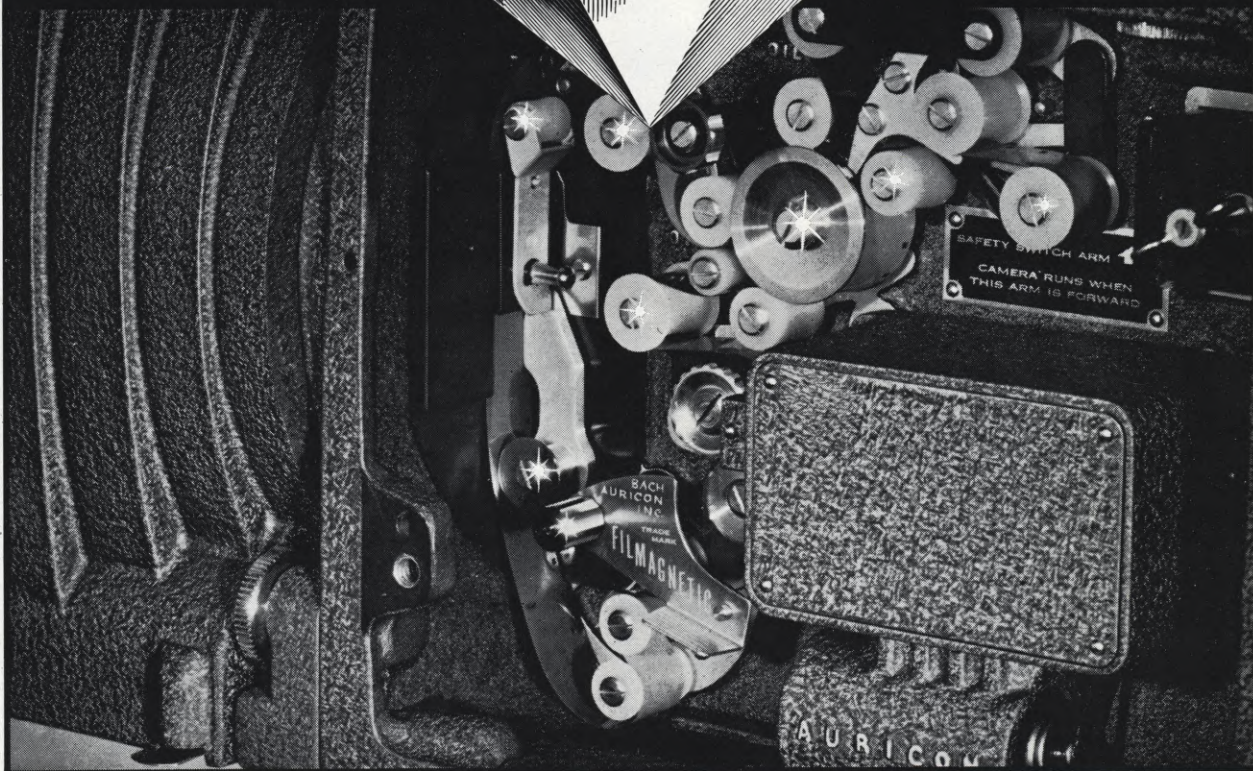
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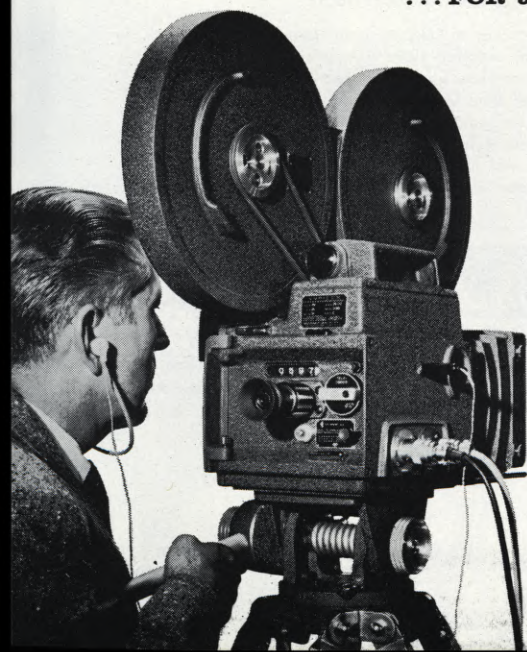
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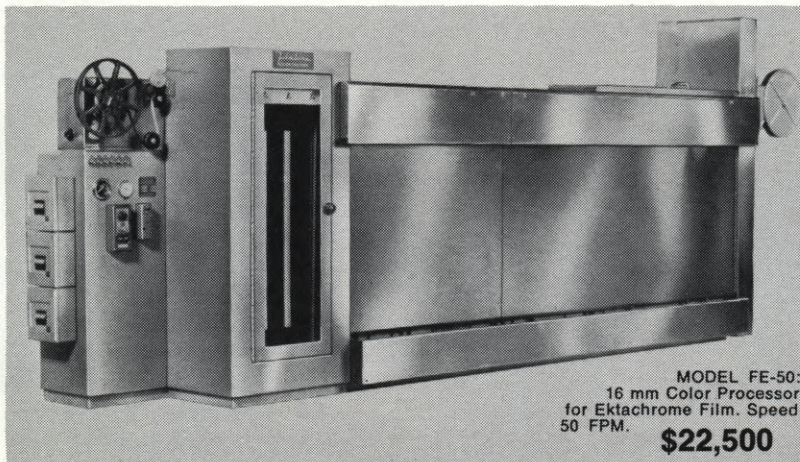
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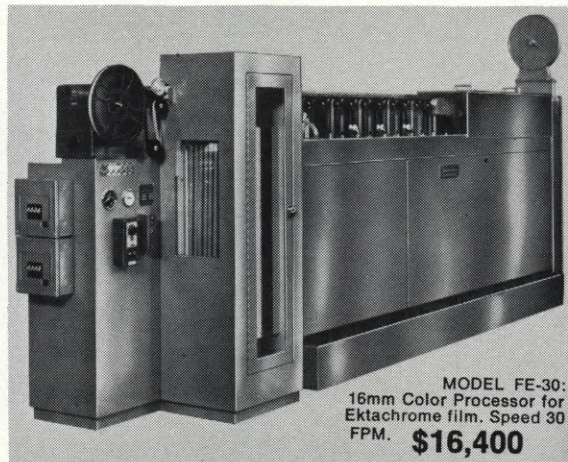
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DIRECTORIAL KNOW-HOW

An informative and eminently readable work, **THE FILMS OF STANLEY KUBRICK** by Daniel DeVries (Eerdmans \$1.75) analyzes the style and contents of that unconventional director's films, and his outstanding ability to communicate ideas while providing genuine entertainment. Whether exposing militarism (*Paths of Glory*) or probing the cosmos (*2001: A Space Odyssey*), Kubrick, in creating his own visual world, expands our understanding of man's fate.

* * *

In **MERVYN LEROY: TAKE ONE** (Hawthorn \$10.), the veteran director gives a lively account (as told to Dick Kleiner) of his Hollywood career, with amusing anecdotes about each of his 75 pictures. His genteel gossip evokes vividly the film capital in its heyday, and is replete with names of fellow directors, producers, performers, studio cops and restaurateurs.

* * *

An attractive large-size book, **THE GENIUS OF BUSBY BERKELEY** (Sherbourne \$4.95) features a substantial interview by Dave Martin where Buzz goes into many detailed comments on his visual techniques and work methods. A biography, carefully compiled by Bob Pike, a filmography and a selection of press reviews complete this tribute to the master of the Hollywood musical.

* * *

Two notable paperbacks from Curtis, **DON SIEGEL: DIRECTOR** by Stuart M. Kaminsky and a study of the late Mitchell Leisen, **HOLLYWOOD DIRECTOR** by David Chierichetti, offer contrasting appraisals of Siegel's uncompromising realism and Leisen's sophisticated romanticism. Both books rank high in knowledgeable and intelligent research, providing first-hand information from the directors themselves and many of their associates. Detailed filmographies and illustrations round out these worthwhile volumes. (\$1.50 ea.)

* * *

Lengthy essays that skillfully analyze the work of **THREE EUROPEAN DIRECTORS** (Eerdmans \$3.95) deal with the influence and style characteristics of François Truffaut (written by the book's editor, James W. Wall), Luis Buñuel (by Peter Schillaci) and Federico Fellini (by Roger Ortmyer). An informative and scholarly work, with a thoughtful and perceptive approach.

* * *

CAUSES AND CONTROVERSIES

A discerningly analytical study, **TO**

THE BOOKSHELF

By **GEORGE L. GEORGE**

FIND AN IMAGE (Bobbs Merrill \$7.95) is black movie critic James Murray's informative survey of the role and contribution of black filmmakers to American movies. From Oscar Michaux, in the early '20s, to today's Gordon Parks, and from the Uncle Tom-ish *The Wooing and the Wedding of a Coon* (1905) to the recent *Super Fly* type of black machismo, Murray's critical yet objective account is a lucid statement of what non-racist cinema should be.

* * *

A film critic for New York's *Village Voice*, Molly Haskell focuses, in **FROM REVERENCE TO RAPE** (Holt, Rinehart & Winston \$10.), on the changing characteristics of women in films. She contrasts the positive image once projected by a Katharine Hepburn or a Bette Davis with today's misogynous movie portrayals of women as mere playthings, victims of macho violence, or decorative props in sexist flicks. To filmmakers wondering how to deal with the new woman, Ms. Haskell offers cogent and timely advice.

* * *

In **PAT LOUD: A WOMAN'S STORY** (Coward McCann Geoghegan \$6.95), the main protagonist of the controversial TV series, *An American Family*, tells with extraordinary honesty and candor what happened before, during and after its filming. The raw nerve that the show touched in most of the viewers is easily understood in terms of the technical ordeal and emotional tension bared in this unusually revealing document.

* * *

TECHNIQUES FOR TODAY

Two volumes in the Hastings House "Media Manuals" series explore areas of current technical interest. **BASIC TV STAGING** offers set designers a comprehensive survey of standard procedures, tools and devices used in television studios today, with emphasis on labor-saving and low budget ideas. **TV CAMERA OPERATIONS** provides detailed guidelines to effective camera work and the operational techniques of sophisticated video equipment.

Both of these manuals, written by TV expert Gerald Millerson, approach their subjects in a concise and factual style, with the text on the lefthand page conveniently facing two-color illustrations on the opposite page for easy reference. (\$10.95/5.95 ea.)

A new title in the Barnes "Screen Textbooks" series, compiled and edited by Terence St. John Marner, **FILM DESIGN** (\$3.95) deals with the creative contribution of Art Directors and Production Designers to the visual environment of a film. Planning and dressing of sets is discussed in considerable detail, stressing the practical aspects of construction and the use of special photographic effects, as well as the craftsmen's artistic contribution.

* * *

John Burder's **THE WORK OF THE INDUSTRIAL FILM MAKER** (Hastings House \$14.50) is a manual useful to both the maker of industrial films and his sponsor. It emphasizes the economics of this type of film, the need for proper planning, expert production and efficient utilization. Marketing directors, publicity and advertising personnel will find particularly helpful the section dealing with the distribution and exploitation of industrial films.

* * *

A first full-length critical study of a relatively new documentary technique, Stephen Mamber's **CINEMA VERITE IN AMERICA** (M.I.T. \$10.) discusses the filmmakers who pioneered in this genre and the films they created. The special lightweight camera and portable tape recorders that facilitated their work are given due credit for the uninhibited and probing dramatic results achieved by Frederick Wiseman (*Titicut Follies*), Richard Leacock (*Chiefs*), D. A. Pennebaker (*Monterey Pop*), and Albert and David Maysles (*Showman*).

* * *

FROM THEN TO NOW

As exciting to read as the spectacular feats it describes, John Baxter's **STUNT** (Doubleday \$10.) tells the story of the great movie stuntmen from their first recorded exploits in the 1908 *Count of Monte Cristo* to such recent hair-raisers as *The French Connection* and *Bullitt*. Considerable research went into this entertaining book, with interviews of leading stuntmen yielding a wealth of expert technical information.

In his substantial and informative preface to **THE WARNER BROS. GOLDEN ANNIVERSARY** (Dell \$2.95), film scholar Arthur Knight pertinently observes that 1923, when WB was legally born, is also the year when the American film industry established the basis of its spectacular growth. The balance of the book is an elaborate filmography of all WB movies, a record of achievement that has few equals.

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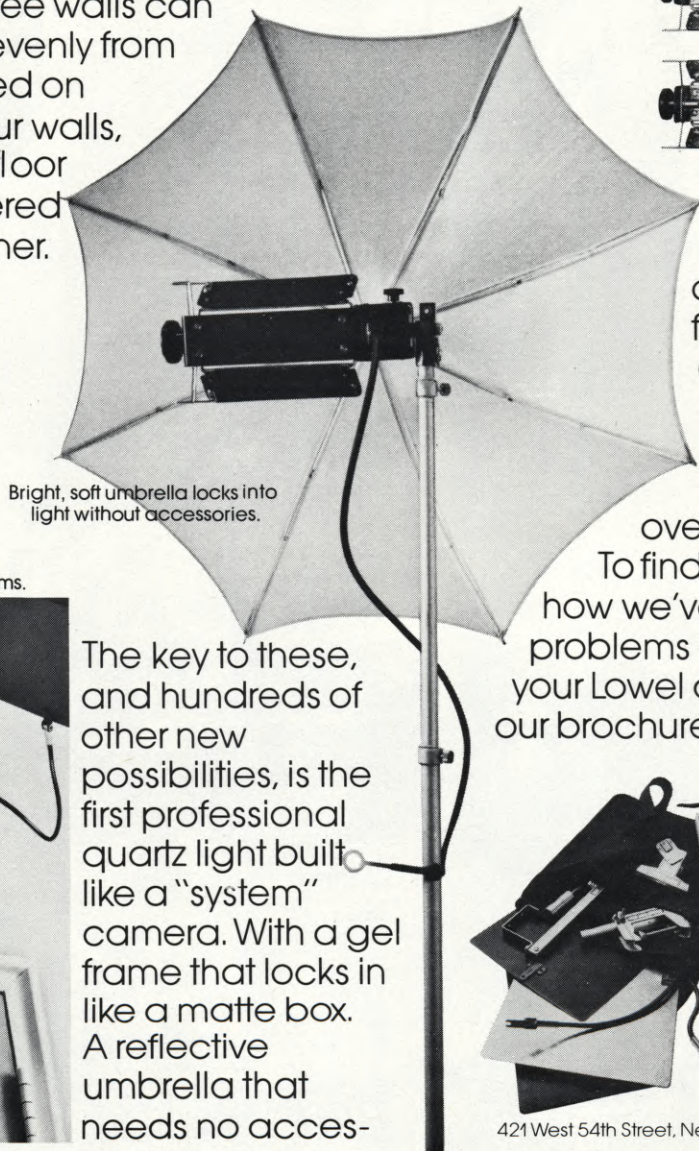
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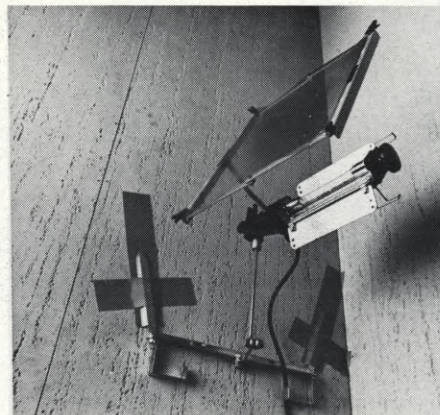
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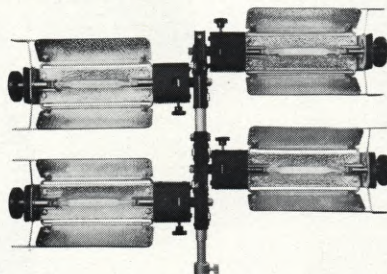
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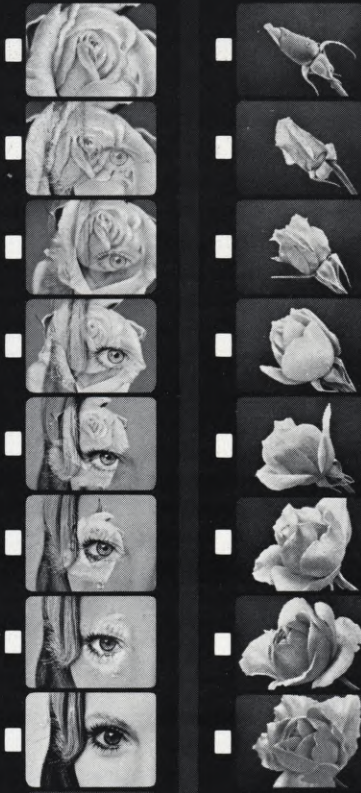
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INDUSTRY ACTIVITIES

CINEMEDIA V FIFTH ANNUAL COMPETITION FOR YOUNG FILM-MAKERS

Cinemia V, The Broadway Department Stores' annual film competition encouraging creativity and extending recognition to imaginative young filmmakers in California, Nevada and Arizona, embarks this month on its fifth successful year.

The film festival, open to all students registered in high schools, colleges and schools specializing in the creative arts, is honored this year with a highly impressive panel of distinguished judges selected from the motion picture industry and its related fields.

"A film competition such as Cinemia can be a great asset to the motion picture industry with its potential to broaden the much neglected area of short subjects. The young creative mind can do wonders in our industry," commented Daniel Taradash, president of the Academy of Motion Picture Arts and Sciences, 1970-73, and screenwriter of *From Here to Eternity*, *Picnic* and co-writer of *Hawaii*.

Other members of the judging panel include: John Green, composer, conductor and winner of five Academy Awards including *An American in Paris* and *Oliver*; Julia and Michael Phillips, producers, with Tony Bill, of *The Sting* and *Steelyard Blues*; Shelly Manne, jazz drummer, composer and winner of the Down Beat poll for 15 consecutive years; John Milius, screenwriter of films including *The Life and Times of Judge Roy Bean*, *Jeremiah Johnson*, *Magnum Force* and *Dillinger*; Alan R. Howard, film critic for "The Hollywood Reporter"; William Froug, screen and television writer, producer and teacher in film history at UCLA and USC; Bronislau Kaper, composer of scores for over 150 motion pictures, including his Academy Award-winning *Lili*; Roderick Paul, producer and director, including coproducership of *Paper Chase*; Melville Shavelson, writer, producer, director and former president of the Writer's Guild of America West; Sid Marshall, Senior Vice President, Managing Director, Young and Rubicam West; and Darryl Ponicsan, author and screen writer, with credits including *Cinderella Liberty* and *The Last Detail*.

According to Mrs. Lee Hogan Cass, the Broadway's Fashion Director and originator of Cinemia, judging will be based on creative imagination, over-all

presentation, general technical proficiency and camera work. "Cinemia, with prize money totaling over \$3,000, has evolved into one of the most significant student film festivals in the West," commented Mrs. Cass.

Rules, regulations and entry blanks can be obtained at your nearest Broadway Department Store. Submitting deadline is midnight, June 15, 1974.

Contact: Laine Altman; Public Relations Coordinator; The Broadway Department Stores; 3880 North Mission Road; Los Angeles, California 90031 (213) 223-2266, Ext. 1769.

BRITAIN, JAPAN WIN TOP AWARDS FOR TV COMMERCIALS

A British public service announcement for traffic safety won sweepstakes honors as the best television commercial of the year in the 14th annual International Broadcasting Awards sponsored by the Hollywood Radio and Television Society.

It was the first British television spot to win top honors in the competition which has been choosing the "world's best" commercials since 1960.

The radio sweepstakes winner was a retail commercial for O'Neil's department store of Akron, Ohio, produced by Chuck Blore Creative Services, of Hollywood, for the McDaniel, Fisher & Spelman Agency, of Akron.

More than 3300 entries from 40 nations were considered in choosing the top television and radio winners honored before an audience of nearly 1000 advertising and broadcasting executives and their guests at the IBA Presentation Dinner in the Century Plaza Hotel, Los Angeles.

The dinner also honored Mary Tyler Moore, selected by the Society as its "Woman of the Year" in broadcasting for her starring role in the CBS television-MTM Enterprises comedy show which has won both critical and public acclaim.

It was the best showing ever for entries from outside the United States. In addition to the television sweepstakes winner, "Sewing Machine", a public service announcement for traffic safety, Britain had the series television winner and the best 30-second humorous radio commercial.

Dentsu Advertising, Ltd., of Tokyo, now the largest advertising agency in the world, had three television winners to lead all agencies. Two of its entries tied

as the best 30-second live action non-English commercial, including "The Egg", for an insurance company, Nippon Songai Hoken Kyokai, and "Cough Cure", for Smith Klins & French Overseas.

Its third winner was "Winter Hot-spot", combining live action and animation for Ajinomoto Co., Inc.

Japan also won the live action 60-second non-English language trophy with "Children's Dreams" for Toyoboseki Co., Ltd., fabrics, entered by the Hakuhodo Advertising Agency of Osaka, Japan.

Canada also had a television winner, "Jasper", for General Motors Co. Vega, entered by MacLaren Advertising, of Toronto, and a radio trophy winner, "Milk, Milk, Beautiful Milk," for Fraser Valley Milk Producers Association, entered by Griffiths-Gibson Productions, of Vancouver, B.C.

Grey Advertising was the only double winner among the American agencies. Its New York office won the radio public service trophy with "Janie", for the National Highway Traffic Safety Association. Its Detroit office won the radio series trophy with three commercials for the Midwest Trousers Exchange of Detroit.

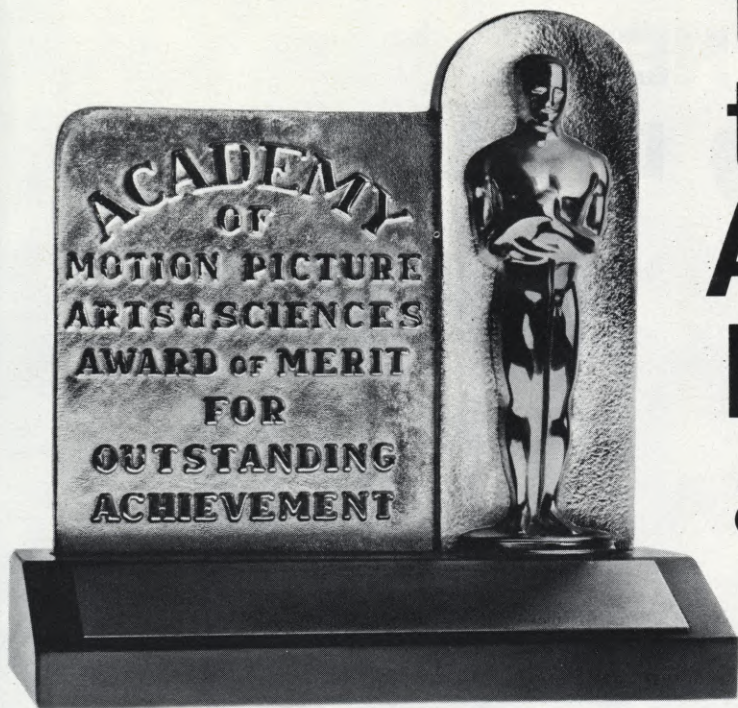
Also a double winner was Chuck Blore Creative Services, of Hollywood. In addition to its radio sweepstakes winner, which also took trophy honors in the local category, the Hollywood production company had the radio open 60-second winner with "Watch Out Daddy" for the Texas Governor's Office of Traffic Safety.

The radio competition produced winners from all over the continent, including agencies and production companies from Akron, Vancouver, Kansas City, Denver, Austin, Seattle and Detroit, in addition to the New York, Hollywood and London titlists.

IBA general chairman this year was Perry Lafferty, vice president, programs, Hollywood, for CBS Television. President of the Society is Gerald J. Leider, president, Warner Bros. Television. Dinner chairman was John J. McMahon, vice president, programs, West Coast, for NBC Television.

The IBA was the first world competition for both radio and television commercials when established in 1960, and is now recognized as the only international event exclusively for broadcast advertising. ■

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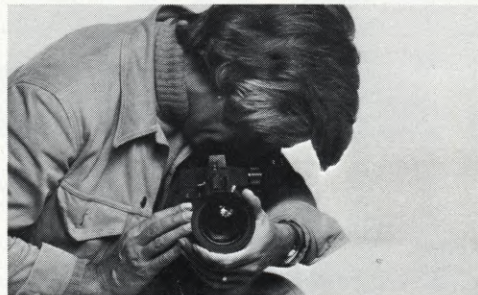
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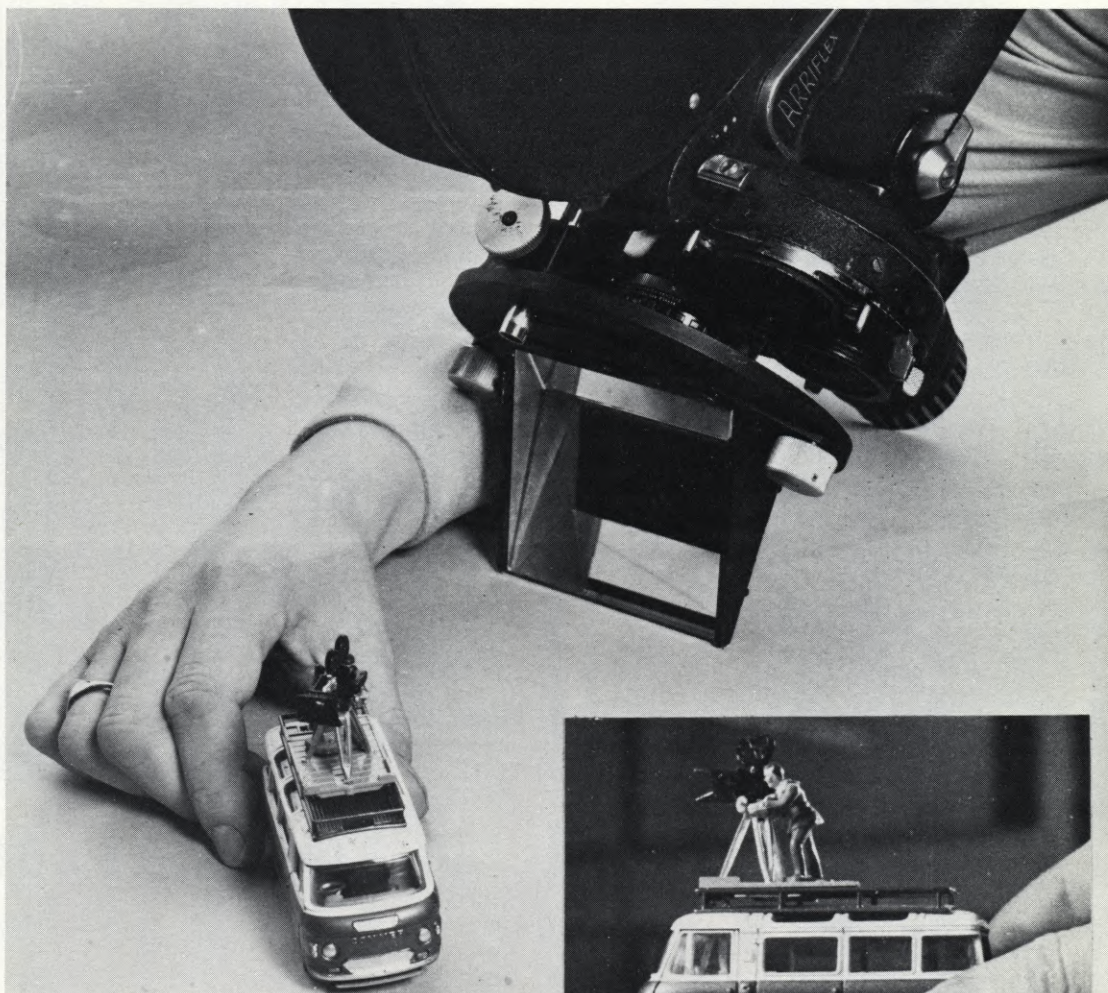
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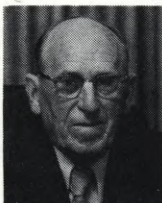
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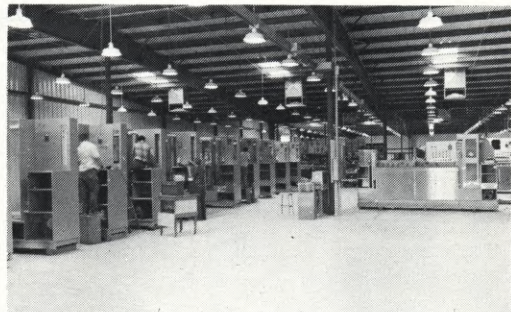
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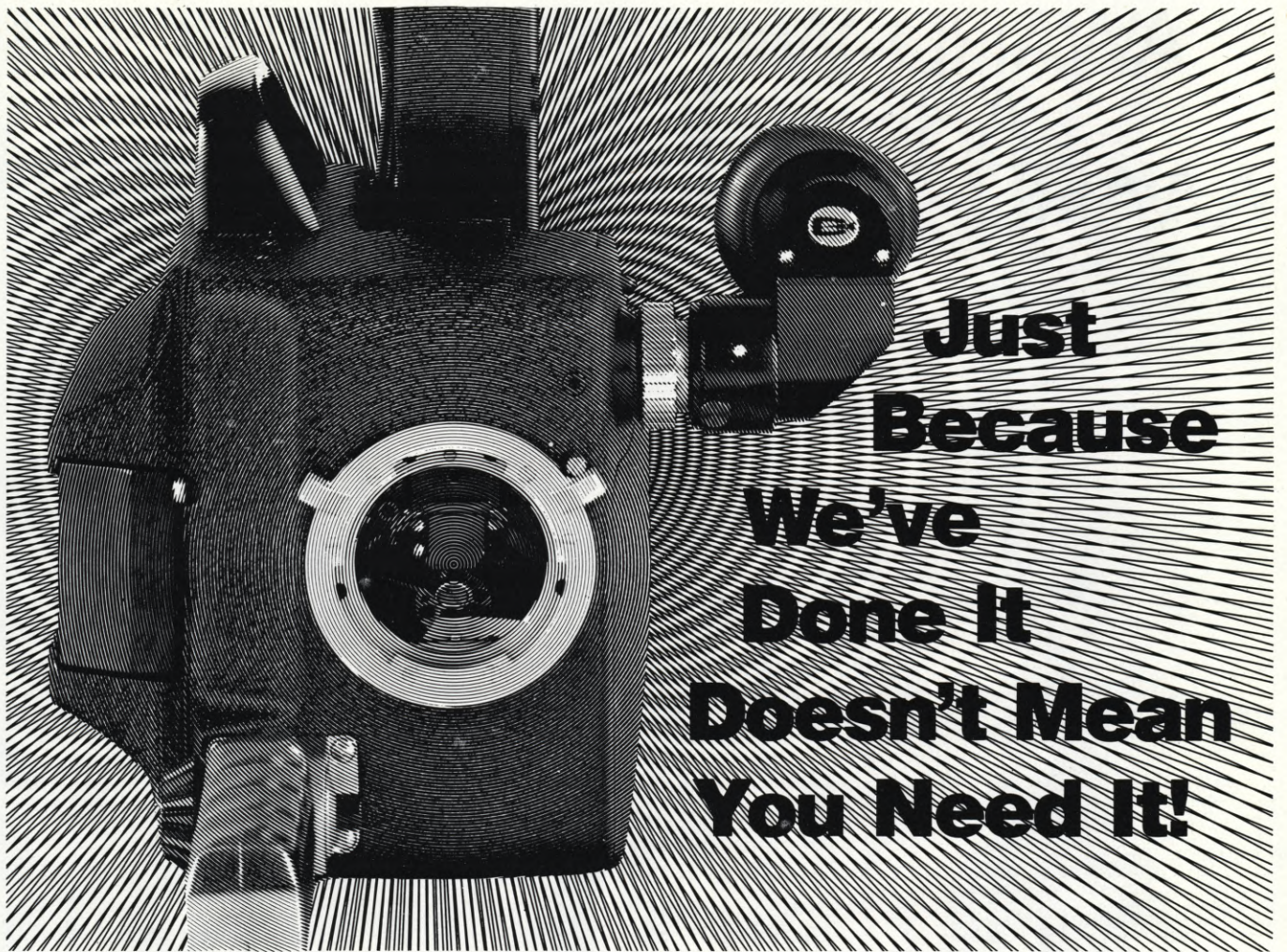
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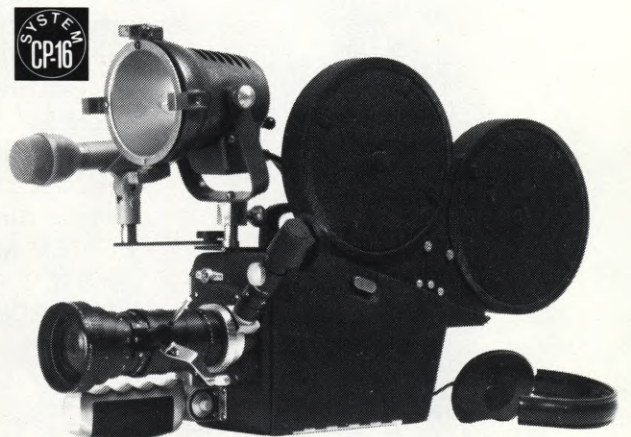
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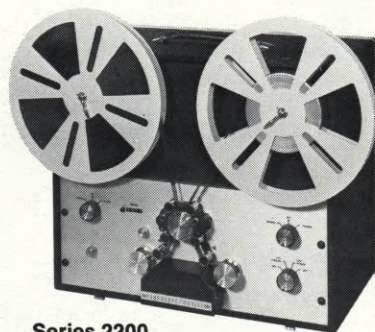
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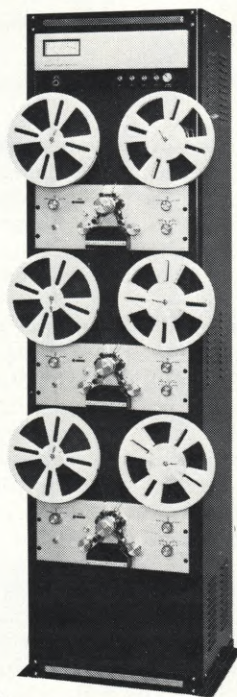
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What the pros say about the Bolex 16 Pro.

On the drawing board the Bolex 16 Pro out-performs every 16mm camera we can think of. Of course, the only test that really counts doesn't happen on the drawing board. It happens on location. Here's how the Bolex Pro did there.



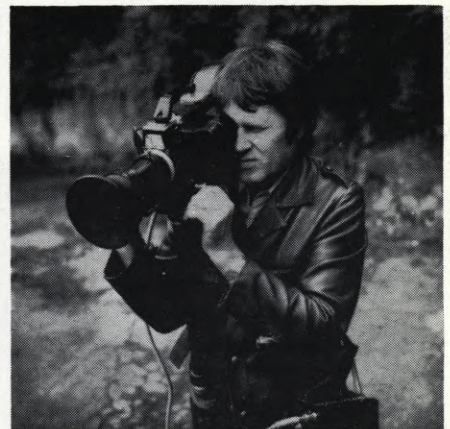
"We made an educational documentary about the Hindu Festival Thaipusam in Malaysia...the participants go into trance and are able to shut out any awareness of pain as they are pierced with small and large needles and hooks. Our shooting ratio during these tense moments...was one to one with only the head and tail frame getting lost in the splicing process matching original to work print...I must attribute these exciting moments in our films mainly to the uncanny abilities of the Pro to accept a new magazine, to thread itself and to film again in a fraction of the time usually needed with other cameras. This allowed me to roll nearly continuously at the most crucial moments..."

**Gunter Pfaff, Filmmaker
Michigan State University**



"...One year and 250,000 feet of film later...this camera has performed faultlessly. From the Peruvian Andes to the Arctic Circle, the ease of loading and the speed of operation afforded by the power systems have proven a tremendous boon. The automatic iris and the instant start and stop, without losing a single frame, are invaluable where lighting conditions cannot be controlled and time will not permit conventional editing. The self loading is so amazing that after more than six hundred magazines I occasionally peek into the take-up side, and sure enough—it worked."

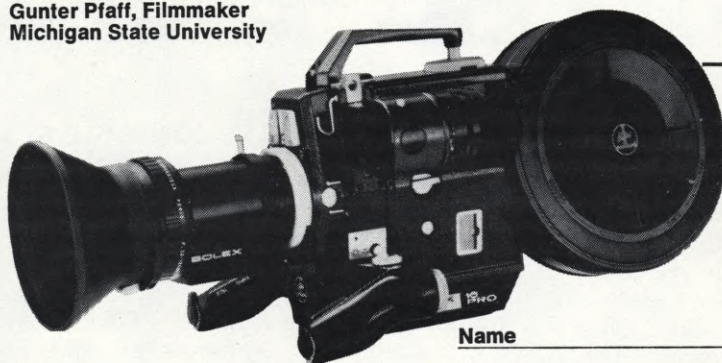
Tom McEnry, Staff Cameraman CBS News



"It is the first time I had a camera which I did not have to bring in for repairs during such a long period... Of special advantage to me are... motorized zoom and motorized follow focus... On my job in Alaska...where I had to work without assistance, I first discovered the advantages of the motorized focus. It was like having an extra hand. I also relied on many occasions on the automatic iris which is built in the camera and it worked more than satisfactorily..."

...in Rochester Heights Hospital I appreciated the quick changes of the magazine and automatic threading of the camera, which enabled me to film surgical operations without loss of any phase.... Many times I have occasion to use the camera handheld ...and find that the well balanced design of the camera enables me to work freely and relatively tireless in these confined areas."

Rudy Herrmann, Documatic Films, Inc.



I am interested in a demonstration of the Bolex 16 PRO camera with its: Instant 400' magazine interchangeability, automatic threading from core to core in three seconds, electronically controlled instant start and stop motor (so quiet that no blimping is required), crystal control for wireless sound, variable speeds coupled to automatic exposure system, handgrip controls (power focus, start stop and powerzoom), 20X mirror reflex viewing, VF (can be rotated) with both ground glass or clear glass and no shutter black-out, outstanding zoom optics, and many more.

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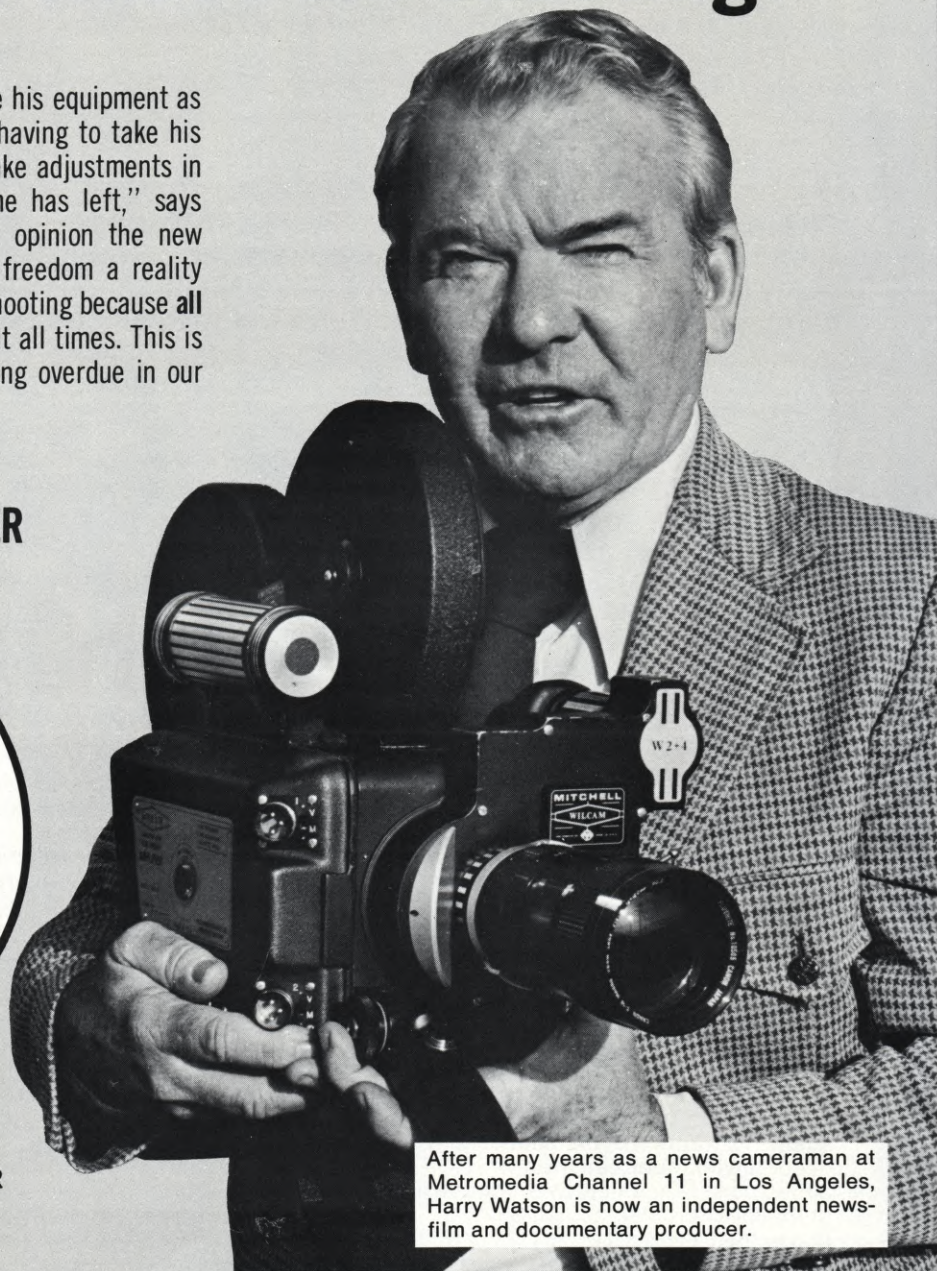
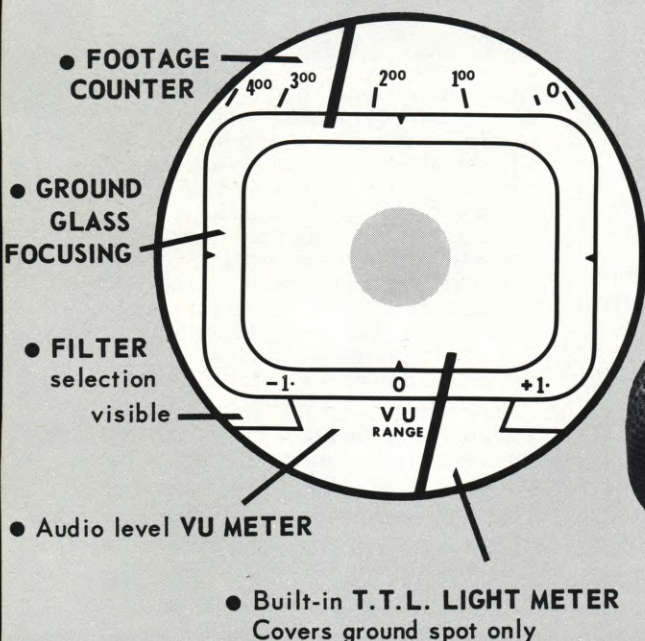
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"Here is a news camera that lets me concentrate on what I am shooting!"

"A good news cameraman should be able to handle his equipment as naturally as he does his hands and feet, without having to take his attention away from the action he is filming to make adjustments in exposure, change filters, or check the footage he has left," says veteran news cameraman Harry Watson. "In my opinion the new **MITCHELL-WILCAM** makes this kind of operating freedom a reality for the first time. I can **concentrate** on what I am shooting because all of the information I need is right before my eyes at all times. This is a 'news cameraman's camera,' and it has been long overdue in our industry."

It's ALL in the VIEW FINDER



After many years as a news cameraman at Metromedia Channel 11 in Los Angeles, Harry Watson is now an independent news-film and documentary producer.

Designed with the working news and news/documentary cameraman in mind, the new MITCHELL-WILCAM is a brand new concept in 16 mm single system sound cameras. Equipped with either an attached, removable amplifier or a separate amplifier system, the WILCAM has a ROTATING MIRROR SHUTTER that always stops closed. It features single frame INCHING CONTROL, plus CRYSTAL CONTROL at 24 or 25 FPS and variable speeds from 12 to 40 FPS. An internal, fingertip controlled FILTER SLIDE allows instant change to any of four filters. The camera takes MITCHELL type 400 and 1200 ft. magazines or the WILCAM 200 ft. magazine. The bayonet lens mount accepts a variety of lenses.

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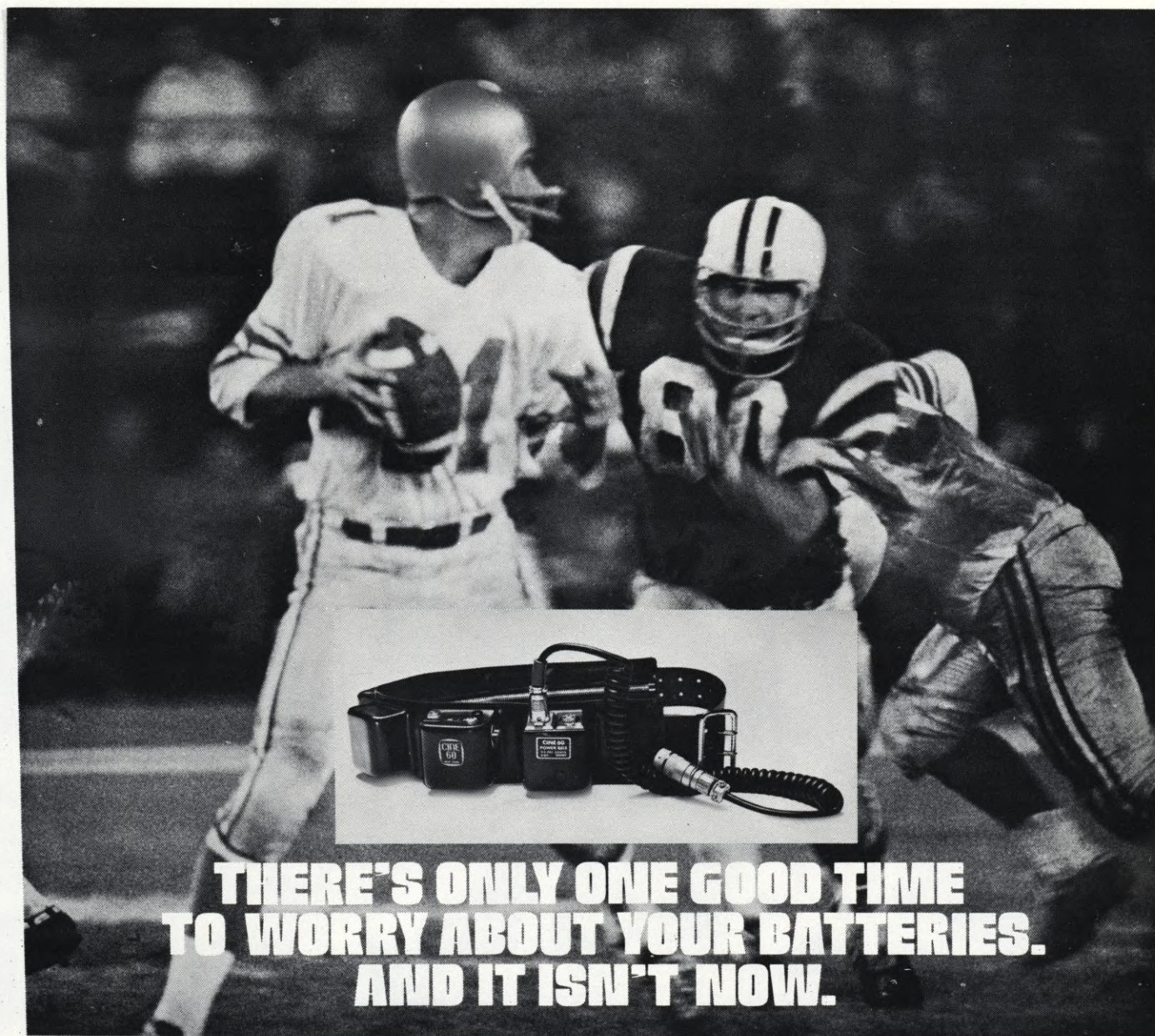
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There's a simpler, more dependable, and much more comfortable solution. Connect your camera (any professional camera) to a Cine 60 Power Belt. The rechargeable nickel cadmium batteries are arranged in

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And you *do* get your shot. Because the Cine 60 Power Belt delivers 6 to 30 volts of reliable power for up to 7 ampere-hours. It can be recharged quickly and safely at any 110- or 220-volt AC outlet. There's a reassuring little signal light to tell you you're getting the charge you think you're getting. And an automatic, built-in safety switch to protect you and your camera from a shock you'd never think of getting.

Since it was introduced over a decade ago, more professional filmmakers depend on the Cine 60 Power Belt than on any other port-

able power supply. And if that isn't one hell of a powerful endorsement, we don't know what is.

Cine 60 makes other motion picture equipment that helps prevent other kinds of crises. There's a battery-powered fiberglass blimp for Arriflex 35 cameras... unique, lightweight single-and-double-shoulder pods... motor-drives for Angenieux, Zeiss and Canon zoom lenses... suction-activated platform and car mounts for shooting at any angle... all kinds of special connectors and camera/lens mounts for all kinds of cameras... and all kinds of helpful information, because we've been there, and we can help. With custom designs and repairs as well. All you have to do is ask.

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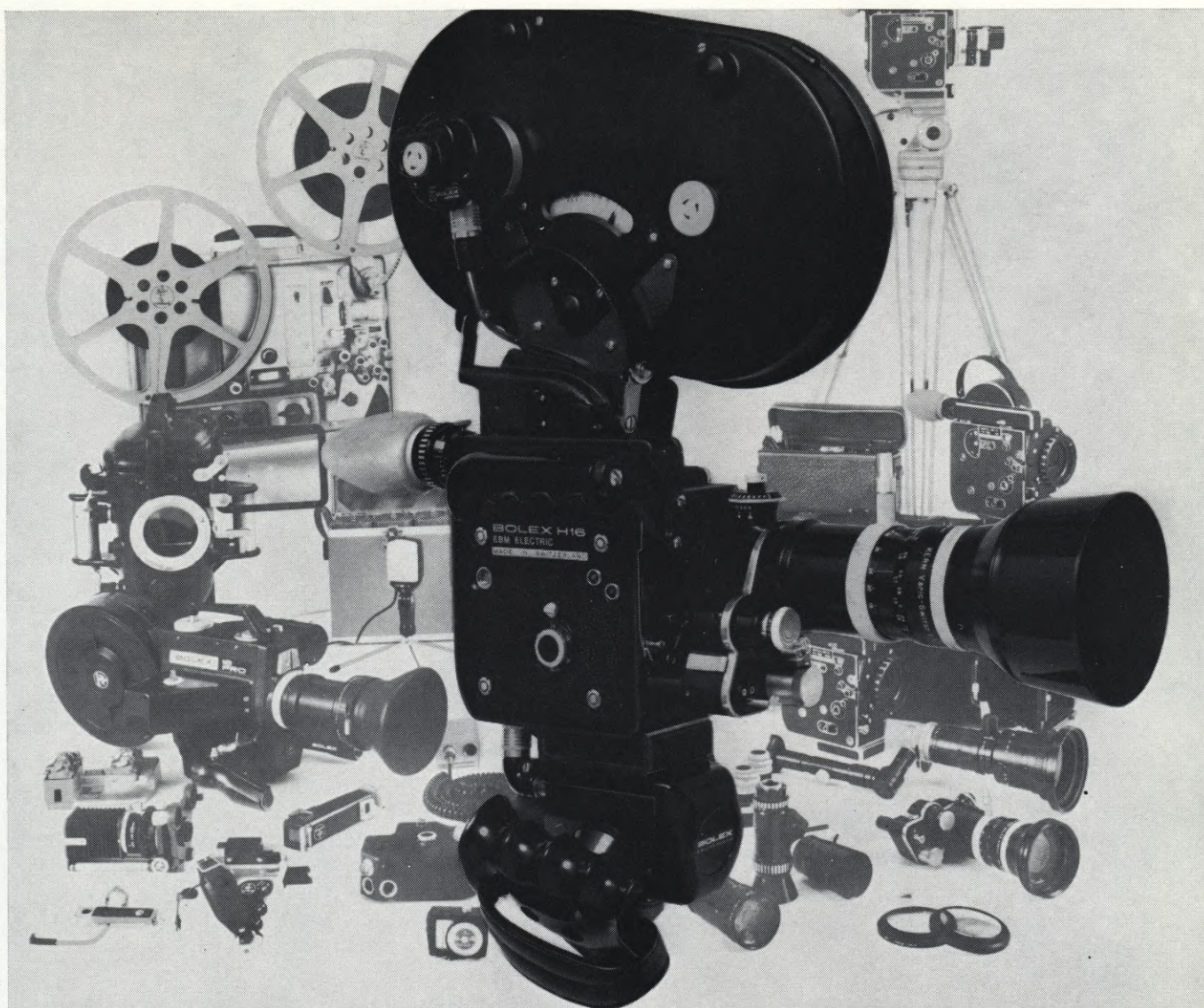


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Consider features like: automatic threading, flickerless reflex viewing and focusing with complete depth of field control, a filter slot behind the lens, single-frame counter, unlimited film rewind, variable speeds for accelerated and slowmotion filming, single frame filming, variable shutter with automatic control possibility, registration claw for total accuracy in picture steadiness even when films are blown up to 35mm.

THE WHOLE SHOOTING MATCH.

The lenses: With the Bolex system, you can choose from 7 fixed focal length lenses, ranging all the way from 10mm super wide angle to long 150mm telephoto. And they all have built in macro focusing, automatic depth of field scales and diaphragm presetting so you can step down the aperture without taking your eye off the reflex finder. You can choose a lens as fast as f/1.1, or one that can focus down to one inch without accessories.

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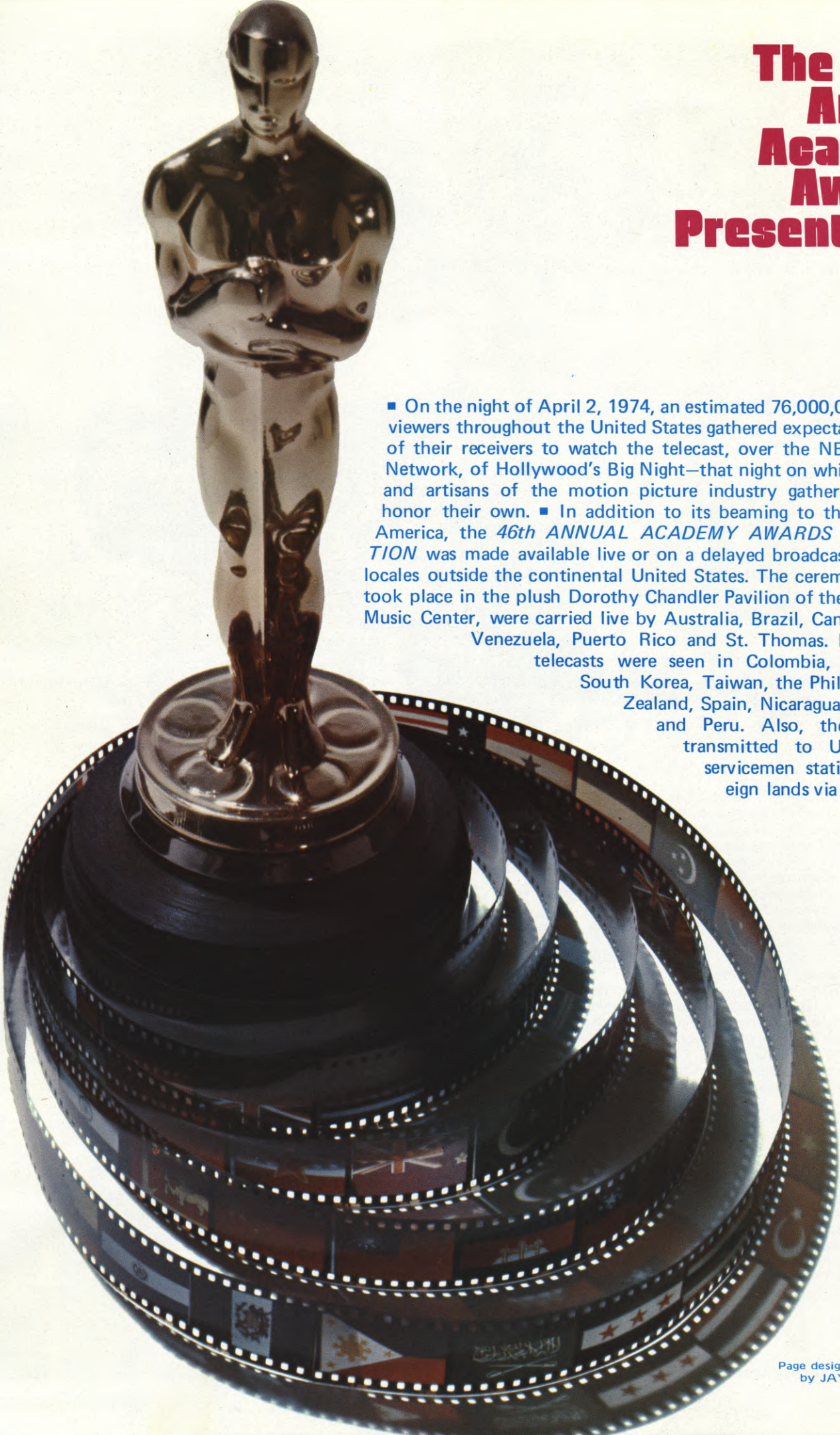
The works: You can extend your basic equipment almost indefinitely with a wide range of accessories.

For instance: if you choose a spring-wound camera, you can automate easily with any one of four auxiliary motor drives, for time-lapse or animation, for variable speed shooting or for filming with sync pulse generator or crystal. The system offers you tripod; monopod; camera grips; blimps; an automatic fading device; cable releases; matte boxes (complete with masks); an underwater housing; attachable exposure meter; 400' magazine; closeup lenses; extension tubes; optical magnetic sound projector.

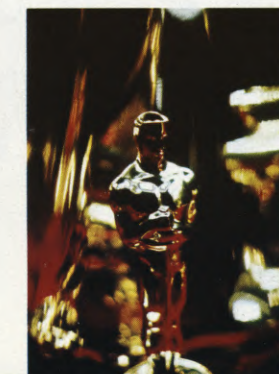
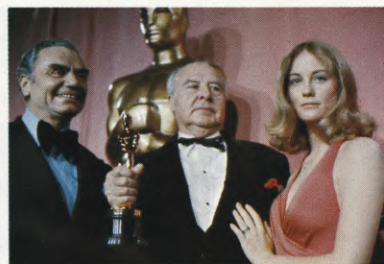
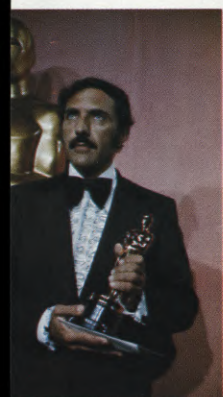
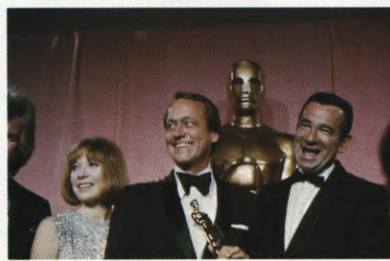
It's quite a list. But that isn't all. The full story of Bolex's whole shooting match fills a 32 page book. Which we'll be happy to send you. Just write to Paillard Incorporated, 1900 Lower Road, Linden, N.J. 07036. You'll get a very professional response. Other products: Hasselblad cameras and accessories, Hermes typewriters and figuring machines.

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The 46th Annual Academy Awards Presentation



■ On the night of April 2, 1974, an estimated 76,000,000 television viewers throughout the United States gathered expectantly in front of their receivers to watch the telecast, over the NBC Television Network, of Hollywood's Big Night—that night on which the artists and artisans of the motion picture industry gather annually to honor their own. ■ In addition to its beaming to the millions in America, the *46th ANNUAL ACADEMY AWARDS PRESENTATION* was made available live or on a delayed broadcast basis in 17 locales outside the continental United States. The ceremonies, which took place in the plush Dorothy Chandler Pavilion of the Los Angeles Music Center, were carried live by Australia, Brazil, Canada, Mexico, Venezuela, Puerto Rico and St. Thomas. Delayed-basis telecasts were seen in Colombia, Hong Kong, South Korea, Taiwan, the Philippines, New Zealand, Spain, Nicaragua, El Salvador and Peru. Also, the show was transmitted to United States servicemen stationed in foreign lands via Armed Forc-





Director John Huston arrives for the awards presentation in full dress. He was one of the four official hosts of the show, along with Burt Reynolds, Diana Ross and David Niven.

es Television Stations.

As always, it was a gala occasion. The great, near-great and would-be great of Hollywood turned out in all their finery to honor their peers in the industry. As they walked down the red carpet toward the classic auditorium, thou-

The classic facade of the Dorothy Chandler Pavilion of the Los Angeles Music Center backdropped the sidewalk ceremonies preceding the 46th Annual Academy Awards Presentation. This year, Daylight Saving Time, necessitated by the energy crisis, robbed this phase of its usual spotlighted glamor, since the audience arrived in daylight. Nevertheless, 3,000 fans crowded the bleachers to watch them.

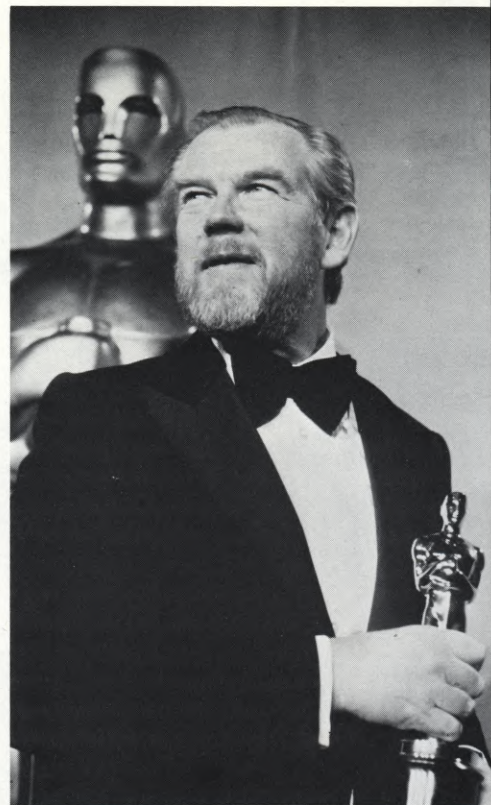


sands of fans, many of whom had been waiting in the bleachers since dawn, cheered and applauded their favorites of the silver screen.

The lavishly staged Awards Presentation program lasted more than three hours (the longest ever) and was highlighted by ambitious musical production numbers, film clips from pictures and the extra-curricular performance of a "streaker", who enlivened that portion of the program considerably and managed to unnerve the usually unflappable Elizabeth Taylor.

Outside the Dorothy Chandler Pavilion, star-struck fans had been gathering since dawn and the 3,000 bleacher seats were filled hours before the event, with several hundred more people thronging the sidewalk across the street. The usually glamorous aspect of the scene outside the auditorium (due mainly to the lighting that is used) was absent this year because Daylight Saving Time, necessitated by the energy crisis, resulted in most of the preliminary festivities taking place in daylight.

Still, the sidewalk show had its funny moments, thanks to two ladies of the screen who are noted for talents other than their acting ability. Linda Lovelace, she of the deep throat, caused the greatest furor when she rode up in a horse-drawn carriage and emerged clad



Famed Swedish cinematographer Sven Nykvist, ASC, shown with "Best Achievement in Cinematography" Oscar awarded for his work on Ingmar Bergman's "CRIES AND WHISPERS".

from top to toe in virginal white lace. Running her a close second for fan hysteria was Edy Williams in a leopard-skin bikini, leading a Great Dane.

Inside the auditorium, the show, produced by Jack Haley, Jr. and directed by Marty Pasetta, led off with an original musical extravaganza, "The Oscar", choreographed by Ron Field and starring Liza Minnelli.

The four hosts for the show were Burt Reynolds (who was very funny), Diana Ross, David Niven (oozing charm from every pore) and John Huston.

Film figured prominently in the staging. There were clips from the work of those nominated for acting honors and a very funny and nostalgic montage of Oscar winners of the past picking up their awards.

The highlight of the evening was the appearance on stage of that elusive Great Lady of the screen, Katharine Hepburn. She had never before appeared at an Academy Awards Presentation, though nominated many times and the winner of three Oscars as "Best Actress". Her charming speech in presenting the coveted Irving Thalberg Award to producer Lawrence Wein Garten brought the audience to its feet in a loud and heartfelt ovation.

The Jean Hersholt Humanitarian Award, voted by the Board of Gover-

nors of the Academy of Motion Picture Arts and Sciences and presented to an industry member "whose humanitarian efforts have brought credit to the industry", is named after the late Jean Hersholt—actor, humanitarian and past president of the Academy. It has been voted 14 times since its creation in 1956, and this year it went to Lew Wasserman, board chairman and chief executive officer of MCA for "giving unstintingly of his time, his efforts, his intelligence and his substance to the betterment of the lot of his fellow men, in philanthropy, in culture and in humanity."

The award was presented to Wasserman by director Alfred Hitchcock, a great favorite of the crowd. Previous winners of this unique honor have included Y. Frank Freeman, Samuel Goldwyn, Bob Hope, Sol Lesser, George Seaton, Steve Broidy, Edmond L. DePatie, George Bagnall, Gregory Peck, Martha Raye, George Jessel, Frank Sinatra and Rosalind Russell.

As for the Awards themselves, a great deal of suspense had been generated by the fact that "THE EXORCIST" and "THE STING" had each received 10 nominations. It was a surprise to many that in the actual awarding of the Oscars, "THE EXORCIST" won only two ("Best Sound" and "Best Adapted Screenplay"), while "THE STING" walked off with seven, including "Best Picture".

One of the most popular awards, in terms of expressed audience approval, was that which went to Francois Truffaut in the "Best Foreign Film Category" for his wonderful "DAY FOR NIGHT". This extraordinary and highly entertaining picture is Truffaut's affectionate and wryly satirical valentine to the motion picture industry which he obviously loves so well. In it he captures, for the first time, the authentic *ambiance* of film-making, its agonies and ecstasies, the behind-the-scenes excitement, the anxieties, the explosive temperaments, the unique family-like rapport that grows between cast and crew members who have worked together on a film for a space of time and must finally, wistfully, take leave of one another when the last scene is "in the can".

Out of all the awards, the one which is perhaps most significant to *American Cinematographer* readers is that presented for "Best Achievement in Cinematography." This year the competition was especially keen, with Cinematographers of "THE EXORCIST", "THE STING", "CRIES AND WHISPERS", "JONATHAN LIVINGSTON SEAGULL" and "THE WAY WE



The sidewalk comedy that took place outside the Pavilion was as funny as anything that happened onstage. Here actress (?) Edy Williams tries to steal the spotlight by arriving in a leopard-skin bikini, with a feather-collared Great Dane in tow. Her act collapsed when her open charms failed to promote her admission to the Pavilion without a ticket.

WERE" in the running.

The Award went to Sven Nykvist, ASC, for his unique and inspired lensing of the Ingmar Bergman drama, "CRIES AND WHISPERS". Long known as "Bergman's cameraman", Nykvist has also been praised for his work in such films as: "SIDDHARTHA", "THE LAST

RUN", "A DAY IN THE LIFE OF IVAN DENISOVICH" and, most recently, Gregory Peck's production of "THE DOVE". (See *American Cinematographer*, March 1974).

Mr. Nykvist, who has many friends in Hollywood, was recently elected to
Continued on Page 557

Arriving at the Pavilion, wide-eyed with the wonder of it all were the nine young filmmakers between the ages of 11 and 15, each of whom created a "LIFE" commercial for the Academy Award-nominated short subject "LIFE TIMES NINE" (See Page 550). Although their film lost out to "THE BOLERO", it was a special and exciting evening for them.





ACADEMY AWARD-WINNING ART DIRECTION FOR "THE STING"

An "Oscar" for the wonderful visual mood of the 1930's created by a combination of studio sets, backlot exteriors and actual locations

The fascinating and elaborate anatomy of the confidence game, as revealed in "THE STING", a Zanuck/Brown Presentation and a Bill/Phillips Production for Universal, took off like a rocket at the box office and ended up with 10 Academy nominations in a tie with "THE EXORCIST".

Part of the film's extraordinary charisma can be attributed to its faithful reproduction of the Chicago of 1936, and the major credit for that achievement must go to Oscar-winning Art Director Henry Bumstead. Working closely with three-time Academy Award-winning Director of Photography

Robert Surtees, ASC, Bumstead blended studio interiors with backlot exteriors to match actual locations in and around Los Angeles and Chicago to re-create an especially colorful atmosphere of by-gone Americana.

Bumstead made several location-scouting trips to Chicago's seamier sides,

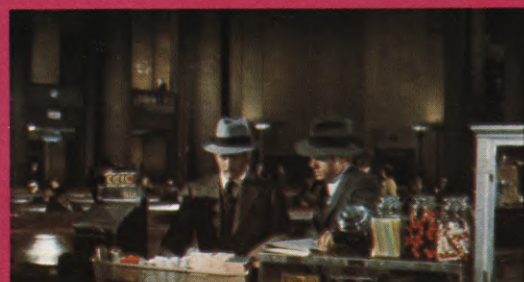
(LEFT) Among the sets for "THE STING", voted best picture of the year by the Academy, is the bar of a 1930's brothel. (CENTER) The wonderful old carousel at the Santa Monica Pier served as a very colorful set. (RIGHT) One of several bars which served as sets for "THE STING". Some interior sets were built on studio sound stages at Universal, while others were actual locations—but they all blend with amazing consistency to create an aura of the period.



(LEFT) The actual exterior of the LaSalle Street Station in Chicago presented no architectural problem, because the building has changed little in appearance since it was built. Control of the period cars passing in front of it was more of a problem. (CENTER) The bookie joint which the con men in the film set up to lure their mark. (RIGHT) Plush lounge of the venerable Green Hotel in Pasadena was converted into a 1930's gambling den by changes of set dressing.



Chicago provided the actual location that served as sets for train terminals in Joliet, New York and Chicago. Two of them were no longer in use as train terminals, having been converted to office buildings. The former ticket booths had all been covered over and had to be exposed again for the filming. Several modern anachronisms had to be blocked out and various billboards, signs and pieces of furniture of the time were used in dressing the set.





(LEFT) Three-time Academy Award-winning Director of Photography Robert Surtees, ASC listens as Director George Roy Hill (who won the Oscar for his direction of "THE STING") discusses the next set-up. (CENTER) The crew at work on location in an alleyway. (RIGHT) Period automobiles line the streets of this exterior set. Every detail of such scenes, including street signs, advertising billboards and stop lights, was intensively researched for authenticity.



(LEFT) On location in Chicago, the crew prepares to shoot scenes involving cars of the period. Very carefully framed compositions were necessary to block out the modern skyscrapers in the background. (CENTER) The interior of the bookie joint was dressed with props from Universal's extensive collection, plus others that were rented. (RIGHT) Fog and a few period props dress this actual alleyway filmed as the passageway leading to the bookie joint.

only to find that Mayor Daley's crime-fighting efforts, e.g. the brilliant sodium vapor street lights, updated many city streets too radically for their use in a period film. Scrupulous scouting yielded a series of seedy alleys and side streets unmarred by modern bric-a-brac and these were used for a chase sequence with Robert Redford as the hunted.

Chicago, however, is still rich in rails. To represent the train terminals of three different cities (Joliet, New York and Chicago), the company utilized Chicago's Union Station, the Penn Central Freight Yards, the LaSalle Street Station and the Illinois Central Station.

And the train look didn't end there. Universal's backlot bristled with an ominous gray superstructure, 20 feet high and 250 feet long. The "el," or the Chicago elevated (a construction originally built there for "GAILY, GAILY") served as an important background for much street action. Moving trains of the period were matted in to rattle across the "el" through the wizardry of special effects.

Several local locations provided settings that Art Director Bumstead found unrivalled. The Green Hotel, built in 1894, is probably Pasadena's oldest building, a cherished heirloom and landmark. One of its plush parlor rooms was dressed to appear as an exclusive New York gambling house. Pasadena also lent "THE STING" the prestigious Commercial and Savings Bank. The seven-story

structure, dated to 1912, contains a teller's lobby rich in Italian marble—a perfect look for a cosmopolitan bank of Chicago's prime.

Down in San Pedro, the old Koppel Plant, a storage building for grain shipments, served as an FBI hideout. Its dramatic exterior, flanked by silos, provided an ominous visual to enhance the mood of "THE STING".

The wonderful period carousel at the Santa Monica Pier, another old landmark whose days seem to be numbered and which was recently threatened by fire, was used for key scenes, its exterior weathered for the filming. The carousel operation served as a front for the brothel where the con artist played by Paul Newman was holed up.

In the following interview for *American Cinematographer*, Henry Bumstead discusses some of the unique problems encountered during the course of his assignment as Art Director on "THE STING":

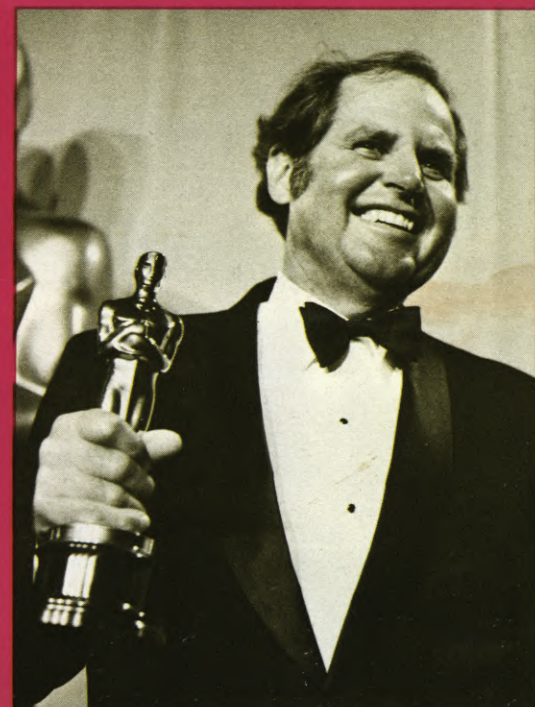
QUESTION: Had you ever worked with Robert Surtees before "THE STING"?

BUMSTEAD: No. This was the first time, but I've always wanted to work with him. He's a really wonderful cinematographer. I was very happy when I heard that he'd been assigned to the picture, because I've admired his work for a long time. Coincidentally, I've worked with his son, Bruce Surtees,

on two Clint Eastwood pictures: "JOE KID" and "HIGH PLAINS DRIFTER", which was made up at Lake Mono in the High Sierras.

QUESTION: Creating on the screen the atmosphere of a bygone period of American history is never easy. What would you say were your major challenges?
Continued on Page 600

A happy Henry Bumstead, Art Director on "THE STING", holds his golden statuette on "Oscar" night. He had previously won the Academy Award in 1964 for Art Direction of "TO KILL A MOCKING BIRD".





**THE FIVE BEST
PHOTOGRAPHED
MOTION PICTURES
OF 1973**

In this time of convulsive transition and revolutionary technological change within the motion picture industry, certain truths remain constant—one of these being the fact that film is, first and foremost, primarily a *visual* medium. Because this is so, the special contribution of the cinematographer to the general excellence and audience impact of any motion picture presentation is, and always will be, of paramount importance.

The tools of the trade used by the Director of Photography and his crew continue to grow more compact, more efficient and more automated. His *metier* is much more than a kind of reflex expertise born of vast experience in his chosen field. It involves such all-important intangibles as taste and style and a peculiar gut-feeling for achieving the specific images that will best tell the story.

It is these abstractions of technique which make the work of each cinematographer distinctive—and variable, depending upon the dramatic demands of specific screen vehicles. How, then is it possible to choose a single "best" from among the highly diversified challenges which cameramen face during the course of a single production year?

Five superlatively photographed motion pictures were nominated for the Best Achievement in Cinematography "Oscar" to be bestowed during the 46th Annual Academy Awards Presentation. Obviously, only one could be the recipient of the cherished statuette. But the members of the American Society of Cinematographers consider the *nominations* for this highest accolade to be as important as the Award itself, and it is with that thought in mind that the membership of ASC salutes with pride the following Directors of Photography who received nominations in the category of "Best Achievement in Cinematography" for the Academy's 45th Annual Awards Presentation:

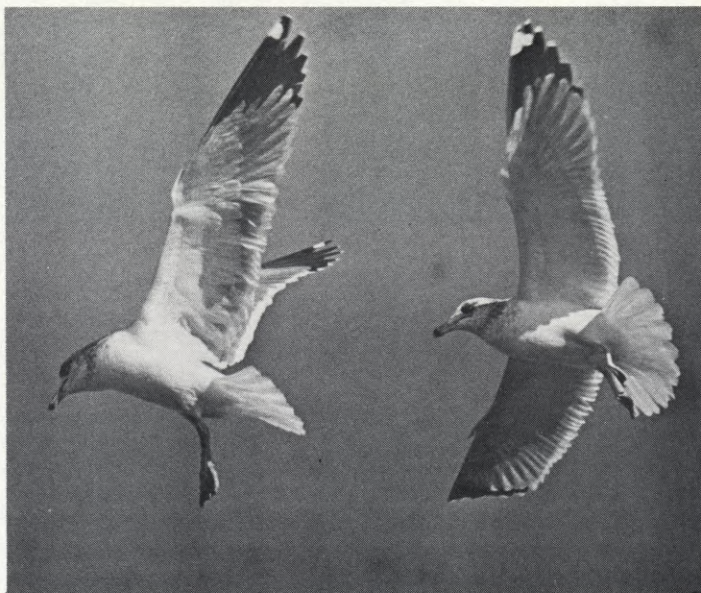
JACK COUFFER, ASC
"Jonathan Livington Seagull"

SVEN NYKVIST, ASC
"Cries and Whispers"

OWEN ROIZMAN
"The Exorcist"

ROBERT SURTEES, ASC
"The Sting"

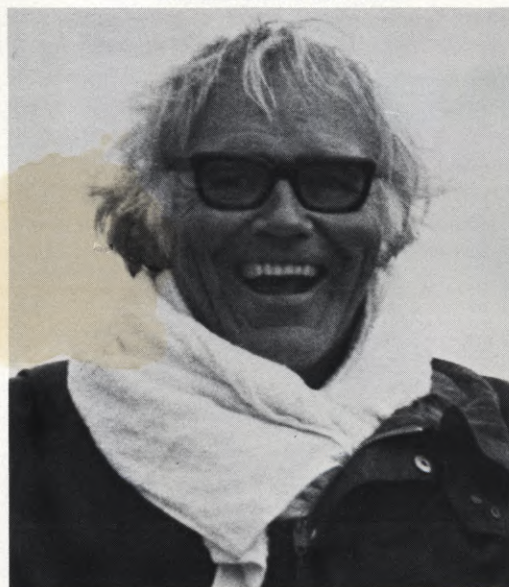
HARRY STRADLING, JR., ASC
"The Way We Were"

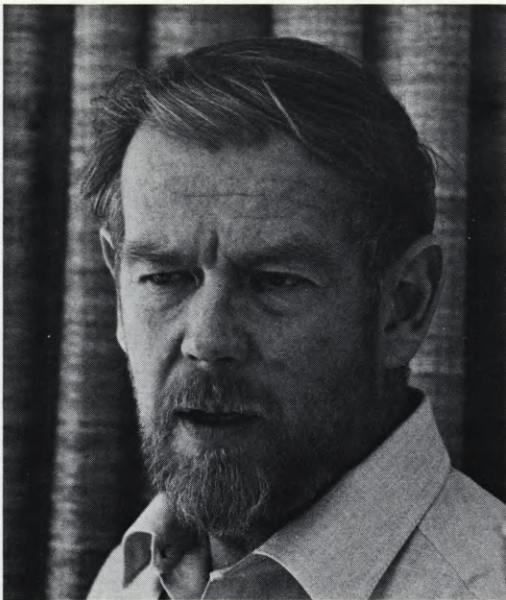


"JONATHAN LIVINGSTON SEAGULL"

"JONATHAN LIVINGSTON SEAGULL"—photographed by Jack Couffer, ASC, is the story of a maverick seagull who battles tradition and the taboos of his peers to approach perfection and become free. Adapted from the best-selling short novel by Robert Bach, the film version depends upon lyrical visual images to put across its metaphysical theme. Couffer's stunning cinematography, augmented by spectacular helicopter shots by MacGillvray-Freeman, lends the film an other-worldly beauty, creating visual mood of a type rarely seen on the screen.

JACK COUFFER, ASC





SVEN NYKVIST, ASC

"CRIES AND WHISPERS"—photographed by Sven Nykvist, ASC, is a dramatic tour de force by Ingmar Bergman, in which two sisters and a faithful maid keep lonely vigil while the third sister slowly dies. Cinematographer Nykvist, a veteran of many Bergman films, creates a unique visual style that is exactly right for the off-beat theme of the story. He contrasts the soft dreamy aura of reminiscence with the stark, chilling, hard-edge of present reality. The cold white vision of impending death, played against blood-red walls is superbly realized.

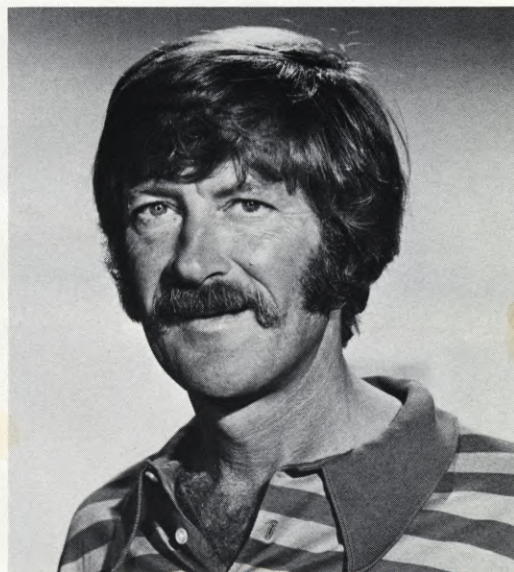
"CRIES AND WHISPERS"



"THE WAY WE WERE"

"THE WAY WE WERE"—photographed by Harry Stradling, Jr., ASC, is a romantic comedy with bittersweet undertones. It begins in the late 1930's and progresses forward for a decade or more, as the characters grow and mature. Making a famous name in cinematography even more famous, Stradling captures the nostalgia of the early period and subtly segues to a more modern visual approach as the story moves forward in time. The film has not one photographic style, but several styles, each of which is precisely adapted to the sequence which it portrays.

HARRY STRADLING, JR., ASC

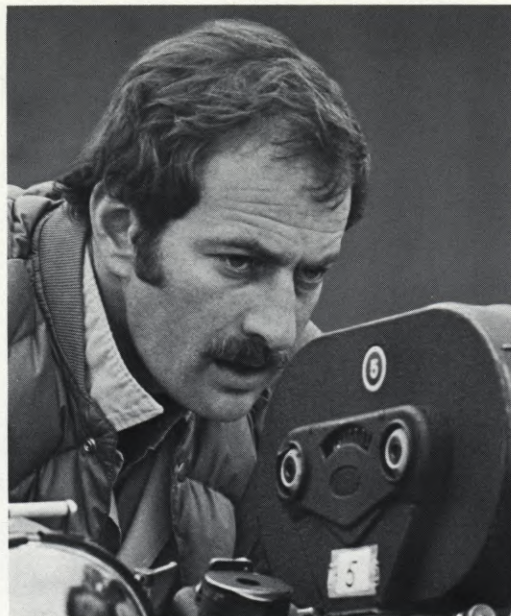




"THE STING"

"THE STING"—photographed by Robert Surtees, ASC, is a wonderful comedy-adventure romp through the 1930's, with all the elements of sheer screen entertainment out in full force. Surtees, amazingly versatile in his command of all styles of cinematography, lends a glossy touch to the creation of a mood-filled visual treatment that is precisely authentic to the period. It is wonderfully "old fashioned" photography that is exactly right for the time and place that are brought to life so vividly in this highly entertaining film.

ROBERT SURTEES, ASC



OWEN ROIZMAN

"THE EXORCIST"—photographed by Owen Roizman, is a hard-hitting and technically superlative screen version of William Peter Blatty's best-selling novel. A story balancing on the razor's edge of fantasy-reality, it demands—and gets—a visual treatment that creates a mood of impending horror in the most ordinary surroundings. Cinematographer Roizman's exquisitely controlled mood photography lends an almost tangible extra dimension to the unthinkable theme of demon-possession, adding tremendous dramatic impact to the film.

"THE EXORCIST"



New Scoopic 16mm cameras and lenses. From Canon.

When you're shooting news and documentary footage on location, surprises are no fun. You've got to be ready for anything, with equipment as tough—and as talented—as you are.

Scoopic cameras and lenses are exceptionally good solutions to the problem. They are lightweight and unusually versatile. They are designed with human engineering in mind, so they handle easily and quite naturally. Perhaps even more important, for equipment of such precision, Canon Scoopic cameras and lenses are utterly dependable in demanding everyday use.

Nothing will prove to you how good Scoopic 16mm equipment is as well as the equipment itself. See your local authorized Canon dealer for a demonstration. Or write directly to Canon for more information today.

SCOOPIC 16M

This is the professional 16mm camera that's perfect for fast-moving news and documentary work. New, brighter-than-ever viewfinder also gives you TV safe-frame markings, T-stop scale, and under- and over-exposure warnings. Exposure control is automatic or manual, at your option. Filming speeds range from 16 to 64 frames per second, plus single frame. Battery power from 12-volt rechargeable NiCd takes you through 1600 feet of film at 24 fps on a single charge. New f:1.8 Canon Macro Zoom lens has 6:1 ratio (12.5 to 75mm) and built-in macro capability, for focusing from as near as 3½ inches from the front of the lens.

SOUND SCOOPIC 200SE

All the compact mobility and handling ease of the 16M, with sound, too! Automatic gain control (AGC) assures no volume

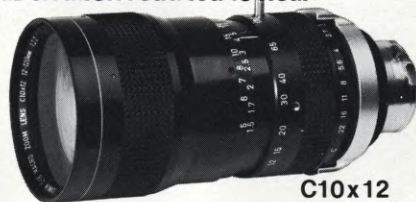


Sound Scoopic 200SE

overloads even under extreme conditions. A special rotating mirror transmits brilliantly bright images to both film plane and viewfinder. Zoom lens has 6:1 ratio and allows filters to be inserted through external filter slot for faster changes with no screwing around. Registration pin for perfect framing, with TV safe-frame markings visible in finder and auto/manual exposure control.

C10x12 MACRO ZOOM LENS

Canon's exclusive ability to manufacture fluorite and incorporate it into lenses of superb quality and light weight is seen at its best in this phenomenal lens. Zooms from 12 to 120mm for a 10:1 ratio, with chromatic aberration reduced to near



C10x12

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This is the first lens ever to be designed specifically for the new Super 16 format. Upholds all the famous Canon standards for lens quality, with fast f:2 max. aperture,



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The Filming of "THE GREAT AMERICAN COWBOY"



An Academy "Oscar" for Best Documentary Feature to the crew on wheels that followed the professional rodeo circuit to film the saga of the soft-talking, rough-riding men who are America's classic folk heroes

By KIETH MERRILL

Producer/Director

Once when I was twelve years old I tried mounting an old, gentle horse named Boots, the same way those marvelous stuntmen did in Paramount's eight-day westerns. I ran up from behind, took a great leap calculated to land my left foot in the stirrup and, at the same moment, let out a war-cry like Broken Arrow to Fury. Boots couldn't have understood what was supposed to happen. She didn't go to the movies every Thursday night at the Mormon Ward House in Farmington, Utah (population 1,200), like I did. In spite of not knowing the plan, she responded. When her rear hooves connected with my chest in mid-air it occurred to me I had startled her. It was not until I became conscious later that afternoon that I realized there was something more to being a cowboy than was immediately apparent from the movies.

When I decided to make a film about Rodeo Cowboys I thought of Boots. There was something memorable about that experience that I wanted to capture.

I met with the Rodeo Cowboys' Association (The National Football League of Professional Rodeo) in late summer at their Denver headquarters, and began to lay plans for filming one year on the pro rodeo circuit. Cowboys tend to be a little leary of "outsiders" and it required several months, new cowboy boots, and a haircut to secure the exclusive documentary film rights to their some 547 rodeos.

By the time the seemingly endless months of negotiating and money-raising ended, and filming was ready to commence, I had become so personally involved with cowboys... rodeos... and the very special mystique surrounding their distinctive world, that the complexion of my intended film had almost totally changed. To be certain, it was more profound than getting kicked in the chest by a horse. I forgot about Boots.

Rodeo, in spite of being gravely misunderstood, is rapidly becoming one of America's truly big-time professional sports. Our filming took place during a

season when the metamorphosis from the "old-timer" to the "New Breed" was taking place. This juxtaposition became an important element of the final story.

To understand our approach to filming "THE GREAT AMERICAN COWBOY", it will be helpful to understand a couple of basic things about the sport of rodeo itself. Contrary to popular belief, rodeo is not a traveling show like a circus. Rodeos are put on by a local organization, such as a Junior Chamber of Commerce, etc., which usually employs a professional rodeo producer who furnishes the animals, promotion, and even the fences where there is no existing arena. The carnival atmosphere that has grown up around rodeo with kids, clowns, popcorn, and parades, has contributed to a sometime impression that rodeo is a traveling sideshow instead of a professional sport.

But the real heart of rodeo is the cowboy... a tough, fiercely independent individual... linking us somehow to our traditional western past. In spite

(LEFT) Crew of "THE GREAT AMERICAN COWBOY" filming the Days of '76 Deadwood, South Dakota Parade. On a platform atop the multi-purpose production vehicle, Producer/Director Kieth Merrill sets up a shot. (RIGHT) The slightly worse-for-wear crew stands in the mud after the storm in Cheyenne, Wyoming. (Left to right) Cameraman Reed Smoot, Associate Producer/Soundman Alan Cassidy, Arena Cameraman Preston Fox and Producer/Director/Cameraman Kieth Merrill.







(LEFT) Producer/Director Kieth Merrill instructs world champion saddle bronc rider Dennis Reiners in operation of the Arriflex and technique of "floating" the camera at arm's length during top gallop tracking shot. (RIGHT) Cameraman Preston Fox (left) dresses like clown for tight camera-to-action work in the arena. He became so daring that he began to interfere with the second camera's shot. Here professional rodeo clown Earl Lang instructs Fox in the art of being a clown, while Merrill and Cassidy prepare to film his preparation.

of his growing stature as a professional athlete, the rodeo cowboy manages to maintain an aura of western nostalgia. This in spite of the fact that many of them were born and raised in the big city.

Cowboys travel from one rodeo to another to compete for the purse, a sum of money put up by the sponsor and based on a percentage of the entry fees, to which the cowboy contributes something, like a hundred dollars for the privilege of climbing on a horse, riding a bull, or tumbling onto a running steer with razor-sharp horns.

Traveling is really what rodeo life is all about. Champions, the guys who win more money than anybody else during one year in a particular event, think nothing of traveling 150,000 miles a year. Using every means of transportation imaginable, cowboys lovingly call their number-one pastime, "goin' down the road".

From the beginning, it was clear to me that the only way to make an authentic documentary about this spe-



(LEFT) After many months of filming rodeos, cameraman Fox was as much at home in the arena as the cowboys. Using a 10mm-100mm Zeiss zoom lens on an Arriflex, running at 50 fps, he captured the most incredible rodeo action ever filmed. (RIGHT) Merrill atop chutes at Cheyenne Frontier Days. A high-hat bolted to an aluminum plate was taped to the chutes, providing a stable turret for filming intimate expressions and activities of cowboys on their drawn animals.

(LEFT) Merrill rigs nine-time world champion calf roper Dean Oliver with the Bell helmet camera on location at the Oliver ranch near Boise, Idaho. (RIGHT) Jack Hart, at 101 years old, is the oldest living rodeo cowboy. Jack bridges the gap between the old west and its historic rodeos and the tough professional competition of the big-time sport today. Before Jack would allow himself to be photographed on someone else's horse, he insisted that the stirrups be adjusted just right.





(LEFT) Clown and bull fighter Wilbur Plauger filming with gun camera from Bell helmet fitted with 5.9mm lens. Cameraman Preston Fox also filmed close action dressed as a clown and it was while doing this that he was run over by a bull that lifted him fully off the ground three times before dropping him into the dust. (RIGHT) Cameraman Fox aboard Jack Glass's chuck wagon during a round of races at the famous Calgary Stampede. Fox is the first cameraman ever to ride in an actual race—and was satisfied not to repeat the experience.

cial breed of folk-hero was to follow him on his endless trek across the back roads and small towns of America . . . climbing on . . . bucking off . . . win some . . . lose a lot . . . but always hangin' in with the sacred cowboy oath, "TRY". To film "THE GREAT AMERICAN COWBOY" it was necessary to become like him . . . join him in his world . . . on his terms; throw our camera gear in a bag and keep moving. Like him, keep "goin' down the road".

Conceptually committed as I was to the idea of living for six months like the cowboy, throwing an Eclair, a Nagra, and a pile of other cameras and equipment into a bag posed a few more problems than stuffing an old bronc saddle into a sack.

The balance between total mobility and reasonable production demands was created with the modification of a huge Californian motor home, chassis mounted on a one-ton Ford truck. But the real key was the crew. I had worked with nine-man crews and made one-man films. "THE GREAT AMERICAN

COWBOY" demanded something in between, but seemed to favor an absolute minimum number of people, all of whom would totally commit themselves, not only to several months of filming on the road, but to a totally different way of life.

Alan Cassidy, one of the great spontaneous comics of all time, and I had been associated over several years and several films. Alan is the most likeable person I've ever met, and a thoroughly dedicated filmmaker.

Alan and his pretty blonde wife, Ann, were both working with me during the long "will we—won't we?" period that precedes independent film production ventures.

Both of them became committed to the project long before the cameras rolled . . . before the exact details and logistics of who would do what, when, and sleep where—were resolved. There must have been many times later when driving all night after working all day, dinner on the move, and only faint recollections of the last shower, must

have combined to cause serious doubts about their own sanity. Remarkably, neither Alan nor Ann ever complained. Their unwavering loyalty to me—in spite of all my filmmaker fantasies—and their unchecked dedication to the film made the total results possible. People like them are rare.

Preston Fox was introduced to me through our Executive Producer, A.P. Heiner. Years earlier I had made a film for Kaiser, of which Heiner was Vice President. The film turned out well, won a bunch of awards, and in the middle of the whole "where do we get the money" stomach ache, Heiner called me out of the blue and asked "What's going on . . . can I be helpful?" "Funny you should ask, Al . . . how does executive producer sound?" He put together the nearly \$300,000 needed to make "THE GREAT AMERICAN COWBOY" a reality.

When Heiner suggested a cameraman named Fox, I was obliged to be interested. Preston's eventual talent as an

Continued on Page 564

(LEFT) Producer/Director Kieth Merrill adjusts Bell helmet camera on veteran rodeo clown and bull fighter Wilbur Plauger. Plauger, in the consistent spirit of his profession, insisted on wearing his traditional clown hat . . . *regardless*. (RIGHT) "TURTLE ONE", as the all-purpose production and living vehicle came to be called, doubles as an elevated platform for camera and lights, as crew of "THE GREAT AMERICAN COWBOY" prepares to set up a shot with the help of former world champion steer wrestler Jack Roddy.



WHAT MAKES OSCAR RUN?

More than 3,000 voting members of the Academy of Motion Picture Arts and Sciences—in the United States and abroad—determined which film achievements were Oscar-honored during the 46th Annual Oscar Awards program.

Eligible for awards were any films which had been exhibited in 35mm or larger for paid admissions in a commercial motion picture theater in the Los Angeles area (defined as Los Angeles, West Los Angeles, and Beverly Hills) between January 1, 1973 and midnight of December 31, 1973, if the picture played at least seven days starting before midnight of December 31.

Qualified for Oscar consideration in 1973 were 327 motion pictures. Included were several foreign productions, some of which were originally made in a language other than English. The latter are eligible only if they had English dialogues or titles.

Each branch of the Academy of Motion Picture Arts and Sciences conducted its own nominating procedures under rules established during the 46-year history of the awards program.

In the Art Direction, Costume Design, Cinematography, Film Editing, Music and Sound categories, a preliminary ballot was sent to members of the respective branches, who then selected 10 achievements for consideration. After a series of screenings, a nominations ballot listing the 10 achievements was sent to members of the branches, who this time vote for not more than five. The five achievements receiving the most votes then became the official nominations.

The Academy invited every country

to submit its best film for consideration for the Foreign Language Film Award (best feature-length motion picture produced by a foreign company with a basically non-English sound track). Each country's entry was selected by a committee within that country. Only one picture was accepted from each nation, and all were screened by the Foreign Language Film Award Committee, a cross-section of Academy membership. This committee nominated five contenders.

Special Visual Effects, Documentaries and Short Subjects also were nominated by committees. Scientific or Technical Achievement Awards were voted by the Board of Governors, based on the recommendations of the Scientific or Technical Awards Committee.

In the nominations procedure, voters were confined to the individual branches and special selection committees. Cinematographers nominated cinematographers, directors nominated directors, costume designers nominated costume designers, actors nominated actors, etc.

After the nominations ballots were tallied and nominees announced, all nominated pictures were screened for the active Academy membership. Final ballots were sent to all voting members, who voted for one achievement in each of the 21 categories. There can be no write-ins.

In the final balloting, all voting members voted on all of the awards except those determined by the Board of Governors—Scientific or Technical, Honorary, Jean Hersholt Humanitarian, Irving G. Thalberg Memorial Awards.

Ballots were tabulated by Price Waterhouse & Co., and results were kept secret until announced during the awards program. No one but Price Waterhouse ever saw the ballots after they were marked. ■



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1. Lightweight, self-contained design, for maximum freedom of movement with minimum effort.
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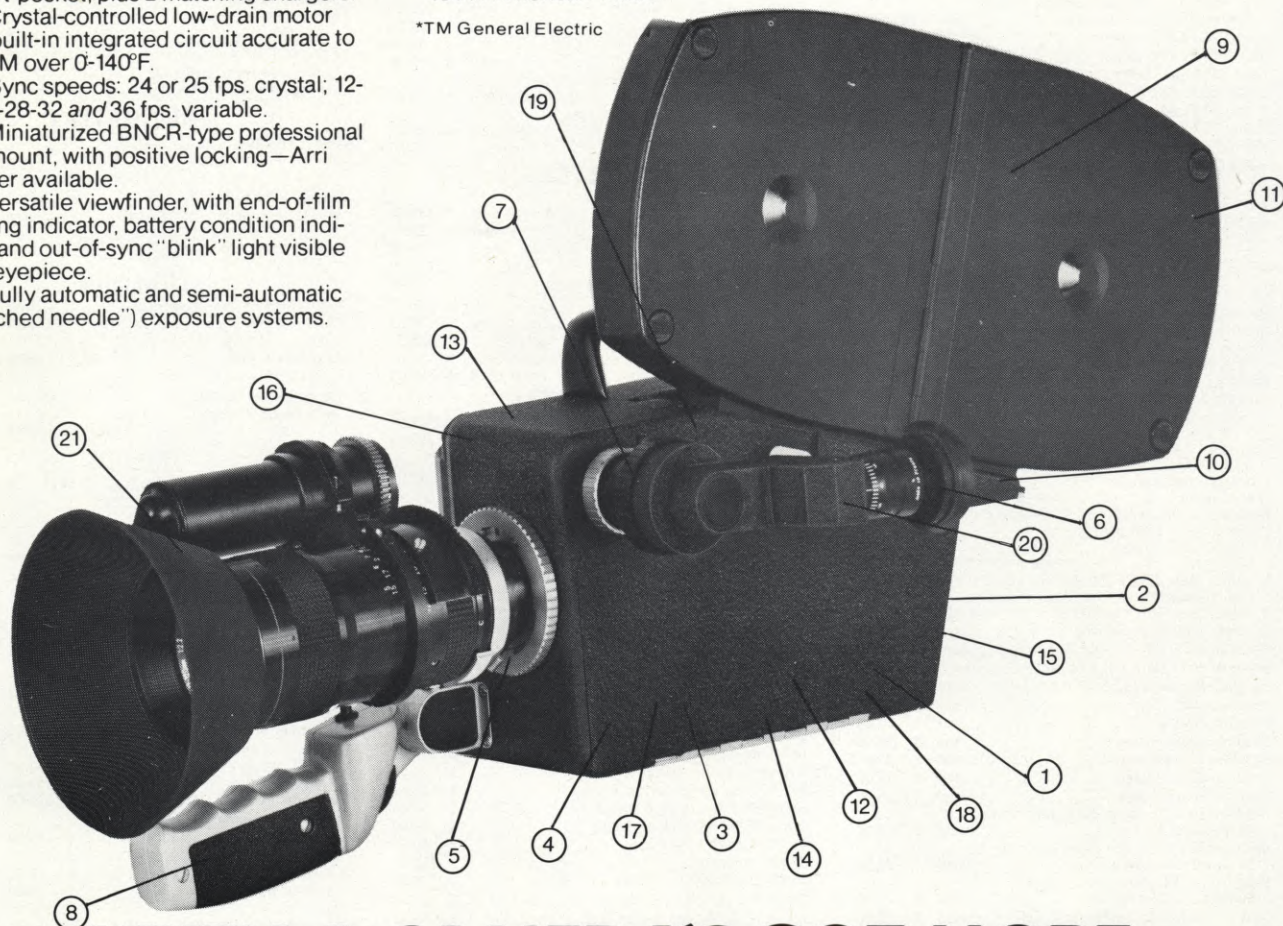
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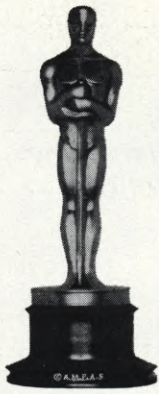
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“LIFE TIMES NINE”

Nine young film-makers between the ages of 11 and 15 team with professional crews to create commercials for “LIFE”, and end up with an Academy nomination for “Best Short Subject”

By PEN DENSHAM

Director/Cameraman

As a professional cameraman, how would you like to work under the direction of 11-year-old kids? ... For me, it was a very rewarding experience in its own right and, incredibly, it led to a nomination for an Academy Award.

This project was initiated very soon after the formation of Insight Productions in 1970. One of the aims that John Watson and I set for ourselves in forming the company was to make films that would have a genuine educational value. To us that meant creating something quite different from the “talking books” that are so often presented as films for education.

It seemed to us that very few people had explored how kids perceive. We decided that one way to learn how youngsters *perceive* would be to study

how they *communicate*, so we went to schools to watch them making films, to discuss their films with them, and also to check out the relevance of our own. It was when we noticed that often a child would have a strong film idea but then be overwhelmed by the technical problems that we decided to enlist the help of young people to make a unique movie. Eventually there emerged “LIFE TIMES NINE”, our Oscar nominee.

The concept was a simple one: the kids would write the scripts and “direct” all stages of production thereafter, while professionals would provide all the technical “know-how” (as cameramen, editors etc.). The children would fulfill the same role as directors do on all professional films and would have a film company at their disposal. An early

decision was to make a lot of short films rather than a longer one. In that way we could involve more kids and each could personally make a film, rather than simply being part of a group effort. Next, a format had to be selected which would involve a low budget, an easily controlled length and a clearly-defined and familiar concept.

Thus, the next decisions: to make “commercials”, and to give them all the same “product” to sell: “LIFE”. We figured that an anthology of filmettes on what life means to young people would intrigue audiences of all ages.

Being new in business, we had no investment capital available, so we took our idea to the Province of Ontario Arts Council and applied for an “arts grant” of \$5,000.00. The idea clicked. We got our grant. We said we’d spend it on out-of-pocket costs, and any proceeds to Insight would come through print sales.

To find kids to work with we went to Toronto’s “free schools”, which don’t have fixed timetables and, therefore, allowed us to take the students out of school for a number of hours or even a whole day. We started with an older group (14-16) who had some prior experience in film production, before moving on to a younger group with no background in the medium.

The process of familiarizing the kids with the terms, techniques and potentials of film-making naturally took longer with the second group, but in both cases the greater battle was that of breaking down the teacher-pupil relationship and replacing it with the concept of “co-workers”. Their natural inclination when submitting ideas was to give us a “correct answer”. We explained that we were more interested in what they themselves had to say. Gradually they ceased to treat us as “teachers” or “experts” but rather as

<p>LIFE Times NINE A professional movie made by kids. → START</p>	<p>1. The BIRD BY: Kimmie Jensen</p>	<p>no. 2. by: Jordan Hale LIFE, LIFE, LIFE</p>
<p>3 TANK by: Paul Shapiro</p>	<p>4 GHOSTS BY: Marilyn Becker</p>	<p>no. 5 PEANUT by: Ricky Clarke.</p>
<p>7 CHESS MEN BY: Melissa Franklin Designed by: Jordan Hale.</p>	<p>PICTURES by: Celia Merkur EIGHT</p>	<p>by: Andrew File 9 MUD PUDDLE Life Times Nine is a fourteen minute colour film, combining nine commercials for life, written and directed by kids. Produced by: insight and Toronto.</p>

CANADA'S 1974 'OSCAR' NOMINEE

friends and co-workers, and acquired the confidence to start directing us.

The kids watched and discussed a lot of film, worked with sample storyboards for commercials, and shot short movies on Super-8mm before devoting their energies to writing scripts for "Commercials for Life". About two-thirds of those involved came up with a finished script, for which he or she then became the director. We had a total of nine commercials to produce.

We budgeted \$500.00 per film, with \$500.00 for combining the individual commercials into one movie. We asked the outside people we had involved to volunteer their time or to take reduced fees. We received tremendous cooperation from people who were equally enthused with the concept. The kids had at their disposal the services of top-notch people, such as the personnel of Bellevue-Pathé, one of the best-equipped laboratories and sound studios in Canada.

Of course, we never dreamed that we were helping create an Academy Award nominee, nor even a film that might be a commercial success. But we did realize that observers would be quick to criticize us if they thought we were "manipulating" the kids. All the way through, therefore, we bit our tongues to make sure we weren't pushing them. Any "suggestions" we made were always based very closely on what they wanted to do. Terminology was sometimes a problem. Often they knew what they wanted but didn't know how to describe it. We made sure they always understood the options they had, and we guaranteed them complete veto power over the artistic content of their productions.

All of the young directors were amazed at how long it took to make a film and how much laborious work was involved in every step of the production, even to the extent of counting frames to ensure synchronization. One of the girls commented afterwards that she would love to make another film but would hate to *edit* one.

We do not claim that our youngsters are all budding David Leans. In fact, they represent a cross-section of ordinary school-age kids who were given an opportunity to create in a medium the ground rules of which they have been exposed to daily throughout their lives. Most doubted their ability to "make a film", while, on the other hand, a few underestimated the difficulties. Our job was one of positive encouragement in all situations. This was easy because we honestly believed that each of the kids had a script that was really a strong,



Eight of the nine young Canadian film-makers whose films are included in "LIFE TIMES NINE", the Academy-honored collection of "commercials" on the subject of "LIFE", made under the auspices of Insight Productions, Toronto, (Left to right) Robi Blumenstein (14), Kimmie Jensen (11), Celia Merkur (14), Jordan Hale (13), Melissa Franklin (14), Paul Shapiro (15), Andrew File (13) and Marilyn Becker (15). Absent from the photograph is Ricky Clark (11).

interesting document. We treated them all as we would adults, and I believe that anyone who attempts to work with young people in a creative context will have a similar chance of success if he interacts with them as equals. It will be a valuable learning experience for both parties through the sharing and exploration of ideas.

BIRD—by Kimmie Jensen, 11

Synopsis: *A little black boy in a dishevelled house draws a bird,*

then carries his drawing to the window. The bird comes to life in his hands, and flies away, as the boy peacefully waves goodbye.

When we sat down together to draw storyboards, I was afraid Kimmie would call for animation of the bird coming to life. Instead—she chose the "direct cut" method.

We went over her script, discussed all the shots and how she wanted to see them. She wanted the camera to trace

(LEFT) John Watson and Pen Densham, partners of Insight Productions, shown on location. (RIGHT) Eleven-year-old Kimmie Jensen, who created the lyrical short film, "BIRD", enjoys a joke while planning her storyboard.



down cracks in the walls of the house and then, as it roamed around the room, to reveal a photograph, then pan over to the little boy. "I want to see what he's drawing," she insisted. She also required it all to be shot in slow-motion. Because we were working in a room with a very low ceiling, as cameraman, I wasn't capable of producing the shot she called for in the conventional way. Instead I covered the eyepiece to avoid getting flares on the lens, and, using 5.7mm wide-angle lens, held the camera at arm's length and "floated" it up and down the cracks. I was able to keep it quite low, about chest-high, and get a smooth flow. The 5.7mm fixed lens gave us a very wide depth of field and, thus, stayed in focus very close to the wall. We kept the lighting very flat.

The pigeon-handler brought along six pigeons, which was lucky because the actor was afraid of the birds and there were many premature launchings. We got the shot we needed with one bird to spare.

We had difficulty shooting prolonged closeups of a bird in flight, so we had to "stretch" a shot. We took our 7252 material to the optical lab and asked for a black-and-white high-contrast dupe negative with no middle tone. What was originally a dark bird against a white background now became a white bird against a dark background, and we superimposed that over the boy's head, as he waved.

We didn't really explain this technical problem to Kimmie. She just wanted to see a closeup of the bird flying away as the boy waved. If we had been able to shoot a prolonged closeup, the technical tricks would not have been necessary.

(LEFT) Paul Shapiro, 15-year-old director of "THE TANK" holds a long-lensed camera in front of his main prop, a full-sized tank. (RIGHT) Eleven-year-old Ricky Clark lines up the camera on the prop which plays the title role in his film, "PEANUT".



LIFE, LIFE, LIFE—by Jordan Hale, 13

Synopsis: *An animated version of a 20-line poem on life that Jordan wrote.*

She was doodling, looking for a script idea and writing "life, life, life", then continued on that theme—adding little nuances as they came to her. Next, she started producing art work for each significant phrase or word.

She and seven friends went into the recording studio with the script and took turns to read the poem. Jordan listened to the different voices, then said which ones she liked. She then supervised the sound editing, with different voices chipping in different lines.

We shot the visuals in a style she was familiar with, both the cutting and the use of camera movement. We set the pictures up in order, played the tape, and she decided what she wanted to happen. She liked, for instance, the idea of having the picture "giggle" in sync with a giggle on the sound track. Between us we managed to achieve that.

We avoided using an animation stand by shooting the pictures off a wall, lit by matching lights at 45 degrees. She could check the composition through the viewfinder to see if it was what she wanted.

THE TANK—by Paul Shapiro, 15

Synopsis: *A tank salesman (straight-faced imitation of a car salesman) extols the virtues of his latest model, "a tank to call your very own." By joining the army, he suggests, "all this can be yours." The "all this" is demonstrated in scenes of war and carnage as*

the salesman looks increasingly insane.

This was the first Commercial for Life that we shot and it completely cured our nervousness about working with young people.

Paul called for a script that was full of jump cuts. He personally called for every shot in the film except where the actor improvised once by swinging on the barrel of the tank. Paul liked that so much that he kept in it.

I had never seen a film shot in jump cuts in this way, and I was convinced it wouldn't edit. But I was wrong, and Paul got his film the way he wanted it.

We worked with an amateur actor, a busy architect friend of Paul's, who only gave him two hours to shoot it. So we worked in a helluva hurry. We had to post-sync all of the sound for the film, and the actor, although an amateur, was able to do all that in an hour. If someone had imposed those limitations on me, I'd have panicked. But Paul didn't know that wasn't "enough" time, so he just carried on.

He wanted the salesman to develop into a maniac at the end of the commercial. He knew about the distortions a wide angle lens can produce, so he called for the cameraman, Bob New, to build up to very distorted and ugly close-ups with the 5.7mm lens.

Paul asked for multiple freeze-frames at the end of his commercial. At first, we had to say no to that, because of cost. But when we had finished the nine commercials we found there was just a little money left over so we went back, and he got his multiple freeze-frames.

GHOSTS—by Marilyn Becker, 15

Synopsis: *Two ghosts in black robes can't make up their minds whether or not to arise from the dead. One holds out to the other a series of temptations—to cycle, play golf, tennis—but these all prove unattractive. Then he is reminded of an old girlfriend and the ghoul decides with enthusiasm to return to life. The closing shot shows the two of them happy with their girlfriends. There's a freeze frame while a voice-over asks: "Wouldn't you want to come back to life? For one reason or another?"*

This was a full one-day shoot in a graveyard. In discussing with Marilyn the kind of mood she wanted, she kept talking about a very eerie, frightening feeling. We considered letting off smoke bombs to create mist, but then I showed

her what it looked like when you put Vaseline on the lens.

She liked that, so we kept the Vaseline on the camera right through the film. In the sequences when the ghosts are considering the pros and cons of living, the Vaseline is thin; when they are in the graveyard, it is laid on thick.

Marilyn also wanted the first ghost to materialize in front of a tombstone. We achieved this with a lock-off dissolve—the camera held rigid so you can shoot a scene without a person in it, have an actor step in during the shot, then edit out the frames where he stepped in and dissolve the two pieces of film together. Thus the ghost appears in the middle of the scene as if from nowhere. She also called for pop-offs, so the ghouls just kept disappearing and reappearing.

I had trouble illuminating inside the hoods of the ghosts and had to throw in a lot of fill light. We also had trouble shooting wide shots, because we didn't own enough reflectors, so I shot with a three-quarter light to create a rim light of sunlight, rather than a harsh frontal light.

Our locations were plagued by traffic noise, so we were again forced to post-sync the dialogue.

We used 7252 film. It is so fine-grained that it lets you get into all sorts of areas. You can push it one stop; you can underexpose it one stop; and it gives you great flexibility. We used Arriflex cameras throughout.

OLD FOLKS—Robi Blumenstein, 14

Synopsis: An old couple stroll about contentedly, obviously with lots to chat and chuckle—two of life's satisfied customers. The soundtrack is a song: "Do what you want to do, be what you want to be..."

Robi wanted a soft, friendly kind of film, so Bob New, the cameraman, shot almost everything with a 300mm lens, which created a lot of atmosphere. He tried to maintain very pretty rim lighting; the actors almost had halos caused by sunlight on the backs of their heads.

Robi talked about the mood he wanted, rather than calling for specific shots, so New just kept letting him look through the camera to see if the material being shot was what he wanted. He had John Watson edit this footage to an original piece of music composed by Paul Shapiro. Robi selected the piece and supervised the music recording session with Paul and his group.

CHESSMEN—by Melissa Franklin, 14

Synopsis: Chess pieces complain about their positions in the game



Fifteen-year-old Marilyn Becker, director of "GHOSTS" accepts Silver Hugo award for "LIFE TIMES NINE" at the recent Chicago International Film Festival. Award was presented by Festival judge John Russell Taylor, former film critic for the London Times and currently a U.S.C. Cinema Professor.

and criticize their neighbors right up to the time of being put away in their box, which is in the shape of a coffin. Voice-over: "Life—Appreciate."

We put Melissa in touch with people—Bob Borg of Grafilm, Dennis Pike of the Ontario College of Art, Jim Mackay of Film Design—who would take the time to explain animation to her and show her how she could bring about her commercial. She used a professional narrator to characterize all the pieces and a professional musician gave her the theme. She drew up her own sound

charts so she knew exactly for how many frames the characters' mouths would have to be open. For chess pieces she used two-dimensional paper cutouts and animated their mouths with cell overlays. We had to shoot this one twice. The first time we shot on a 16mm animation stand and used a Bolex camera. Melissa supervised the shoot, designed all the pieces herself, and drew up the characters and layout. But we had a lot of camera chatter and an unhappy final result. We reshot it on a much more expensive and intricate 35mm machine. The 35mm negative

Continued on Page 605

(LEFT) "LIFE TIMES NINE" co-producer John Watson with director Marilyn Becker during mixing session for her film, "GHOSTS". (RIGHT) Fourteen-year-old director Robi Blumenstein works at the Steenbeck editing console on a sequence for his film, "THE OLD FOLKS".



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ACADEMY AWARDS

Continued from Page 535

membership in the American Society of Cinematographers. The members of A.S.C. extend hearty congratulations and a most sincere "welcome aboard" to this warm, genial and highly talented artist of the camera.

In past years, a regular Award was made annually for Special Visual Effects, but under a recent rules change, the Award is no longer mandatory and comes under the category of Special Achievement Awards, to be voted by the Academy's Board of Governors "at such times as in the judgment of the Board of Governors there is an achievement which makes an exceptional contribution to the motion picture for which it was created, but for which there is no annual Award category."

This year, no Award was voted in the category of Special Visual Effects, but there are many who feel that such recognition should have been accorded to Marcel Vercoutere for his stunning and technically ingenious effects for "THE EXORCIST". Too bad that the Academy Board of Governors did not agree.

In time to come, the 46th Annual Academy Awards Presentation may come to be known as "the year of the streaker" because of the unscheduled appearance of a mother-naked young man who streaked across the stage just as David Niven was about to introduce Elizabeth Taylor. Niven, loaded with *savoir faire*, nearly brought the house down when he ad-libbed: "The only way he could get a laugh was by

showing his shortcomings."

The streaker, undaunted by this slur, was just barely (no pun intended) seen by the TV audience, as the camera was on a medium close shot of Niven when the young exhibitionist went loping across the stage. He eventually found his way up to the Press Photography room where he said his name was Robert Opel and seemed anxious to be photographed. Our photographer obliged by taking his picture and it appears in the lower left corner of Page 533, as part of

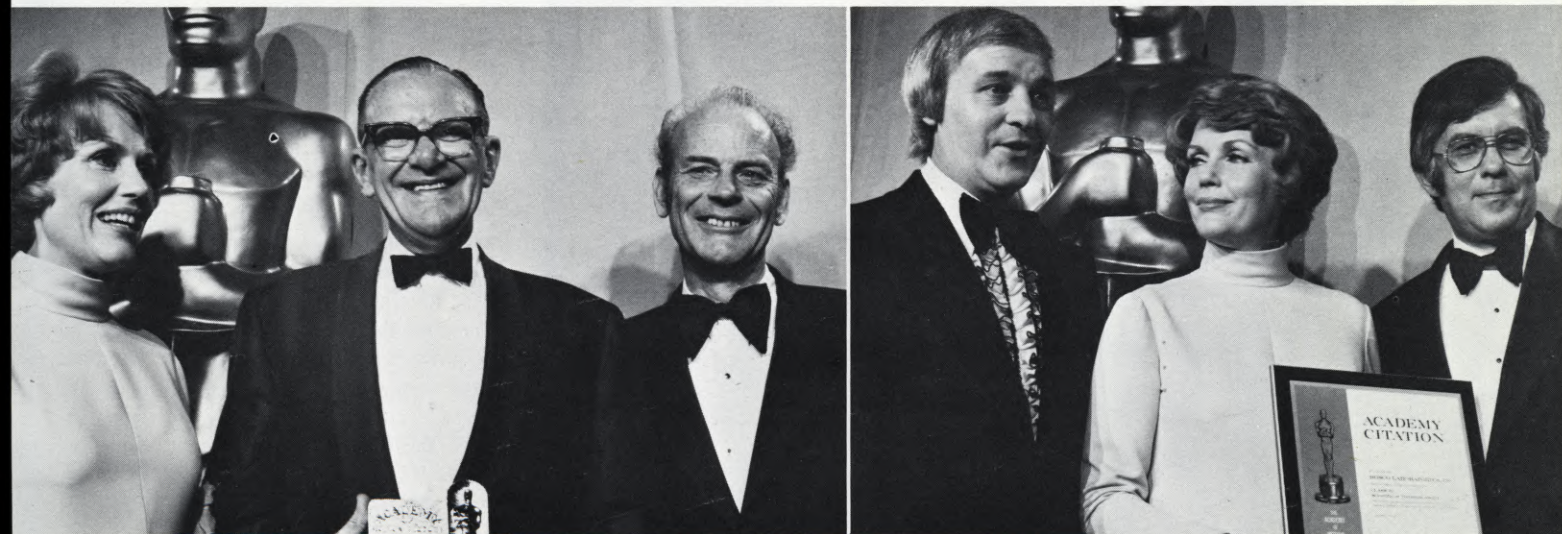
the behind-the-scenes montage of the Awards Presentation.

To the layman, the Scientific or Technical Awards tendered by the Academy each year are the least important, and it is perhaps for this reason that such awards are presented off-camera prior to the telecast of the show. But to those who work in the film industry, such awards are of the utmost importance, for they represent the technological progress within an industry

Continued on Page 572



The Academy Scientific or Technical Awards, of utmost importance to the technological progress of the motion picture industry were presented off camera by actress Elizabeth Allen. (ABOVE) Paul Klingenstein, President of Arriflex Company of America and Robert Arnold, of Arnold and Richter, Kg, Munich, accept Class II Award for development and engineering of the Arriflex 35BL Camera. (BELOW LEFT) Harold A. Scheib of Research Products Incorporated holds Class II Award presented for the concept and engineering of the Model 2101 optical printer for motion picture optical effects. (RIGHT) Miss Allen holds Class III citation plaque presented to Rosco Laboratories, Inc., for the development of a complete system of light-control materials for motion picture photography. Stan Miller, President of Rosco at right.



HOLLYWOOD IS ALIVE AND WELL AT TBS IN BURBANK

On its Second Anniversary, The Burbank Studios lot is bustling with activity on a year-around schedule

By ROBERT K. HAGEL

General Manager of The Burbank Studios

(Editor's NOTE: For those doomsayers who are fond of stating: "Hollywood is dead!", a visit to The Burbank Studios should quickly convince them (to paraphrase Mark Twain) that the report of its death is greatly exaggerated—for the huge lot is humming with activity and, at this writing, strained to capacity with motion picture, filmed television, video tape and recording production. For some forty-plus years the sole domain of Warner Bros. Pictures, the lot is now shared by that company and Columbia Pictures, with the Columbia Ranch (down the road a piece) serving as a handy "on location" extension of the studio's own considerable backlot. During the short two years that the new entity known as The Burbank Studios has been in operation, it has created a dynamic image and emerged as a revitalizing force in the Hollywood motion picture, television and recording industries. Following is a speech made on February 21, 1974, by Robert K. Hagel, General Manager of The Burbank Studios, on the occasion of the production facility's second birthday:)

February 21, 1972, was a day of total terror at The Burbank Studios. It was our very first day of business, and in spite of the extensive thinking and planning that took place prior to that

date, there wasn't a person here who didn't wonder where we were going and whether we could handle it. It was as if we suddenly woke up and found ourselves in business.

Fortunately for everyone on that first day, "THE THIEF WHO CAME TO DINNER" was the only feature being filmed. But, a week later, "LOST HORIZON", which was the biggest film that had been done in a studio for a long time, went into production. Through a lot of talented believers putting forth a lot of extra effort, "LOST HORIZON" got made and made well.

Today, on our second birthday, The Burbank Studios is the busiest production center in the country, if not the world. Currently in production, using TBS facilities, are 4 television series, 7 pilots, 5 ninety-minute movies for television (some of which may be pilots), 2 features, 3 video tape shows, and 2 TV commercials. And, this isn't even our most active day. There have been times during the past year when up to 25 separate production companies per day have been working at TBS. What's

especially significant is that even though we've had stages closed for major reconstruction and modernization, our total number of shooting days has increased from 2607 the first year, when we thought we were at 100% capacity, to 2873 the second year, which put us over our capacity and forced us to reopen shooting stages at our Gower facility. And, our gross payroll for the second year was \$21,000,000, which is \$5,000,000 higher than that of our first year. While our basic weekly TBS payroll remained at about 4100 people, our total W2 forms sent out rose from 25,400 to 28,000.

Much of our recent activity came from the traditional types of work on feature films which is done at most film production centers. Among those types of activities taking place here were all of the post-production and the sound on "THE EXORCIST". In that film, the most modern record recording procedures were combined with the most sophisticated film techniques to obtain the desired sound.

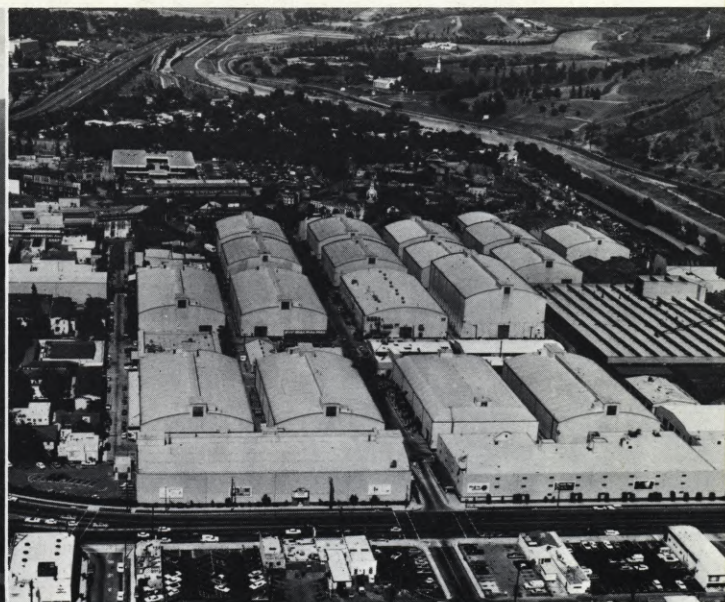
Other films using our facilities this past year include Columbia's "THE WAY WE WERE", Warner Brothers' "MAGNUM FORCE", and their respective upcoming features, "FOR THE LOVE OF PETE", and "MAME". Meanwhile, some of the many television series that kept us busy were "THE WALTONS", "POLICE STORY", "KUNG FU", and "THE FBI".

But, a lot of the work we did was not what you normally find being done at a film-oriented studio, because in this past year TBS has evolved into a total production center with the addition of complete video tape and record recording facilities.

Our new \$1,000,000 video tape stage which opened on November 14, 1973, has been busy every working day. The first special to be taped there, beginning the day after the opening, was George Schlatter's "ONE MORE TIME", which aired on CBS. That was followed in quick succession by "MARRIED IS BETTER", a Joe Cates Production for the Bell Systems Family Theatre, which aired on NBC; and the first program of Stanley Kramer's "Judgment" series,

Robert K. Hagel, President of The Burbank Studios (left) receives an Energy Conservation Award from Burbank Councilman Leland C. Ayers (right) while George Flaherty, Vice President IATSE (center) waits to present a similar award on behalf of the State of California. The presentations were made at a recent luncheon marking the Second Anniversary of TBS.





Views of The Burbank Studios. Formerly, and for many years, the home of Warner Bros. Pictures alone, the vast lot now accommodates that production company, as well as Columbia Pictures. It is currently the busiest production center in the country, if not the world, with four television series, seven pilots, five 90-minute movies for TV, two features, three video tape shows and two commercials shooting on the lot.

"THE TRIAL OF JULIUS AND ETHEL ROSENBERG" for ABC-TV. Currently, the stage is being used by Screen Gems for "MISS KLINE, WE LOVE YOU", an upcoming presentation on ABC's "Afternoon Playbreak" series.

Because we're convinced that video tape will continue to be a major force at our production facility, we have recently opened our doors to the Local IATSE Guilds for their use in voluntary training programs designed to acquaint their film-oriented members with video tape technology. The response to this idea has been tremendous and we've recently conducted a seminar which was attended by 275 members of the Sound Technicians Local No. 695 (IATSE). Currently on Saturdays our video tape facilities are being made available for a hands-on training program for members of International Photographers of the Motion Picture Industries Local No. 659 (IATSE). This is a 16-week program which is being run by Local No. 659 and Columbia College. TBS is providing the stage and equipment. Our next seminar is being planned for the Motion Picture Editors Guild Local No. 776 (IATSE).

Another area in which we are introducing film-oriented personnel to a related art is in record recording. A little over a year ago we opened Music Recording I... a complete record recording facility... as part of our total production center concept. It was an immediate success and on November 14, 1973, we opened Music Recording II. In that short period of time, the income derived from the new record recording

department has become equal to the income derived from motion picture and television scoring.

But, of course, without the cooperation of Sound Local No. 695, it could never have happened. As part of the experiment of introducing record recording into a production facility, Local No. 695 and TBS entered into an exclusive, unprecedented agreement for the use of the union's personnel for record recording. Because of that agreement, the stages which previously have been used only about 6 hours a day, 7 months a year for scoring, are now being used for scoring and record recording at least 12-14 hours a day, 12 months a year, and on weekends, too. Sometimes both record recording stages are in use 24 hours a day, 7 days a week. The stages were that busy in December, when the entire orchestra and chorus of NBC Entertainment Corporation's road show production of "PETER PAN", under the direction of Paul Weston came to TBS. The musicians were joined by the entire cast as well as Producer/Director Michel Grilikhes. In a non-stop two-week session, the whole show, dialogue included, was recorded for use during the year-and-a-half of scheduled performances.

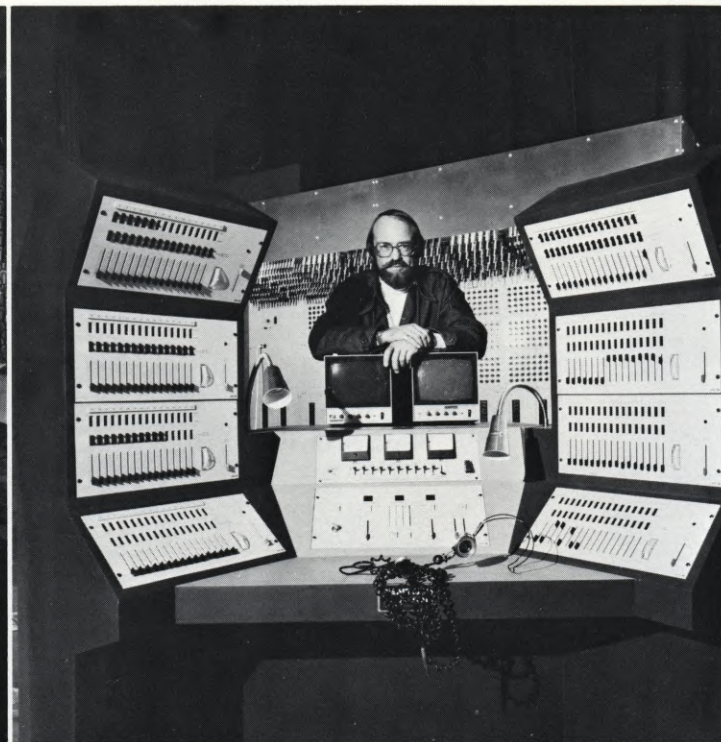
At the present time TBS is the only production facility which has an agreement with Local No. 695, thus enabling us to engage in record recording.

Because we're so new in the record recording industry, we're especially pleased with the number of top artists who have used our facilities. It's hard to know where to begin and end a list, when every artist using a stage is so

superb, but among the performers recording at TBS this year were Gordon Lightfoot, Quincy Jones, Frank Sinatra, Bob Dylan, Sammy Davis, Jr., Aretha Franklin, Spike Jones, Jr., Carl Reiner and Mel Brooks, Ringo Starr, and Barbra Streisand. And, while motion picture scores done at our new facility are receiving critical acclaim, or even Academy Award nominations, as in the case of "THE WAY WE WERE", records recorded here are also being heralded, such as Neil Diamond's album, "JONATHAN LIVINGSTON SEAGULL", which was certified Gold almost upon release.

Our record recording business got off to such a fast start that it was necessary, initially, for TBS to seek talent from outside the film industry to do the record mixing because there were no personnel with dual training available from within the guild. Now, however, talent is being drawn from the membership of Local No. 695 to be trained for record mixing.

This past year has been the year in which TBS has made all of the major physical changes necessary to be where we want to be as far as facilities are concerned. The key from here on will be to remain so flexible and so modular that we can be a part of everything that's happening in the area of entertainment production. For example, if holograms become a working reality tomorrow, we can accommodate them from our position right now. But that probably is still a long way off. What is a reality today, and what The Burbank Studios plans for this year, is to introduce a new technical advancement to



(LEFT) A view from the control room of the six-month-old TBS Music Recording II, a stage designed specifically for the solo artist or small recording group. (RIGHT) Tom Belcher, Director of TBS Video Tape Services, is seen behind the lighting console designed and engineered especially for Video Tape Stage 2. It is backed by 128 dimmers and a memory bank of 99 settings.

the industry which not only is feasible using today's technology, but is also a practical example of how we can use our modular facilities. That technical advancement is the linking up of our video tape and record recording complexes so that we will be able to do live, concert-type television programs, while simultaneously video taping them and cutting an album. This will be a first in the industry.

For the audio portion of the video tape show, the music will be mixed output from our console.

The input of music can be handled in two different ways. If there is a group which is musically self-contained and they want to play directly to the live audience on the video tape stage, their output will be picked up from the video tape stage, fed into the recording console in our music complex, and re-recorded in mono, stereo, 4-track or even 24-track while at the same time the audio for the television show is being mixed.

If, however, the artist is backed by musicians who need not appear on camera, these musicians will be located on one of our music recording stages. Their output will be fed directly into the record recording console, and a mixed output from the console will be fed onto the video stage for a composite reference. The advantage to the second alternative is that the musicians have the benefit of the almost perfect acoustics

of the recording stage which, of course, no sound stage can equal.

Naturally, the two methods of recording can be combined or interchanged during any program. No other facility today has these capabilities or options.

Where else are we going this year?

Perhaps I should answer that by telling you where we're *not* going. For the first time in many years, a major production center, in this case, The Burbank Studios, is not going on the usual, annual production hiatus. The split television season combined with upcoming features including "DOC SAVAGE", "FUNNY LADY", and "ALICE DOESN'T LIVE HERE ANYMORE", as well as television specials being scheduled for our video tape complex, plus record recording activity will carry the employees of The Burbank Studios through what is normally the industry's bleak production season.

What The Burbank Studios has achieved so far is due largely to the support and good will of people. Both the people within TBS and the people within the Southern California community. We know that without a close, warm relationship between ourselves and our neighbors, we could not have done so much, so fast. Therefore, we feel it is only just that we return the cooperation we have received by involving ourselves in the community through opening our doors and giving our time

to numerous organizations such as Actors and Others for Animals, The Fair Housing Congress of Southern California, The Leukemia Foundation, Christmas Seals, Synanon, Bridge (drug-related problems), and NAACP (Legal Defense Fund). We also try to lead the way and set a standard in meeting community problems, such as the current energy crisis. And we've initiated a cooperative program with the Cinema Department of USC and a Field Study program with California State University at Northridge. In the Field Study Program, outstanding selected students from the Motion Picture and Broadcasting Departments earn university credit while participating in observation workshops in both videotape and film at TBS. The students also hold individual one-to-one meetings with The Burbank Studios' department heads in order to explore the areas of their greatest interest as well as to get an accurate overall view of both the business and production procedures required to operate a production facility.

Of course, our involvement with students is as much to our advantage as it is to theirs, because no matter where we plan to go from here, it will be with the bright new people entering the industry who will continue and improve upon our plans for tomorrow. With their help, we will be able to say for many years to come, "Hollywood Is Alive and Well at TBS in Burbank". ■



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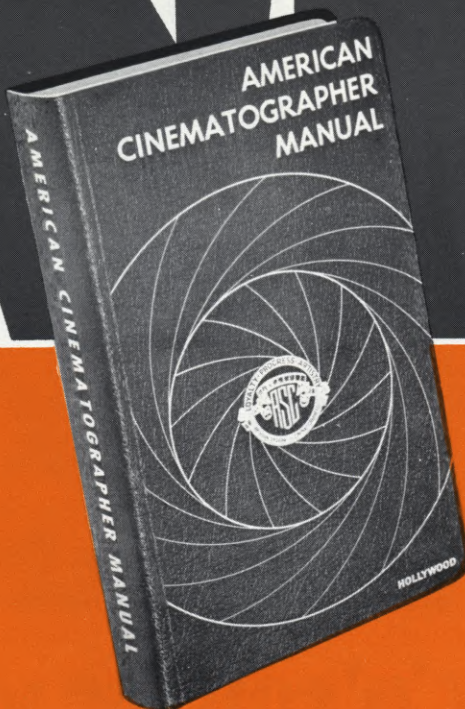
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"GREAT AMERICAN COWBOY"

Continued from Page 545

arena action cameraman turned out to be superb. Even he was surprised how steady he could hold an Arriflex six feet from a thrashing, stomping bull, and how long he dared stand there, and how incredibly agile he was in leaping tall fences in a single bound. I rounded out the crew of three.

The majority of the film was made with this three-man production team . . . with a lot of help from our wives. Working on a relatively small budget with a shooting schedule stretching into

months, it was essential to staff the production the way we did, with versatile, all-purpose-type film-makers. Guys committed to a total consuming experience, and not just another shoot.

Considering the scope of the task before us, we would shuffle our feet a lot and search for excuses when people asked about the size of our crew. "Three guys," they'd say . . . "with wives and kids", then wander off mumbling something about the sanity of our investors.

Like so many times in the business of making films, trying to give an acceptable explanation was more painful than

simply absorbing the implied criticism and pressing forward with personal confidence in one's own beliefs.

If the filming of "THE GREAT AMERICAN COWBOY" is at all distinctive, it comes not from the elaborate things that were done, but rather from their absence. The simplicity demanded in a feature-length dramatic documentary made by three film-makers gives the film its greatest strength.

For several critical locations a fourth cameraman was brought in. At one point we had seven cameras rolling for the Omak Suicide Race in Washington State; it was a one-day shoot. Alan Cassidy, associate producer and sound man for the picture, and his wife, Ann, who worked as production assistant and secretary, lived with my wife and partner, Dagny, and our three children in the big truck, while cameraman Preston Fox, wife Gwen and son Geoffrey followed in a converted GMC van. We looked quite like a traveling gypsy band with everything but the chickens hanging on the side of the truck. There is something almost purifying about putting everything of real importance in a big box with wheels—wife, kids and cameras (in that order, Honey!)—and criss-crossing the heartland of America with only a goal and a dream.

The inconvenience of living and working in such close quarters was outweighed by the necessary subjugation to a totally team effort, without which the fresh, truthful, spontaneous style of the film would have been impossible. The many months and 30,000 very close miles together on the road were not without moments of tension, but, overall, seemed to work toward the success of the ultimate film.

Some conditions were so unreasonable that they had a strong unifying



(ABOVE) Wearing the Bell helmet camera, nine-time calf roping champion Dean Oliver makes tie and brings the roper's point of view to the film with stunning impact. (BELOW LEFT) A tracking shot from horseback is executed by Merrill, as the film explores the daily routine of a working cowboy on a ranch in Wyoming. (RIGHT) Alan Cassidy (left) and Kieth Merrill capture an intimate moment behind the chutes, as would-be champions warm their ropes and psych themselves into a high of courage. The film positions the rodeo cowboy of today in the perspective of his traditional past.





(LEFT) The crew of "THE GREAT AMERICAN COWBOY", with a little help from the clowns. (From left to right) Cameraman Preston Fox, Assoc. Producer/Soundman Alan Cassidy, professional clown and bull fighter Wilbur Plauger, world-famous bull fighter Wick Peth, Producer/Director/Cameraman Kieth Merrill and Cameraman Smoot. (RIGHT) Oldtime cowboys from 1912 are interviewed in Deadwood, South Dakota. They recalled everything from Indian uprisings to the great cattle drives of their youth. (BELOW) Packing gear on horseback, the crew prepares to capture atmosphere of the old west in scenic Grand Tetons of Wyoming.

effect on all of us. Thanks to Alan's unconquerable humor, some truly terrible circumstances took on the frivolity of a Laurel and Hardy comedy. They are somehow funnier now—Alan made them humorously tolerable then.

At the heart of most domestic grief was the leaky roof, still dripping to this day. When the rig was modified, our zealous carpenters overlooked the possibility that it might rain during the six months on the road. It did . . . the first time in Texas . . . eight days into our journey.

Driving all night while wives, kids, and Cassidys slept, I gave little thought to the rain. Dagny, sleeping directly under the air conditioner, was the first to recognize that we had a problem. I shut the vents and reassured her that the air-conditioner allowed water to pass through while moving because of the force of the wind. "No problem," I said. "Go to sleep." A few sunny days later it was my turn to sleep under the air-conditioner. All the rain in the whole Texas sky was funneled into the air conditioner. When I woke up my sleeping bag sloshed as I raised onto soggy elbows. Like a great sponge, it had absorbed the steady flow of water pouring through the air-conditioner. "But we're not moving," I reasoned. "No wind to drive water into the air-conditioner." With towels and buckets I hated the whole night. Next morning we discovered that the roof boxes had been drilled into the inner shell of the camper and left unsealed. The rain simply ran through the holes, accumulated in the space under the roof and poured out through the air conditioner. Fortunately, the equipment stayed safe and dry. Only we got wet.



There was no way to correct the problem without tearing the whole roof apart. Since we had neither time nor budget to do so, we bought a giant canvas hay tarp, 12 x 24' square, and turned our sleek home into a giant ominous turtle with a red shell. Preston affectionately gave her the name "TURTLE ONE" because he could go so much faster—but we never had to stop.

It rained at least once at every one of over 38 locations in 15 states. We should have charged farmers for saving their crops. I believe a rain cloud had

fallen in love with that earthbound red puff of something below, and followed us everywhere.

The stories that can be told about our months on the road go on endlessly. Many shouldn't be told at all. Alan drafted a screenplay for a comedy feature motion picture based on our experiences which reanimates the whole almost unbelievable journey of Turtle One. Upon reflection, I doubt that any of us would want to do it all again, and yet we are convinced that "THE GREAT AMERICAN COWBOY" could

have been made in no other way.

The fully self-contained unit became not only a motel on wheels for the production crew, but doubled as a poor man's Cinemobile. The whole rear end of the unit was rebuilt to accommodate the specific equipment selected for the shoot. Exterior access compartments were designed to accept each piece of regularly utilized gear. A massive storage box was constructed on top to accommodate grip equipment, cables and lights, including two Maxi-Brute 6's. In addition to a self-contained auxiliary power generator which provided 110-volt power to the living quarters, a specially built generator was bolted under the hood to drive our collection of Colortran lights.

Alan Gordon Enterprises in Hollywood arranged for the generator to be specially built and installed by U.S. Energy Corp. The generator provided 110 amps/12,000 watts of power, the largest belt-driven generator ever built by U.S. Energy, and the first of what I understand has now become a production model for them.

The throttle control on the truck engine, operated from inside the cab controlled the output of the generator to a switching panel mounted on the exterior of the cab. In filming night rodeos, and some selected interiors, the lighting and power capabilities proved invaluable. In some non-action sequences where time and conditions

Cameraman Reed Smoot, who shot most of the high-speed photography for the film, keeps on shooting in spite of rain, the worst in Cheyenne's Days of '47 Rodeo. The resulting footage of cowboys slipping and falling into a two-foot sea of mud is a highlight of the picture.



Dean Oliver makes a record tie for the camera at his private roping arena on his ranch in Idaho. What sets "THE GREAT AMERICAN COWBOY" far above any other rodeo film ever made is its strikingly subjective camerawork. Closeup angles of the action right in the midst of the fray, stunning point-of-view shots and lyrical slow-motion involve the spectators as if they were in the arena with the cowboys.

allowed, the Maxi-Brute 6's fitted with 6400°K bulbs were used for fill. We found, however, that they were almost too cumbersome for that purpose and, thereafter, relegated them to night and interiors, as required.

By mounting a high-hat to the top of the rig and reversing the skylight vent to open forward, the truck could be used as a camera car while a cameraman worked through the opening. A camera platform was built on all sections of the 25 x 8-foot roof that were not otherwise covered with equipment storage boxes. A tripod-mounted camera on the roof platform proved far more efficient than the high-hat-mounted turret which had created so much enthusiasm during the design stage.

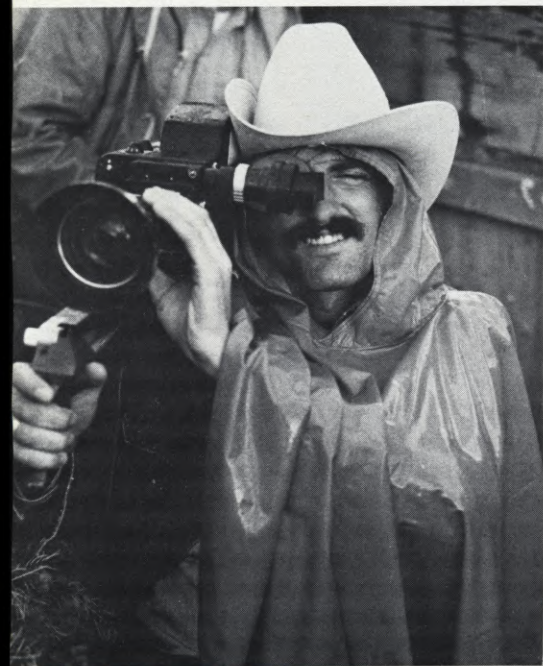
Along one whole side of the chassis, was a fold-up working table, which chained up against the side while moving. Of all our modification brainstormings, this 3x8-foot work table was the most useful. Keeping equipment clean was a major problem anyway, but having a large clean working surface up off the ground probably saved us from more problems than we will ever know. The rear of the truck, as well, was modified with a fold-down compartment door onto which equipment could be pulled out and accessed. It doubled as a working surface, providing every member of

the crew with a little corner of clean, elevated working space.

Midway through the summer we mounted a pressurized air tank on the rear of the truck to blow out equipment. We fell in love with the tank at a service garage in Gladewater, Texas, where we were allowed to borrow it. We talked the guy out of it for twenty dollars, and drove away with one more thing hanging onto a rig that already brought stares of utter amazement.

Inside, closets and cupboards were converted to film, tape, and delicate equipment storage. A Magnacord 1/4" tape recorder was mounted in the wall for use in recording master tapes of the rodeo announcers at all performances. The recorder was powered by the 110-volt generator which came with the rig and functioned perfectly, except once when the generator became so choked with dust that it gave up in the middle of a show. A magic black box, created by an electronic wizard friend of mine, could match our recorder with every conceivable amplifying system in existence. 500 feet of cable from a particular rodeo's PA system to the truck gave us perfect tracks for voice-over, as well as a record of which cowboy rode which horse or which bull at which rodeo.

With so many locations to film and so many months to learn, we experi-



mented with a variety of photographic approaches and equipment. The basic cameras used in filming "COWBOY" were the Eclair NPR, Arriflex GSB, and the Actionmaster 500 built by Photo-sonics Inc.

Filming rodeo action has some inherently interesting problems, most of which we resolved bit-by-bit, learning as we filmed during the long months of the summer locations. The violence and danger of the arena made filming from behind the fence with long lenses very appealing, but influenced by several rodeo-oriented films that I had examined, I felt that a certain important "presence" was lost with the longer lenses. The only solution was to take the camera into the arena.

That we were fearful at first is terribly evident in a comparison of footage shot at the beginning of our venture, and stuff filmed at our last few performances. Like the cowboys, experience increased our ability to move with some measure of predictable safety in the arena, though we learned to never assume that we had outguessed a 1200-lb Brahma bull.

Preston Fox became the master of shooting arena action from the inside. Before commencing production, Preston had had no experience at all with rodeos. His dedication to the shot, however, gave him the constant motivation he needed to move closer and closer to the action, until, by the end of the season, Preston was working as close to those snorting, stomping, raging bulls as the rodeo clowns themselves. Preston worked at this close range with a hand-held Arriflex 16S fitted with a 10-100mm zoom. Since almost every action shot was filmed with more than one camera, Preston worked almost exclusively at 50 frames per second. The overcranking not only helped minimize movement created by hand-holding the camera, but slowed action to what our testing had determined was the ideal speed to really see the action without losing any of the power. Considering the focal-length options of 10-100mm, it is incredible how much of Preston's in-arena action material was recorded at 10mm, with the animals more than filling the entire frame. The depth of field and natural presence of the wide angle resulted in what is undoubtedly the most dramatic and exciting rodeo footage ever taken... we captured "presence".

After several weeks of filming, Preston had become so experienced in working in the arena that he began to cause a problem for the second and third cameras by getting in their shots, usually taken from a stationary location behind

some type of barrier. At Littleton, Colorado, Preston was working so incredibly close to the bulls that I decided to have him dress as a clown to partly camouflage his real identity. The professional rodeo clowns were more than cooperative in helping apply the make-up, and dressing him in their extra clown clothes. By implication, they interpreted his dressing up as changing his status from cameraman to clown, or so it seemed. Working with a modified 16mm helmet camera, smaller and less obtrusive than the Arriflex, fitted with a 5.9mm wide-angle lens, Preston was able to move in as close as he desired unrestricted.

Following directions from the rodeo clowns, he positioned himself 10 feet in front of a chute gate. "This bull always cuts sharply to one side immediately upon coming out," the clown reassured Preston, adding that he would be totally safe so close to the chute. Excited by the incredible shot of a bull exploding toward the camera, then cutting sharply to one side, Preston planted his feet and waited. The chute opened, and if ever a bull ran a straight line out of a chute, that bull did. The bull hit Preston three times before it knocked him over and rolled him away from thrashing hooves. Preston, more startled than hurt, kept right on filming as he ran to the fence amidst the excited roar of the crowd and the gut-busting laughter of the clowns. They were old friends of the bull and had seen him come straight out of the chute a hundred times or more. He hadn't let them down.

Besides a bloody nose, two quarts of adrenalin surging through his veins, and a mouth full of hair from where he bit the hump on the second smash, Preston was luckily uninjured. The camera did not fare as well. The surface of the lens had been scratched so badly that we were not able to use it again.

An Eclair NPR was used to film all of the sync-sound used in the picture. Sound, recorded on a crystal-adapted Nagra III was synchronized with every conceivable kind of slating device, including slapping the shotgun mike with one, two or three fingers, or simply whomping it into a fence post. I grimaced every time we slated that way. The most creative syncing apparatus was a King Klapper rigged with a strobe light which fired in sync with its little light. The strobe was used to sync the shot when the recorder and camera were widely separated—the strobe showing up much more readily than the small light, particularly in bright sunlight. This device was also used on occasion to sync a second camera (Arriflex GSB) when running at 24 fps.

In spite of the impossible dust problems of filming rodeo, we had no serious equipment problems during more than six months of shooting. We religiously cleaned gear whenever possible, even though "whenever" often meant cleaning on the road while we drove all night to catch a rodeo 300 miles away the next day.

Considering the subject matter of rodeo, and the high-risk type of shooting day after day, I feel it really remarkable that we did not have more serious damage to equipment... not to mention our bodies. We learned early, however, that certain rules must apply in filming rodeos if the equipment is to survive. Cardinal rule No. 1: Never leave a mounted camera unattended. At a night rodeo in Texas, early in the tour, the Arriflex was left standing inside the arena while Preston ran to the truck for film. A frantic saddle bronc which had just unseated its rider, swung around the arena and ran right over the top of it. Preston retrieved the camera and started out of the arena when the same horse came by on a second pass... down they all went again. He gathered the growing number of pieces and started to climb out, and a third time the bronc knocked the camera and tripod from his hands, this time splintering one leg of the tripod, which carried its gaffer tape bandages the rest of the trip. He finally got out. We examined the camera and

Continued on Page 608

Producer/Director Merrill and Assoc. Producer Alan Cassidy waded into the more than 160,000 feet of film from which the picture was edited. A KEM 8-plate table was used throughout for lining up multiple camera takes and searching at high speed for the great moments of action. Cassidy cut the sound, while Merrill spent 8 months editing picture in his garage.



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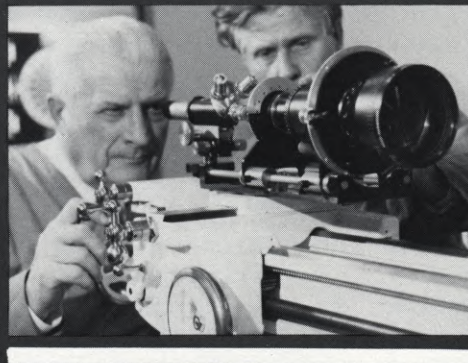
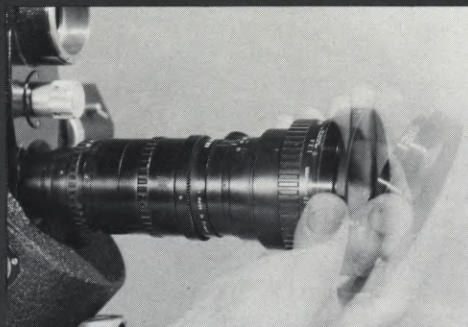
- CENTURY Data Rings, focus, Iris (T & f stops)
Precision machined. Black Anodized \$69.50
- COLLAPSIBLE rubber lens shade. Fit directly on
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into Angenieux filter retainer or Century Snap-on..... \$19.50
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- CENTURY Conversion of "C" mt. lens or std. Arri mt. to
stainless steel bayonet lock Arri mount \$178.00
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brass Eclair CA-1 mount \$118.00
- CENTURY Zoom lens bracket for Arri-16 (fits matte box shoe) \$59.50

For 9.5-57 Zoom

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The Alcan 54 by Aaton Beauviala is probably the finest motor on the market today. And it's the lightest, smallest crystal motor for the Eclair NPR. It'll do everything a heavier motor will do and more.

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The Alcan feels good. You don't have to be a contortionist to operate it. The shoulder position feels comfortable because the location of the rod and the motor's form allow the hand to remain solidly on the camera body.

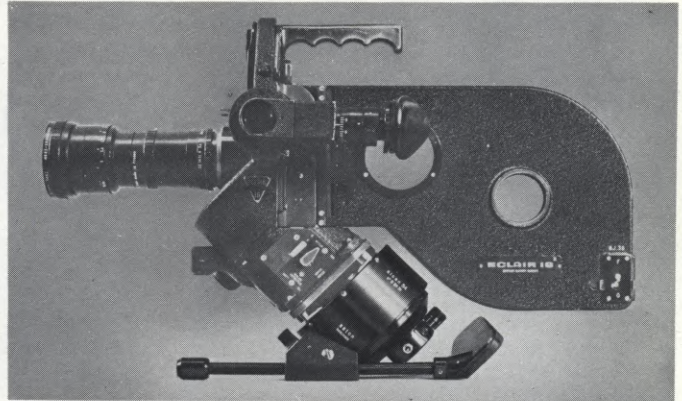
Downtime is kept to a minimum because of interchangeable modular circuits. The power supply is 12 volt with a power drain of 1.9 amps at 72°F.

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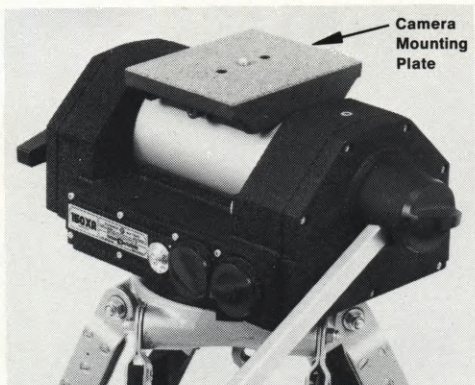
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COMPANY _____

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Camera Mounting Plate

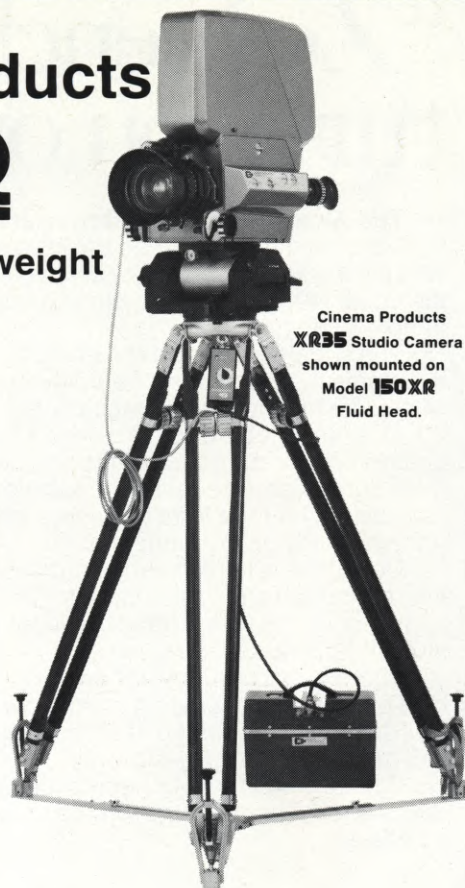
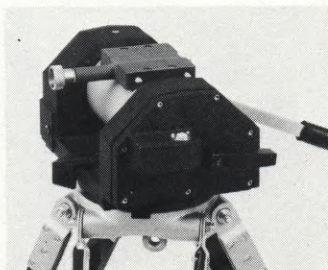
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Cinema Products
XR35 Studio Camera
shown mounted on
Model 150XR
Fluid Head.

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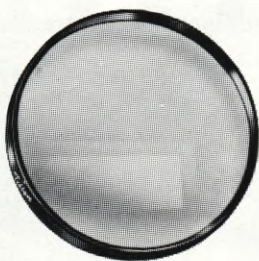
The Model 150XR Fluid Head is designed and manufactured by O'Connor Engineering Laboratories Inc. for exclusive worldwide distribution by Cinema Products Corporation.

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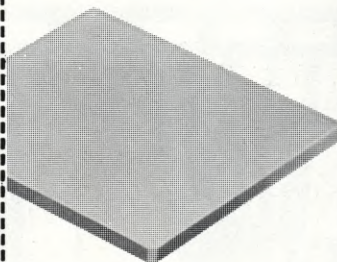
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Tiffen Photar® Filters in all colors are available for Tiffen and other square filter holders in sizes from 2x2-inches up to 6x6-inches.



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William Peter Blatty, author of "THE EXORCIST" holds Oscar received for screenplay adaptation of his best-selling novel. He also served as Producer of the film.

ACADEMY AWARDS

Continued from Page 557

which depends uniquely and in large degree upon mechanical means of expressing the creativity of its artists. This year, the awards in that very special category were as follows:

Scientific or Technical Awards

These Awards were voted by the Academy Board of Governors upon recommendation of the Scientific or Technical Awards Committee.

*CLASS I [Academy Statuette]
NONE*

CLASS II [Academy Plaque]

To Joachim Gerb and Erich Kastner of The Arnold and Richter Company for the development and engineering of the Arriflex 35BL motion-picture camera.

This camera is engineered to make it compact, lightweight, and effectively noiseless. Its low silhouette and excellent balance provide freedom of operation in the hand-held mode. Its reflex viewing system is especially convenient for the operator. It features dual-pin registration and a four-pin pull-down film transport to attain rock-steady images.

To Magna-Tech Electronic Co., Inc. for the engineering and development of a high-speed re-recording system for motion-picture production.

This system was engineered and

developed to modernize and accelerate post-production sound-recording operations. It is capable of handling 3,000-ft. loads (1/2 hour program) with new recorders, reproducers, and projectors, the operation of which is programmable from a computer. The unique, high-speed interlock motors permit running the complete system to programmed start-marks, or rewinding at 10 times normal speed in the interlock mode.

To William W. Valliant of PSC Technology Inc., Howard F. Ott of Eastman Kodak Company, and Gerry Diebold of The Richmark Camera Service Inc. for the development of a liquid-gate system for motion-picture printers.

This liquid gate and its support system, when installed in an optical printer, minimizes the effect of film scratches and other surface defects. The gate permits operation at variable printer speeds in the forward, reverse or "hold-frame" mode. The support system controls temperature, rate of flow, and pressure of the liquid supplied to the gate.

To Harold A. Scheib, Clifford H. Ellis and Roger W. Banks of Research Products Incorporated for the concept and engineering of the Model 2101 optical printer for motion-picture optical effects.

This optical printer, by its new modular construction and function-controlled stepping-motor drives, provides automatic, fast, accurate and dependable operation. It employs

Very proud and excited on Oscar night were Michael and Julia Phillips and Tony Bill, the youthful producers of "THE STING", which the Academy membership voted "Best Picture of the Year". This highly entertaining film, starring Paul Newman and Robert Redford, won seven Academy Awards out of a total of 10 nominations.



William Friedkin, Director of "THE EXORCIST", arrives at the Pavilion. He lost the Oscar to George Roy Hill ("THE STING"), but had previously won for "THE FRENCH CONNECTION".

unique methods for programming its zoom and skip-frame operations, and its fades and dissolves.

CLASS III [Academy Citation]

To Rosco Laboratories, Inc. for the technical advances and the development of a complete system of light-control materials for motion-picture photography.

This system of photographic filters and reflectors utilizes new plastic technology and dye chemistry to

ACADEMY AWARD WINNERS FOR CINEMATOGRAPHY—1928 to 1973

Year	Class.	Cameraman	Picture Title	Studio
1973		Sven Nykvist, A.S.C.	"Cries and Whispers"	New World Prod.
1972		Geoffrey Unsworth, B.S.C.	"Cabaret"	ABC-Allied Artists
1971		Oswald Morris, B.S.C.	"Fiddler on the Roof"	U.A.
1970		Freddie Young, B.S.C.	"Ryan's Daughter"	MGM
1969		Conrad Hall, A.S.C.	"Butch Cassidy and the Sundance Kid"	20th-Fox
1968		Pasqualino De Santis	"Romeo and Juliet"	Para.
1967		Burnett Guffey, A.S.C.	"Bonnie and Clyde"	WB-7 Arts
1966	B&W	Haskell Wexler, A.S.C.	"Who's Afraid of Virginia Woolf?"	WB
1966	Color	Ted Moore, B.S.C.	"A Man For All Seasons"	Col.
1965	B&W	Ernest Laszlo, A.S.C.	"Ship of Fools"	Col.
1965	Color	Freddie Young, B.S.C.	"Doctor Zhivago"	MGM
1964	B&W	Walter Lassally, B.S.C.	"Zorba the Greek"	Fox
1964	Color	Harry Stradling, A.S.C.	"My Fair Lady"	WB
1963	B&W	James Wong Howe, A.S.C.	"Hud"	Para.
1963	Color	Leon Shamroy, A.S.C.	"Cleopatra"	Fox
1962	B&W	Jean Bourgoin, Walter Wottitz	"The Longest Day"	Fox
1962	Color	Freddie Young, B.S.C.	"Lawrence of Arabia"	Col.
1961	B&W	Eugene Shuftan	"The Hustler"	Fox
1961	Color	Daniel Fapp, A.S.C.	"West Side Story"	U.A.
1960	B&W	Freddie Francis, B.S.C.	"Sons and Lovers"	Fox
1960	Color	Russell Metty, A.S.C.	"Spartacus"	Univ.
1959	B&W	William Mellor, A.S.C.	"Diary of Anne Frank"	Fox
1959	Color	Robert Surtees, A.S.C.	"Ben-Hur"	MGM
1958	B&W	Sam Leavitt, A.S.C.	"The Defiant Ones"	U.A.
1958	Color	Joseph Ruttenberg, A.S.C.	"Gigi"	MGM
1957	award	Jack Hildyard, B.S.C.	"Bridge on the River Kwai"	Col.
1956	B&W	Joseph Ruttenberg, A.S.C.	"Somebody Up There Likes Me"	MGM
1956	Color	Lionel Lindon, A.S.C.	"Around the World in 80 Days"	Todd-U.A.
1956	Effects	John Fulton, A.S.C.	"The Ten Commandments"	Para.
1955	B&W	James Wong Howe, A.S.C.	"The Rose Tattoo"	Para.
1955	Color	Robert Burks, A.S.C.	"To Catch a Thief"	Para.
1955	Effects	John Fulton, A.S.C.	"Bridge at Toko-Ri"	Para.
1954	B&W	Boris Kaufman, A.S.C.	"On the Waterfront"	Col.
1954	Color	Milton Krasner, A.S.C.	"Three Coins in the Fountain"	Fox
1953	B&W	Burnett Guffey, A.S.C.	"From Here to Eternity"	Col.
1953	Color	Loyal Griggs, A.S.C.	"Shane"	Para.
1952	B&W	Robert Surtees, A.S.C.	"The Bad and the Beautiful"	MGM
1952	Color	Winton Hoch, A.S.C. Archie Stout, A.S.C.	"The Quiet Man"	Argosy
1951	B&W	William Mellor, A.S.C.	"A Place in the Sun"	Para.
1951	Color	Alfred Gilks, A.S.C. John Alton	"American in Paris"	MGM
1950	B&W	Robert Krasker, B.S.C.	"The Third Man"	British
1950	Color	Robert Surtees, A.S.C.	"King Solomon's Mines"	MGM
1949	B&W	Paul Vogel, A.S.C.	"Battleground"	MGM
1949	Color	Winton Hoch, A.S.C.	"She Wore a Yellow Ribbon"	R.K.O.
1948	B&W	William Daniels, A.S.C.	"The Naked City"	U-I
1948	Color	Joseph Valentine, A.S.C. William V. Skall, A.S.C. Winton Hoch, A.S.C.	"Joan of Arc"	R.K.O.
1947	B&W	Guy Green, B.S.C.	"Great Expectations"	Rank-U-I
1947	Color	Jack Cardiff, B.S.C.	"Black Narcissus"	Rank-U-I
1946	B&W	Arthur Miller, A.S.C.	"Anna and King of Siam"	Fox
1946	Color	Charles Rosher, A.S.C. Leonard Smith, A.S.C. Arthur Arling, A.S.C.	"The Yearling"	MGM
1945	B&W	Harry Stradling, A.S.C.	"Picture of Dorian Gray"	MGM
1945	Color	Leon Shamroy, A.S.C.	"Leave Her to Heaven"	Fox
1945	Effects	John Fulton, A.S.C.	"Wonder Man"	Para.
1944	B&W	Joseph LaSelle, A.S.C.	"Laura"	Fox
1944	Color	Leon Shamroy, A.S.C.	"Wilson"	Fox
1943	B&W	Arthur Miller, A.S.C.	"Song of Bernadette"	Fox
1943	Color	Hal Mohr, A.S.C. W. Howard Greene, A.S.C.	"Phantom of the Opera"	Univ.
1942	B&W	Joseph Ruttenberg, A.S.C.	"Mrs. Miniver"	MGM
1942	Color	Leon Shamroy, A.S.C.	"The Black Swan"	Fox
1942	Effects	Farciot Edouart, A.S.C.	"Reap the Wild Wind"	Para.
1941	B&W	Arthur Miller, A.S.C.	"How Green Was My Valley"	Fox
1941	Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C.	"Blood and Sand"	Fox
1940	Effects	Farciot Edouart, A.S.C.	"I Wanted Wings"	Para.
1940	B&W	George Barnes, A.S.C.	"Rebecca"	Selznick
1940	Color	Georges Perinal, B.S.C.	"Thief of Bagdad"	Korda
1939	B&W	Gregg Toland, A.S.C.	"Wuthering Heights"	Goldwyn
1939	Color	Ernest Haller, A.S.C. Ray Rennahan, A.S.C.	"Gone with the Wind"	Selznick-MGM
1938	Effects	Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C.	"The Great Waltz"	MGM
1937		Karl Freund, A.S.C.	"Spawn of the North"	Para.
1936		Tony Gaudio, A.S.C.	"The Good Earth"	MGM
1936		Tony Gaudio, A.S.C.	"Anthony Adverse"	WB
1935		Hal Mohr, A.S.C.	"Midsummer Night's Dream"	WB
1934		Victor Milner, A.S.C.	"Cleopatra"	Para.
1933		Charles B. Lang Jr., A.S.C.	"A Farewell to Arms"	Para.
1932		Lee Garmes, A.S.C.	"Shanghai Express"	Para.
1931		Floyd Crosby, A.S.C.	"Tabu"	Para.
1930		William Van Der Veer Joseph T. Rucker	"With Byrd at the So. Pole"	Para.
1929		Clyde DeVinna, A.S.C.	"White Shadows in the So. Seas"	MGM
1928		Charles Rosher, A.S.C. Karl Struss, A.S.C.	"Sunrise"	Fox



Ex-Beatle Paul McCartney learned that his fans had not forgotten him when he received a thunderous ovation from the bleacher crowd at the Pavilion.

provide rugged and non-fading materials for the photographic control of light transmission, diffusion and reflection.

To Richard H. Vetter of the Todd-AO Corporation for the design of an improved anamorphic focusing system for motion-picture photography.

This new anamorphic lens system reduces photographic distortion by maintaining a constant squeeze ratio for all object distances, regardless of focusing point.

Charles Bronson and wife, Jill Ireland, present Oscar for "Best Supporting Actress" to gleeful Tatum O'Neal, who won for her role in "PAPER MOON".



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This is the original CIR splicer that we import from Italy. Manufactured by Dr. Leo Catozzo, film editor for Fellini (*La Dolce Vita*, *8½*, etc.), who also has degrees in law & engineering.

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A single stroke cuts, perforates and bonds tape to film for stronger splices. Slashes splicing time by 35%. You save money on splicing time. You also save up to \$8.00 a roll on tape since you don't need perforated tape. And you can use ANY name brand of Mylar or J-Lar tape. The CIR splicer is guaranteed to work with them all.

Splices are stronger, too, because the tape bonds to the film. And the CIR is so versatile, you can make butt, overlap or diagonal splices. You can re-build torn sprockets and repair damaged film without losing frames.

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WHAT'S NEW

Continued from Page 504

SOLIGOR INTRODUCES NEW FIXED MOUNT ZOOM LENS

The Soligor 75-260mm f/4.5 automatic zoom lens is now available in a fixed mount to fit Canon FD, Konica Autoreflex, and other popular SLR cameras.

The versatility of this lens, in terms of its focal length and many fine additional features has placed it in strong demand. It offers a 33°-9° angle of view, smallest aperture at f/22, construction in 10 groups—13 elements and a minimum focusing distance of 5 feet. The lens weighs 2 lbs., 14 oz. and is 7-3/8" long at infinity.

This lens will also continue to be available in the Soligor T4 interchangeable mount system, which permits complete cross coupling to a wide variety of popular camera mounts.

All Soligor lenses are fully guaranteed. Suggested retail price for the fixed mount 75-260mm automatic lens with built-in lens shade, is \$315.50.

For additional information concerning the Soligor lens system write to AIC Photo, Inc., 168 Glen Cove Road, Carle Place, N.Y. 11514.

CFI ANNOUNCES DAYTIME HI-SPEED VIDEOTAPE COMMERCIAL DUBBING

Consolidated Film Industries has announced a new hi-speed videotape duplicating service. CFI has geared its hi-speed videotape duplicator to commercial needs by offering daytime dubbing. This produces large quantities of videotape commercial dubs in just a couple of hours, allowing air freight forwarders additional time to make flights and meet important deadlines.

With the current fuel crisis, many airline flights have been cancelled, in turn creating a serious shortage of freight space. Due to the reduced space, shipments ready in the early afternoon will have a better chance at next day delivery. With the service that CFI's hi-speed duplicator provides, night-time pile-ups can be avoided and shipments may be cleared for afternoon flights.

CFI's ADR-150 duplicator, the only such installation in the west, operates at 30 times normal speed, yet because of its design and operation, the ADR-150 achieves greater consistency of quality than ever before possible.

Milt Shefter, Director of Television Sales of CFI in making the announcement confirmed that the special hi-speed daytime dubbing service would be available at no increase in cost.

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George Wallach, Program Coordinator

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July 8 ANIMATION

Francis Lee, Academy Award-winning animator

Practical aspects of producing animated films from conception to final print. Storyboards, art work, camera techniques, syncing to sound, editing, filming on the Oxberry.

July 15 MULTI-MEDIA COMMUNICATIONS

John Doswell, multi-media producer

Production and presentation techniques used in sales meetings, training programs, displays, exhibits; using slides, film, video, audio, live talent and print.

July 22 FILM EDITING

Si Fried, editor-producer

Introduction to all aspects of handling and editing film including splicing, A & B rolls and creative sync-sound; working on all types of professional editing equipment including the Moviola.

July 29 TV NEWS PRODUCTION

John Fletcher, cameraman, ABC-News

Learn what goes into a news operation! Writing, filming, editing, sound recording, plus "on-the-air" presentation of students' news assignments.

Aug. 5 VIDEOTAPE TECHNIQUES

Lewis Waldeck, producer-cameraman

Introductory course includes porta-pack operation, studio production, lighting, location taping, special effects, plus a group videotape production for a New York station.

Aug. 12 FILM PRODUCTION (16mm)

Morris Engel, Academy Award-winning filmmaker

Accelerated course in making a complete film; camera operation, set lighting, location shooting and editing.

Aug. 19 SOUND RECORDING FOR FILMS

Bill Blake/Tom Hammerall; mixer/recordist

Introduction to sound recording including studio and location production, use of Nagra recorders, studio equipment, optical and magnetic transferring, mixing, music and EFX recording.

Aug. 26 THE TV COMMERCIAL

Maurice Mahler, senior producer/art director

The course proceeds from the creative process to producing a 60-second film—the commercial. It covers the storyboard, direction, casting, filming, taping, editing and final presentation.

All equipment and materials supplied at no additional cost.



Write or call for complete summer brochure F.

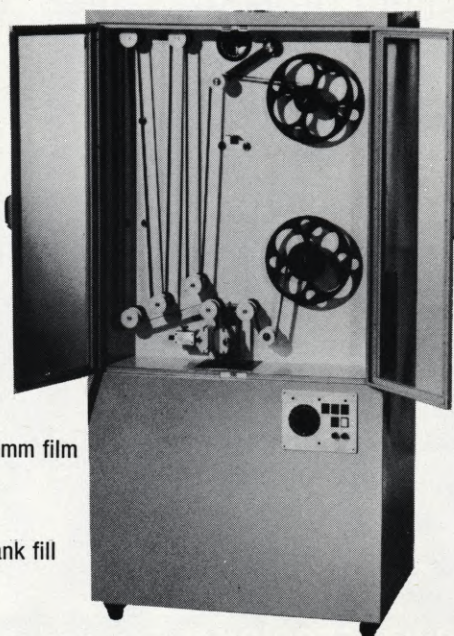
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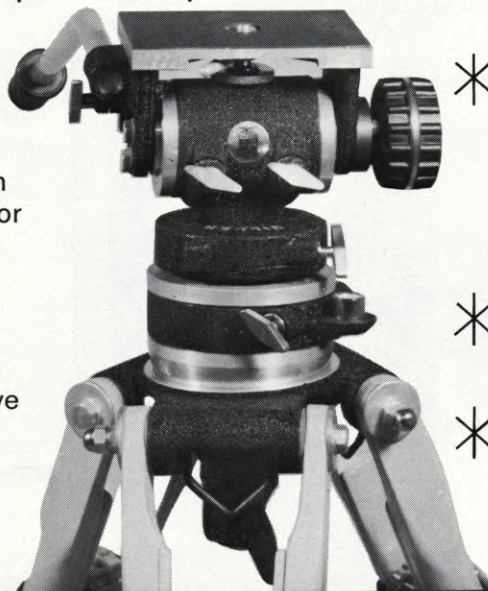
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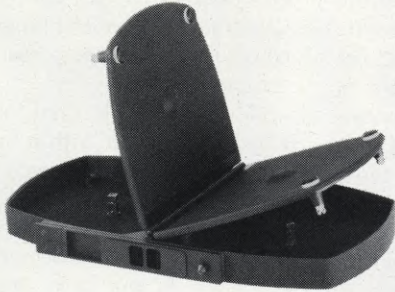
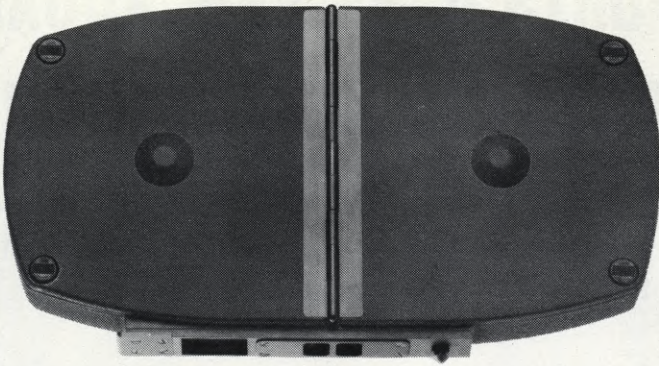
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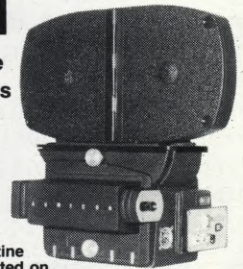
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ABC'S WIDE WORLD OF SPORTS USES NEW KODAK 7247 16mm COLOR NEGATIVE FOR THE FIRST TIME

TV network film crew gives the new 16mm stock a shakedown under rugged field conditions and finds that it is everything that it should be

By HERB A. LIGHTMAN

STEAMBOAT SPRINGS, Colorado

From Los Angeles to Denver, it's a plush DC-10 with impeccable service and more than the comforts of home.

But from Denver to Steamboat Springs, it's a 20-passenger Wright Brothers special, propelled, I'm sure, by two giant rubber bands.

Who cares? I'm on my way to the heart of America's skiing wonderland, an area which compares favorably in terrain and snow quality to any ski center in the world—Alps included.

I'm on my way to join a filming crew of ABC's WIDE WORLD OF SPORTS,

which will be shooting a segment of the professional ski racing circuit run-offs over the weekend. The big news for *American Cinematographer* readers is that they will be shooting an entire show with the new 16mm Kodak Color Negative, type 7247, for the first time, and they've invited me to come along to observe how it works out.

After a breathtaking flight over the Colorado Rockies, heavy with snow that sparkles in the sunlight, the game little plane plops down on a postage-stamp runway and taxis toward the tiny air terminal. Awaiting me are ABC Sports

Production Manager Jon Hammond and Cameraman Peter Henning, a droll type who turns out to be a real whiz behind the camera.

The first shock is not long in coming. I had started out with a huge valise full of ski togs, a separate case for ski boots, a case full of cameras and recorders and a pair of new short skis to use in practicing my hot-dogging. All that is unloaded is the skis. The rest of the luggage? Who knows where? Timbuktu, Kuala Lumpur, Patagonia, Little America—take your pick. I have visions of living in the same clothes for five days, with no change of underwear, no ski boots, no cameras, no nothin'. Little do I know that later that night my missing items will turn up after a round trip to Cape Town. In the meantime . . . *c'est la vie!*

On the way to the ski area, where I will be quartered along with the crew, we pass through beautiful downtown Steamboat Springs, a sleepy hamlet of 3,000 souls—mostly cowboys, I'm told. The town took its name from one of the numerous hot springs in the area which used to make a noise like a steamboat whistle—until somebody covered it with concrete. Steamboat Springs, somnolent as it seems, has the distinction of having produced more skiing and jumping champions than any other single municipi-



(ABOVE) The course lined out for the professional ski races at Steamboat Springs, Colorado, stretches down the mountain. In the background can be seen condominiums of Steamboat Village resort area. (BELOW LEFT) Cameraman Urs Furrer gets the camera right down on the ground for a low-angle shot of top-money-winner Hugo Nindl doing his roadwork in preparation for the races. (RIGHT) Nindl comes running, hopping and leaping toward the camera for sync-sound scene.



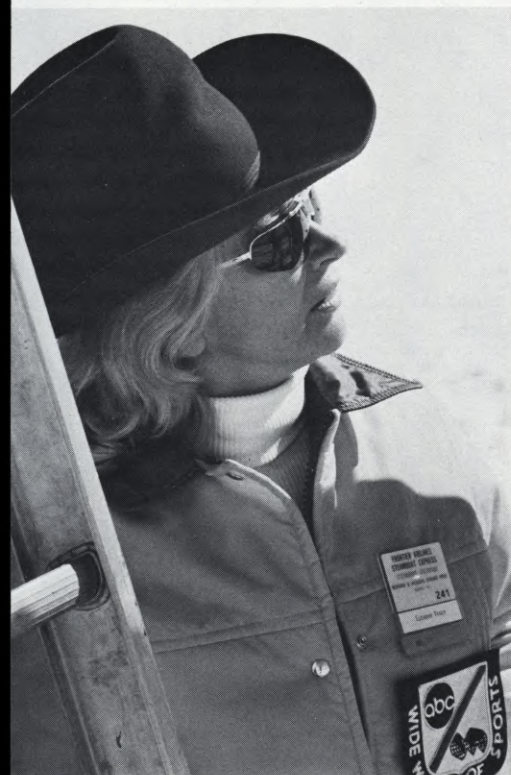


As an added thrill for the race spectators, skiers flying hang-gliders soar above the race course dangling from colorful kites. One young girl flying skier got her ski caught in the rigging of the kite and crashed into the side of a building on landing, but miraculously skied away uninjured.

pality in America.

A few miles beyond the town, we turn into the valley which encloses the Steamboat Ski Village. Just five years old, this resort is a town in itself, a vast spread of Alpine-modern hotels, condominiums, bars, restaurants and ski shops.

The crew is quartered in a couple of posh condominium buildings just a ski



ABC Sports, Inc. Producer Eleanor Riger is a veteran of many years with the networks and a multitude of shows, but Steamboat was her first skiing show.

pole's throw from the lifts. After I've checked in, it's reunion time with John Wilcox (Director of Film Production for ABC Sports, Inc.) and his beautiful wife, Holly. I had first met John during the Olympic Games in Munich, when I took time off from my reporting (and filming) chores with the Wolper crew to trek over to the ABC compound in quest of a story about the hard-working

ABC film crews that were turning out beautiful stuff, but having to fight for air time to get it shown. Later I got together with John and Holly socially a few times when I was in New York.

John is something of a phenomenon. He started work at ABC Sports as a production assistant six years ago and learned his job from the ground up. Now, not yet 30 years old, he is in charge of all film production for ABC Sports, Inc., and he also emerges from behind the desk to direct a dozen or so shows a year. John is a very squared-away dude. As I am to find out shortly, he can handle a very complex filming operation on a difficult location with no confusion, no hysteria and no sweat. He does his homework and has everything planned minutely in advance—including various alternatives if all hell should suddenly break loose. On top of that, he's not above pitching in to do anything that needs doing—like, for example, helping to move a heavy wooden platform that had been constructed on the wrong side of the race course.

There is another hearty reunion with cameraman Joe Longo, a happy-go-lucky character with whom I once shared a hair-raising (and hilarious) experience while climbing a 14,000-foot peak in these very same Colorado Rockies (See "TIMBERLINE ADVENTURE", *American Cinematographer*, January 1972). I'm glad Joe's going to be aboard for this shoot. That means some intelligent conversation salted with laughs.

The crew members, who are being assembled from the four corners of the nation, have not all arrived yet, but the next morning John decides to shoot some informal footage with a couple of the skiers up on the mountain, using a pair of cameramen carrying Beaulieu 16mm cameras for easy hand-holding. He invites me to go along.

We ride to the top of the mountain on the gondola and then must ski down to another lift that will take us to the location. John goes on ahead by a few minutes, but when I get down to the line I can't see him anywhere. I don't realize that the official ABC WIDE

WORLD OF SPORTS badge I'm wearing entitles me to crash the lift lines, so I patiently wait in the long line. By the time I get to the top, John and the others are nowhere to be seen. I'm lost already.

So it won't be a *total* loss, I decide to take a fast run down the mountain. About halfway down, I hear cheering, whistling and applause. I look back and there comes a streaker barreling down the hill. He's nattily attired in skis, boots, a hat and his birthday suit. As the crowd roars approval, he streaks on by.

Minutes later another streaker comes roaring down the run. This one's a bit more modest. In addition to the skis, boots and hat, he's wearing a T-shirt . . . but that's all. Just as he draws abreast of me, he tumbles tail-over-teakettle and lands *splat!*—right on the family jewels. Moaning in soprano, he gets his arms and legs together and proceeds down the hill—his pink *derriere* glistening in the sunlight. Freaky scene!

In the afternoon the Celebrity Race is held. The ranking celebrities seem to be Ethel Kennedy and Clint Eastwood, but a lot of lesser folk join in the fun, as well. John and Holly Wilcox enter and both do very well. They try to persuade me to get into the act, but Slalom isn't my thing.

Meanwhile, back at the condominium, all of the missing crew members have finally arrived, and John calls a production meeting. Present also is the Producer of this upcoming show. She is a cheerful blond lady named Eleanor Riger, a veteran of many years with the networks and producer of a multitude of shows, the most recent of which was an ambitious production on women in sports. However, she has not, to date, produced a skiing show, so she modestly says to the assembled crew: "For me, this will be in the nature of a learning experience."

John has prepared a large diagram of the race course, with the positions and equipment of each crew very precisely pin-pointed. He goes over this with them, but since most of the crew



(LEFT) The "moment of truth" at the top of the Giant Slalom course. Skiers go crashing through the starting gates as ABC WIDE WORLD OF SPORTS cameraman and soundman, shooting crystal sync, record the action close up. (RIGHT) The author catches skiers zooming off the top of the first jump, directly over the heads of ABC on-camera announcers Bob Beatti and Frank Gifford, to provide a spectacular opening shot for Giant Slalom segment of the show. At this point, the film camera zoomed in for a tight two-shot of announcers equipped with Vega wireless microphones.

members have worked with him before on many ABC shows, they really don't need much briefing.

Then comes the moment I've been waiting for. During the previous week's shoot at the Heavenly Valley (Lake Tahoe) professional ski races, 800 feet of tests had been shot using the new Kodak 16mm color negative, type 7247, and now the prints are about to be screened.

They are projected right onto the white wall of the room, a far less than ideal screening surface. But even under these conditions, the footage looks beautiful. The latitude and shadow detail are astonishing and, even in dull light, the color saturation is rich and full-bodied. The real acid test comes when we are shown scenes shot with the Photosonics cameras at 200 frames per second, using the EF, type 7242, emulsion. It has that characteristic bad look: extreme contrast and grain like ping pong balls. Then the same scenes are repeated—but shot with the new 7247 negative. The difference is like night and day. These scenes are sharp and clear, with normal contrast and no visible grain. The cameramen practically stand up and cheer. They express great enthusiasm for the new stock. The tests we've just seen have made believers out of all of us.

The next day is Saturday, and it dawns bright and clear. Brilliant sunlight with not a cloud in the sky. The cameramen, suddenly supplied with a film stock rated at ASA 100 (rather than the ASA 25-rated ECO), are now confronted with the problem of cutting down the brilliance of the sunlight reflected off the snow. To do so, they break out the ND3 and ND6 filters.

Although the quarter-final, semi-final and finals races, which are the ones to be filmed by ABC Sports, are not scheduled to start until 1:30 p.m., deployment of the camera and sound

crews with their equipment begins at 9:30 in the morning. Once in place, the crews will stay in position on the mountain throughout the day. No coffee breaks, no restroom breaks, no lunch on the terrace in the Village.

The reasons for this are several. First off, in order for the crews to be deployed, they and their equipment are hauled to the top of the mountain by means of Sno-cat. This lumbering vehicle starts at the highest position and drops personnel and gear off at their respective positions all the way down the course. This in itself is a time-consuming procedure and John Wilcox has allowed extra time for coping with unforeseen emergencies. Also, it takes time to set up the equipment in what is sometimes a very inhospitable atmosphere. The third reason is that the qualifying runs, which take place in the morning, give the cameramen and soundman a valuable opportunity to practice their skills for the main events.

I start out bright and early in the morning with John and we decide that, rather than taking up valuable space in the Sno-cats, we will ride to the top of the mountain in the gondola and then ski down to the camera positions at the top of the course. In theory this is fine, but I am loaded down with so much camera and recording gear that the ski journey down to our destination takes on certain aspects of a Laurel and Hardy comedy.

At the starting gates, cameraman Peter Henning, crystal-synced to the Nagra IV operated by soundman Roger Daniell, is practicing the intricate maneuvers which will be his lot once actual filming begins. He is picking up "color" shots of the racers preparing to take off down the course. Once they do, he follows them a short distance down and then pans swiftly back to catch reaction among those at the top—all of this with sync sound. It seems simple enough, but

Henning has to operate the zoom, rack focus a couple of times and ride the aperture ring down and up again—all very fast and without the aid of an assistant.

I check out Tower #1, a 20-foot platform from the top of which cameraman Larry Johnson has a great camera angle, almost directly in line with the starting gates. Then I ski down to join my old mountain-climbing buddy, Joe Longo, who is positioned at the first jump about a third of the way down the course. There are three jumps in all, built out of snow and about eight feet high—just about the highest jumps of this kind I've seen on a race course. Joe's job is to pick up the racers as they approach this jump, hold them in profile as they go off the edge and then pan them around for the follow down to the finish line. It's a tricky camera maneuver—especially that jump-in-profile bit—and Joe is operating with the camera on a body-brace for better control. He does a lot of practicing on the qualifying runs.

Just after noon, lunch is served and it is necessarily a primitive business. The bag lunches are hauled to the top in Sno-cats. From there, skiing assistants, toting the lunches in back-packs, ski down to the various camera positions and drop off the chow. Each bag contains a ham and cheese sandwich from the deli, a piece of fruit, a pickle, a package of Twinkies and a can of soda pop. Not very elegant and a far cry from the sumptuous hot repasts served Hollywood crews on location, but it tastes very good on the side of a cold mountain.

On this first day of the weekend professional ski races, the event is the Giant Slalom. For those not familiar with skiing jargon, a Giant Slalom is a race in which the skiers roar down the mountain, zig-zagging in and out of "gates", each of which consists of two

flags spaced quite narrowly apart. The individual turns are laid out rather widely apart and the run is a long one, complicated, in this case, by the three jumps located down the course.

I find myself in a very fine position to get some good still shots of the opening gimmick which has been dreamed up to launch this segment of WIDE WORLD OF SPORTS. Announcers Frank Gifford and Bob Beatti are to stand just below the first jump. Two racers will careen down the course and go flying off the jump directly over their heads—a good way to lose your head over a ski show. Then the camera lens will zoom in on the announcers as they do their lip-sync intro for the show.

It goes off without a hitch, although Gifford nearly loses his cowboy hat to the cause. I manage to snap a perfect still just as the skiers clear the edge of the jump to soar over the heads of the announcers.

After the races are well under way, I ski down to the finish line. Here, atop another 20-foot tower, cameraman Urs Furrer is executing some acrobatic 200-degree pans, as he follows the skiers all

the way from starting gates to finish line.

Meanwhile, Wilcox is coordinating the intricate filming operation by means of a network of walkie-talkies. Each cameraman has his own walkie-talkie, as do the key assistants, and they keep them "open" at all times, even when the races are over. Without these handy little devices, it would be impossible to ride herd on an operation for which camera crews are strung out all over the mountain.

After the final race, a couple of the crews are immediately deployed to the lounge of the Steamboat Village Inn, where announcer Bob Beatti is to conduct a "sitdown" interview with one of the racers. The only lighting used is a kit of four of the miniaturized Lowell Tota-Lights, but a nice quality of lighting is achieved. I am always amazed at the versatility and high light output of these tiny units when I see them in action—a real boon to the location cameraman.

The following day is devoted to filming of the Slalom races. The Slalom, as compared to the Giant Slalom, is a shorter, but faster, course, with the

gates placed much more closely together. This race requires a lot of fancy footwork and quick thinking on the part of the racers.

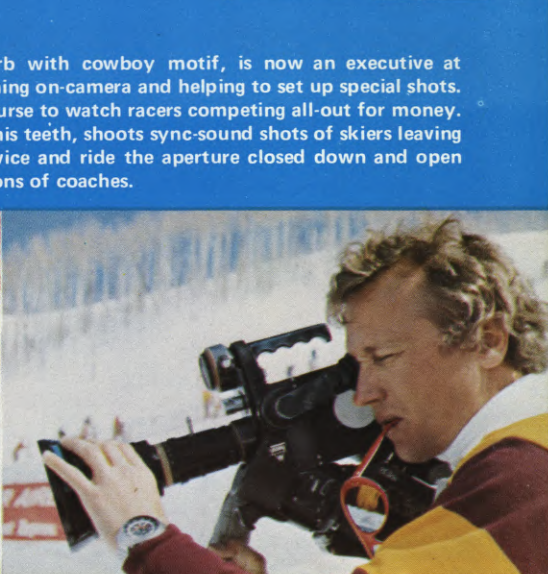
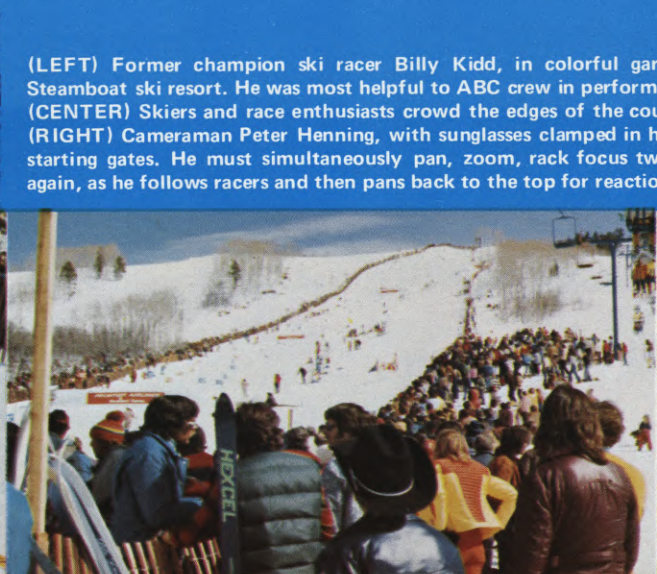
The starting gates for the Slalom are located where the first snow jump for the Giant Slalom had been placed the day before. This wipes out Joe Longo's former camera position, so he is moved to another spot farther down the course. Except for that, there are no other changes in the camera deployment.

The day starts out bright and sunny, but soon becomes overcast. The cameramen retire their ND3 and ND6 filters, which had been needed to control the bright sunlight. All goes well with the filming and, just as the last race is concluded, the snow begins to fall. Perfect timing.

After the shooting is over and the equipment and exposed film are securely stashed away, the inevitable post-mortem bull sessions take place in the bar. I have a chance to talk to several of the cameramen about their experiences in shooting this show and get their reactions to the new 7247
Continued on Page 592



(LEFT) Cameraman operating Photosonics camera shoots racers about to plunge through the starting gates at 200 frames per second. The new ASA 100 7247 color negative proved especially valuable for capturing shots like this with good technical quality. (CENTER) Specialist skier Jake Hessler, shown with two 16mm Beaulieu cameras mounted on a Bell helmet to get spectacular point-of-view shots as he races down the course. In this configuration, both cameras are facing forward with 5.9mm lenses. One camera is tilted slightly downward to include skis. (RIGHT) Former top athlete Frank Gifford now serves as ABC Sports announcer.



(LEFT) Former champion ski racer Billy Kidd, in colorful garb with cowboy motif, is now an executive at Steamboat ski resort. He was most helpful to ABC crew in performing on-camera and helping to set up special shots. (CENTER) Skiers and race enthusiasts crowd the edges of the course to watch racers competing all-out for money. (RIGHT) Cameraman Peter Henning, with sunglasses clamped in his teeth, shoots sync-sound shots of skiers leaving starting gates. He must simultaneously pan, zoom, rack focus twice and ride the aperture closed down and open again, as he follows racers and then pans back to the top for reactions of coaches.

FILMING THE PRO SKI RACES AT STEAMBOAT SPRINGS FOR ABC'S WIDE WORLD OF SPORTS

The mind-boggling logistics behind the fielding and accommodation of ten camera and sound crews to record a major sports event on film

By JOHN WILCOX

Director of Film Production, ABC Sports, Inc.

The versatility of film is an important factor in its consistent use by ABC Sports in the production of sports programming. THE AMERICAN SPORTSMAN series, in its tenth season on ABC this year, relies exclusively on film because of its outdoor documentary

format. Our production teams visited twenty three locations throughout the world in seven months, producing nine-and-a-quarter hours of network programming that could only be produced on film. The Women's Sport Special, a prime time documentary, also visited

locations around the world, including Russia, with a mobility only film can offer. The Howard Cosell Sports Magazine series uses film for the numerous location sequences which would not be feasible to tape. The producer then combines this film with electronic sequences resulting in an exciting format.

ABC's Wide World of Sports uses film for the total coverage of an event or as a supplement to electronic coverage to enhance a program. It may be used for vignettes to be inserted into the body of an electronic show, like an at-home interview with an athlete or, as was recently the case with the Rodeo Championship in Oklahoma City, for behind-the-scene shots of the riders training and a local rodeo museum tour. Film is also used for subjective points of view, as when we mount cameras on Bobsleds, Indy cars, Formula I cars, Demolition Derby Jalopies and Skiers' Helmets. Film is used as an analytical tool in slow-motion photography because its quality as well as cost makes it superior to tape.

Although many competitions for WIDE WORLD OF SPORTS are either live or tape, a number of events are also totally film. The reasons for choosing film vary—sometimes it's a simple cost factor (film production runs 15% to 20% less than tape to shoot), or at certain times our Engineering Department can't handle the current volume of production, or many times film is just



John Wilcox, Director of Film Production for ABC's WIDE WORLD OF SPORTS surveys the race course for professional ski racing at Steamboat Springs, Colorado, issuing instructions over walkie-talkie to crews deployed down the mountain. Walkie-talkies were indispensable to maintain contact at all times between the many crews widely dispersed over the lengthy course. Wilcox, now in an administrative capacity, directs 10 to 12 shows a year, as compared to the 25 to 35 shows he was assigned to previously.

(LEFT) A skiing cameraman flops down on the snow to film a low angle shot of racers zooming down the course toward him. A few such specialists, who can go anywhere on the course, are standard personnel for the filming of ski action. (RIGHT) Set up just beyond the finish line, cameraman with camera on tripod, and soundman film the winner crossing the line and prepare to move in for the shooting of a sync-sound interview.



more suitable to the event being covered.

Surfing, as an example, would be almost impossible to do electronically because of the waiting time involved on location, the distance out in the water where they surf, and such unexpected contingencies as we encountered this year—they changed the beach several hours before the contest. With film cameras, we simply dismantled our towers and followed the surfers to the other location.

The cameramen we use on WIDE WORLD OF SPORTS are all free-lance. Many of them do 80% of their year's work for ABC Sports, although it's logistically difficult for us to put anybody on staff because of the many different locations we work out of. Generally, when we're within easy flying distance of New York, we use New York personnel and on the West Coast, personnel from there. For the majority of the crew, we use cameramen who can perform specific, specialized functions and whose work we know well. If we bring a cameraman from New York to shoot on the West Coast, or vice versa, there's always a very good reason why it's done. It may be his unique proficiency in high-speed photography or in the use of extremely long lenses.

In Europe it's a somewhat different situation. We have had an association over many years with Samuelson Film Service Limited and, through them, we use the finest English cameramen. We very often don't rely on any American personnel at all for European shows—again, unless there is a specially talented technician we take over.

In the specific case of the filming at Steamboat Springs, it was a difficult week for ABC Sports—the reason being that there was another skiing competition to be covered at the same time at Park City, Utah. As a result, we had to split up our crew of cameramen who have worked with us specifically on ski shows for many years. Some of the people who had been with us the week before to shoot the pro ski races in Heavenly Valley, California, went to Park City and the rest came with us to Steamboat Springs with some additions.

My work as director of the Steamboat Springs pro ski race began with a survey with Bob Beattie, who is a consultant on skiing to ABC and has been for many years. Bob and I put on skis and went up to the top with the man who was to supervise construction of the different towers that would be required as camera platforms. The course, at that point, was still a pleasure ski slope. The jumps were not in position, nor had the start mounds been

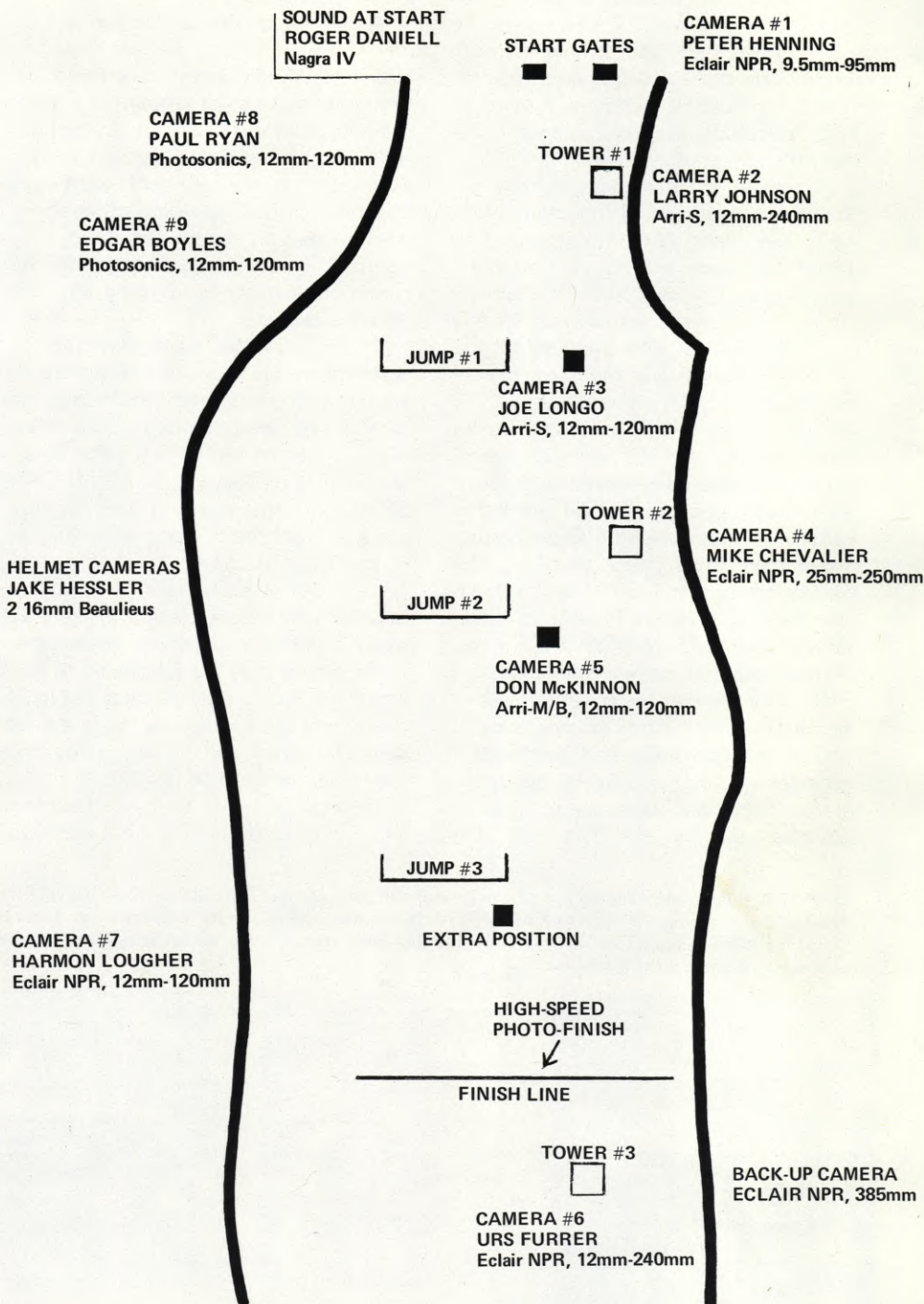


Diagram of the professional ski race course at Steamboat Springs, with camera and sound crews deployed for the filming of the Giant Slalom races on the first day of the weekend. On the second day, the course was shortened (and more gates added) for running of the Slalom races, the starting gates of which were located where Jump #1 appears on this diagram. The previous Camera #3 position was moved farther down the course to shoot action near the finish line.

made, but with the assistance of the people who run the area and with Bob's help, we mapped out fairly well where the course was going to be and, accordingly, where the cameras should be positioned.

The problem was to lock in the locations of the main towers, as they would require the most construction. There would be three of them located down the side of the course: one cover-

ing the Giant Slalom start, one covering the Slalom start, and one at the bottom for a main camera to cover the whole race.

Tony Brown, our Manager of Film Production, had already been working from New York on the difficult problem of finding rooms to accommodate the crew. This is always one of the biggest worries in planning a WIDE WORLD shoot, to quarter 20 people on

location in the same place, often a small town with a great influx of people for the sporting event. Unfortunately, it often proves impossible to have them all in the same place which is very advantageous for holding meetings, turning in film, unloading, storing equipment and the optimal use of vehicles.

I arrived in Steamboat Springs on Wednesday with my Production Manager Jon Hammond. While Jon was confirming room and transportation arrangements, I proceeded to the slope to inspect our tower construction. At this point the hill was fully prepared for the weekend's events and my main towers were built and fully painted.

Unfortunately, my original choices for the location of the two start towers proved unfeasible because of shale located beneath the snow. We had decided to reposition them and the Giant Slalom tower was in an ideal location. The Slalom tower was located too far from the start to make it feasible to cover even with the 12mm-240mm lens I had planned for that camera. Immediately I made arrangements for another tower to be constructed. Also at this time, I placed the five snow-level platforms I would need for the other camera positions. These had been constructed in advance to my specifications, but

moved into position only after I had seen the completed course.

As several of the cameramen arrived on Thursday night, we scheduled a free-style skiing vignette to be filmed on the top of the mountain the next morning. It was a beautiful day and the sky was crystal-clear. We took four racers up on the hill and, with two Beaulieus carried by skiing cameramen, we managed to do 15 set-ups in two hours. The snow and light made the conditions perfect for filming this free skiing sequence.

Friday was the travel day for the majority of the crew and they were all coming in from different locations. One cameraman was coming from New York. Another New York cameraman, who had been directing an AMERICAN SPORTSMAN sequence in Los Angeles, came in from there, along with the rest of the California crew.

Logistically, crew travel is a problem because people are coming in from so many different locations to areas sometimes served only by supplemental carriers. The Production Manager has to sit down and plot out how they are all going to arrive and be picked up and how many cars will be needed.

Generally, I like to have the crew arrive in time to survey the hill and have

an afternoon production meeting. In preparation for the production meeting at Steamboat, before leaving New York, I worked with the Production Manager on all aspects of the upcoming location shoot. We broke down the camera positions and assigned cameramen, equipment and assistants to each. Also assigned was the additional skiing help we would need to transport equipment, operate walkie-talkies and keep track of the competition for the cameramen.

We broke down the needs of each cameraman individually—the equipment and accessories they would need, the number of magazines, how much film they would be issued each day and specifically what I wanted from each camera position. Even with all of the planning, the first actual day of a shoot is always hectic. Cameramen are always looking for that last bit of equipment they forgot to put in their ditty bags, or that extra roll of film they were supposed to bring but didn't.

At Steamboat Springs we were extremely lucky in getting accommodations fairly close to the mountain. This is the first show I've ever done where Sno-cats could pull up to the back door of our condominium for loading the equipment. The first Sno-cat hauled the cameramen and equipment assigned to

(LEFT) A skier comes leaping out of the gate at the start of the Giant Slalom race. (CENTER) From the top of the run the course stretches down toward the Steamboat Village area below, with its Alpine-modern hotels, shops and condominiums. (RIGHT) Cameraman Joe Longo preferred to shoot his Arri-S camera (with 12mm-120mm zoom lens) from a body brace because he had to whip around fast to hold skiers coming off the jump and speeding toward the finish line.

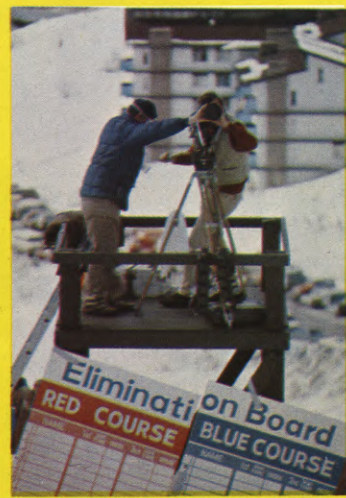


(BELOW LEFT) Skiers coming off the final jump surge in a last burst of speed toward the finish. (CENTER) As skiers leave the starting gates, Cameraman Peter Henning (with Eclair NPR and 9.5mm-95mm lens, shooting sync-sound) pans them around and Soundman Roger Daniell monitors the Nagra IV recorder. (RIGHT) From Tower #2 cameraman Mike Chevalier lines up Eclair NPR camera with 25mm-250mm zoom lens.





(ABOVE LEFT) On Tower #1 cameraman Larry Johnson operates Arri-S with 12mm-240mm lens, assisted by Roy Hogstead. (CENTER) Director John Wilcox, on skis, checks out various camera positions before races begin. (RIGHT) Expert skier Jake Hessler shown with helmet rig that holds two 16mm Beaulieu cameras—in this case, mounted so that one shoots forward and the other backward to get subjective racing shots.



(LEFT) Cameraman Don McKinnon checks out his Arri M/B, with 12mm-120mm zoom, a camera which permits him to shoot at 48 frames per second most of the time. (CENTER) Cameramen representing various organizations line the course. In the foreground is ABC WIDE WORLD OF SPORTS cameraman shooting Photosonics camera at 200 fps. (RIGHT) From Tower #3, just beyond the finish line, cameraman Urs Furrer shoots Eclair NPR camera with 12mm-240mm lens. His camera covers the entire course and is crystal-synced to recorder for sync-sound coverage beyond the end of the race.

the positions at the top of the hill. Those assigned to the lower part of the hill rode over in a large motor home camper which we had on location.

At a condominium parking lot they were met by a 2nd Sno-cat and moved into position at the bottom of the hill. The first Sno-cat moves the cameramen into position as it makes its way down the slope. This is an operation I allow plenty of time for because it is generally a slow process. In this case the Sno-cat couldn't get down to the start so the cameraman, assistants and skier helpers lugged the equipment into position.

On shows where we're operating very close to the base lodge, there is often a fixed building we can use as an equipment room. Where there is no such facility, we bring in either a trailer or a motor home—the motor home being more convenient because it has electricity and gas heat and air conditioning for the summertime. It gives us a place for the cameramen to go back to unload and have a beer or lunch, and gives the announcers a place to hide between takes.

Once the cameramen are in position on the hill, I have the opportunity to get on skis and visit each position. I start at the top of the course and talk to

the sync cameraman and the soundman at the starting gates to be sure that they really understand what I want from them and to hear their suggestions. I do the same with the other camera positions all the way down the hill. I look through the cameras and check the shots and make sure the flow of communication is established, because it is obviously impossible for me to be with all of the cameramen at the same time during the actual shooting. They're also kept busy during the morning practicing their shots, checking focus, discovering any problems they may have with positioning, making adjustments and finding out where the ski patrolmen or other press photographers are going to be. It's valuable rehearsal time.

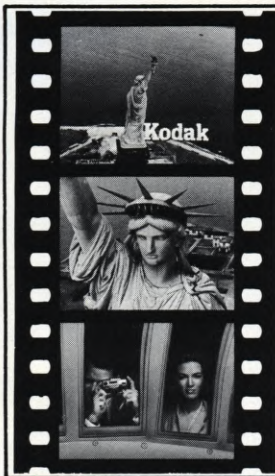
Camera #1, is a hand-held sync Eclair NPR at the start. His coverage is behind the gates and he constantly maintains crystal-sync with the soundman. He uses a 9.5mm-95mm lens because of the close quarters within which he has to function. His coverage is basically the preparation of the racers... cleaning off their boots, preparing the skis, mentally getting themselves ready and getting rubdowns from the coaches. Prior to the key races, this cameraman moves into position alongside the gates and

frames a side shot of the two racers as they get ready, seconds before they are given the signal to go.

Generally, in cutting, that would be the first shot, as the racers move into the gates. We would then go to Camera #2 which, in the case of Steamboat, was an Arriflex-S with a 12mm-to-240mm lens. This cameraman, when we get to the key races, starts his coverage prior to the time that the racers move into

On the day before shooting begins, John Wilcox roars toward the finish line in Celebrity Race. An excellent skier, he came in third. (Photographs by BOB COLLINS.)





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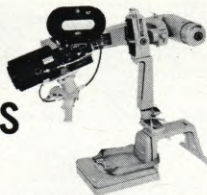
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the gates and he overlaps the preparation, giving us scenes which we can intercut with those from the hand-held Camera #1 at the start position. We try to get the tower where Camera #2 is located as high as possible, so that this camera can point almost directly across on a level with the start.

Needless to say, the slope in front of the start drops down almost immediately. Camera #2 holds his straight-on shot during preparation in the starting area and brings the racers into the gates. He then moves into a tight shot of the left skier and, after identification (on TV we can superimpose the name of the skier on the lower third of the frame) pans over to the skier on the right. Nine or ten seconds before the start, he pulls back to a wider shot showing the two skiers in their respective gates. The horn goes off, the gates are released, and the two racers head off down the hill toward Camera #3, which, in this case, was located just below the first jump.

Camera #3, at Steamboat, was an Arri-S with a 12mm-to-120mm lens and the cameraman was shooting it from a body-brace. He would start rolling his camera as they came out of the gate and carry them over the first jump and down toward the second jump. In editing, his camera would be cut in just prior to the first jump, carrying the racers over that jump in a sort of profile shot to establish the height of the jump. Camera #3 is shooting low on a snow-level platform so it gives us a nice angle on the racers coming down from the start, heading for and over the first jump.

Camera #4 is an Eclair NPR with a 25mm-to-250mm lens and its position catches a profile shot of the racers as they come down over the first jump. It's more or less a back-up cover camera for the entire course, starting at the beginning of the race and carrying the racers right across the finish line. Obviously, it's on a reverse shot at that point, but it gives us another angle in case we lose a camera or if there happens to be a spectacular spill we can document from a different angle.

Camera #5 is located under the second jump. It's an Arri-M with a 12mm-to-120mm lens, and the reason it is an Arri-M is that it permits us to shoot some 48-frame footage when desired. This cameraman's coverage starts after the first jump, carries the racers over the second jump and down toward the third jump.

Camera #6 is our main cover shot of the whole race and it's located atop a 20-foot wooden tower. This camera starts as the racers come out of the gates, carries them over the first jump,

over the second jump, down over the third jump and across the finish line. It then follows them as they run out and stop and keeps rolling as they take oxygen or whatever. It is also used as a second sync-sound camera for interviews. It is a crystal-sync NPR with a 12mm-to-240mm lens.

I always try to cover interviews from two angles, in case one camera has a problem, since you don't get a second chance at an interview. It also gives us two cameras from which to cut an interview. Camera #6, being in the position where it is, doubles very well for this purpose.

Our low camera, which is Camera #7, is an Eclair NPR with a 9.5-to-95mm lens on it. This camera starts right before the racers come across the finish line and, from snow level, carries the winning racer hand-held across the line and moves into him as he stops in the run-out area. If an interview is to take place, Camera #7, in crystal-sync with a Nagra TV recorder, is there with a shotgun and a hand mike standing by.

Camera #8 and Camera #9 are two high-speed cameras. In the case of Steamboat, they were both Photosonics, one with a 12mm-to-120mm lens and the other a 9.5-to-95mm. (These two cameras, needless to say, are utilized for slow-motion photography.) For the Giant Slalom at Steamboat, we started with one of the Photosonics cameras up at the start of the early runs, so that it could get feature shots to be used in openings or closings. We call them "beauty shots" . . . tight shots of racers coming out of the gates, just showing their heads, or just showing their boots or the gates blasting open at 200 frames . . . things that we would use in an opening or cut to a music montage.

Then, as the competition progressed, the Photosonics was used to film the differences in the starting techniques of the two competitors. Obviously, the start is a very important element of any kind of race and, in skiing, some racers are able to climb out of the starting gate faster than other racers. So we did profile shots of a number of racers starting and when we get the footage back in the cutting room, we will try to find bits of photography that indicate the differences in style between one racer and the other.

For the semi-finals, the cameraman running Camera #8 (who is a skiing cameraman and, thus, able to cover anywhere on the course) came down to the first jump and did some photography there, isolates on several racers I thought we should feature. Then he went down to the finish line and positioned himself on a snow-level platform

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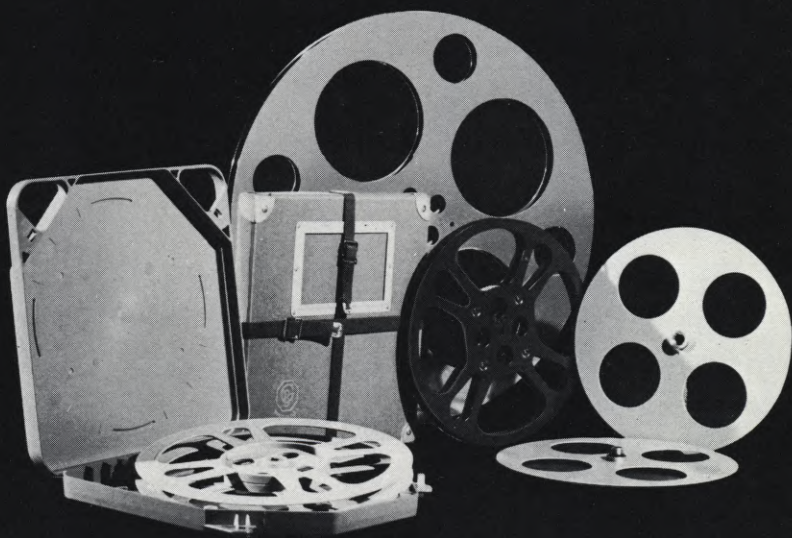
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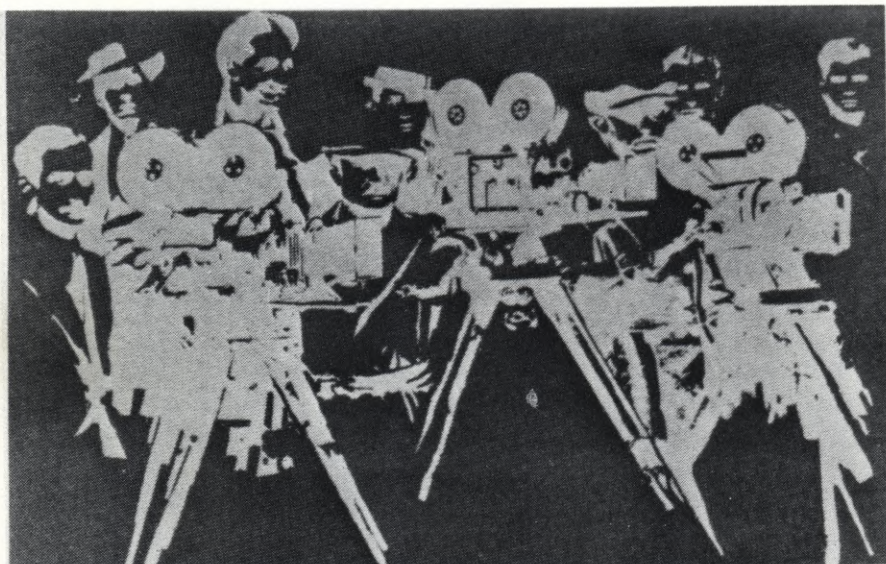
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just behind the line, lining up on a profile shot. In this kind of racing, the racers sometimes finish within a thousandth of a second of each other—the race is that close—so Camera #8 becomes a photo-finish camera, shooting at 200 frames. On the air, we would bring the racers across the finish line at normal speed, but if the race were close, we would dissolve into a “replay” of the finish at 200 frames. We would probably freeze a frame to begin with, bring them across the line in slow-motion, freeze a frame and dissolve back to the action again.

Camera #9, the other high-speed camera, is also operated by a skiing cameraman. He has been making ski films himself for many years and knows much about the techniques and the problems that racers can encounter. His assignment in the morning is to watch the qualifying rounds and spot which racers seem to be having problems. Then, as the afternoon progresses and we get into the final rounds, he generally positions himself at a location that is most advantageous for covering spills. During the early afternoon rounds of the races, he will shoot isolates of specific racers, just to show their style in going off the jumps in a tight shot. When we get into the semi-finals, he stays in a two-shot, in order to cover any accident that may occur.

We were using the 7247 negative for this shoot and, since we couldn't get it on daylight spools, we had to load it onto split-reels for the Photosonics cameras. I've always been afraid of using split-reels in the cameras because there is a danger of jamming, but we didn't have the slightest problem, no jams at all—even at 200 frames.

Another camera “position” that we utilize is the head of a skiing individual who goes down the course and gives us subjective views of what it's like to run the course.

In the case of the ski races at Steamboat, we used a helmet camera rig which has two 16mm Beaulieu cameras mounted on either side of the helmet. We did three runs like this. On one of them we had one camera mounted forward and the other pointing backwards. On another, we had 5.9mm lenses on both cameras, with one tilted down a hair to show the skier's feet, while the other showed the action down the course from his point of view. On a third run, one camera had a 5.9mm lens, while the other had a 10mm lens.

The skier went down the course behind two other skiers for one run and then, for another run, he went down it without any skiers in front of him. This footage could be used in an opening or

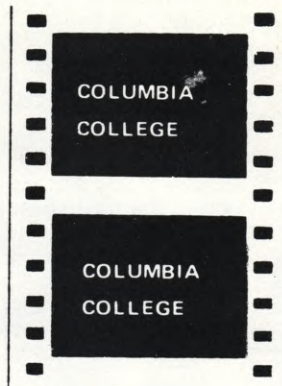
in a montage, and it also could be used to give the viewer an indication of what it's like to scream down a ski slope and jump off of eight-foot jumps.

Equipment is always a major concern because of the different conditions under which we film for ABC Sports. The AMERICAN SPORTSMAN series takes our equipment into jungles and in boats where salt water spray is constant. On WIDE WORLD OF SPORTS shows we operate under many different conditions, with cold weather at a ski race being the most difficult. All of our cameras were winterized early in the year by FERCO in New York. The ABC Sports Film Department has an arrangement with that company for maintenance of our film equipment. Rather than just bringing it in every so often for cleaning and repair by FERCO, the equipment is stored there and under their supervision, preventive maintenance is carried out each time equipment is used. For example, after the Steamboat shoot, all of the equipment used will come back to FERCO and each unit will be stripped down pretty much to its core and checked for any possible damage. It will then be prepared for the next job.

Instead of waiting for a list indicating that the lens is off-focus, or the mirror is wobbly or the speed is off, FERCO approaches it from the point of view that maybe something happened that is not visible to the naked eye—for example, a mirror that is not quite loose yet, but may come loose on the very next day of shooting. All things are checked just as though the camera had been exposed to very heavy shock. In this way, they will hopefully catch a large percentage of the problems that might otherwise occur unexpectedly on the next show. In other words, heavy preventive maintenance.

The reason why we've made this arrangement is that for ABC Sports to run the kind of shop that a professional film equipment company has, with its mechanics, etc., would obviously be unfeasible, considering the number of cameras we have. For years we've had the problem of equipment coming back to us, then having to be sent out to someone else for maintenance and returned to us. Now we have a one-stop service and it's much more efficient and saves a lot of time.

Another important element that is filmed prior to the afternoon finals is the show opening. At Steamboat there were two separate races—one on Saturday, the other on Sunday—and each required its own opening. I talked with the Producer and with the talent about what, specifically, we wanted to say for



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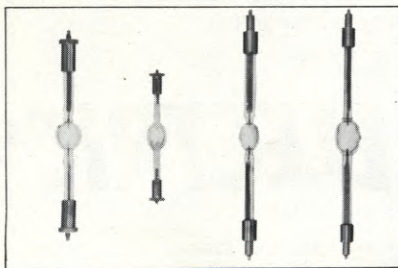
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the opening of the show. Then I blocked the action and decided how we would cover it.

The opening for the Giant Slalom at Steamboat was a bit unusual. We took two racers out of the starting gate and followed them down over the first jump. Standing directly under that jump were our two announcers and the camera pulled back as the two racers jumped right over their heads. Then the camera zoomed back in and the announcers started their dialogue for the opening of the show. This gave us a graphic way of depicting the size of the jumps—which were higher than usual here, eight feet. This opening was covered by three cameras in order to give us a choice of angles. We used Vega wireless mikes on the announcers and the soundman was located with the hand-held cameraman right next to the jump.

The opening for the Slalom race on Sunday was a bit different. We put two people in the starting gates—ex-racer Billy Kidd and our announcer, Frank Gifford—and did cutaways of them looking at each other in an attempt to build up a bit of tension and make believe that the two men were going to race against each other. When the gates blasted open, Billy Kidd headed down the course. The camera followed him for a few seconds and then moved back to Frank Gifford, still in the gate, as he welcomed us again to Steamboat Springs for the Slalom event, which would be Part Two of our show.

The best position for the Director during the actual race is the finish line, because the whole race course is visible from our tower located there.

At the finish line, I try to keep abreast of what is happening in the competition, concentrating on who's ahead at certain points, which racers we should feature with our long lenses and which should be covered with slow-motion and isolates as the competition develops. It's all a guessing game, but obviously, for isolates and technique pieces, we want to end up with footage of the winners.

As we progress into the final rounds, we start coverage with all cameras and I cue this from the bottom, using a walkie-talkie. All of the individual cameramen have walkie-talkies, as does a person at the starting gates who lets me know when the racers are getting into the gates, who they are and what courses they are on, in case we want to do isolates. At the same time, we ready ourselves to do run-out interviews, if a story should develop.

Working with the high cover camera, we pick off crowd and human interest

shots in the finish area. For instance, on Sunday there were quite a few hang-glider kites flying and I noticed that one of them was about to crash. I yelled to the cameraman on the high camera and he swung around and, with his 12mm-to-240mm lens, did a nice zoom in on this girl flying a kite into the side of a building.

Each cameraman, in addition to his regular duties, is instructed to shoot 150 to 200 feet of crowd shots, pretty girls watching, children sliding down the hill on sleighs, etc. Shot from each position, this gives us cutaways to go to in cutting to commercials. The middle cover camera would also swing around and pick up the racers riding back to the top on the ski lift, which was right alongside his position.

Other things that we shoot on location include what we call "sitdown" interviews. They're not always *sitdown*, but in the case of Steamboat, we did one on the patio of a restaurant with the leading money-winner on the circuit, Hugo Nindl. We used two cameras and put Vegas on Nindl and Frank Gifford, who did the interview. Prior to this interview with Hugo, we had followed him as he trained and did his afternoon exercises—running, jumping and gymnastics. We shot this from four different angles to be used as cutaways from the interview as he discussed his training program.

Another interview we did was shot in the lounge of the main hotel near a fireplace. We lit it with four Lowell Tota-Lights. This is a great light kit that we bring along with us on many assignments. We don't shoot many interiors, but when we do have a situation like that, the Tota-Lights always prove adequate for us. We always bring along enough cable to find that extra plug on a different circuit, so that we won't blow out the lights of the hotel.

The sitdown interview we did in the hotel involved Bob Beattie and another ski racer. Again we used two cameras and the Vega mikes. This interview will be used during the body of the show.

As the hectic events of the day came to a conclusion, the Sno-cats moved back into position to retrieve the cameramen and their equipment. Then back to the hotel to unload and repack the many equipment cases. Using the 7247 for the first time, we were eager to see our rushes. They were quickly sent back to our supervising editor, John Peterson in New York, and, once out of the lab, the results were beautiful. The latitude of the new film is tremendous... What follows next—the post-production—is a whole 'nother story... ■

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ABC USES NEW NEGATIVE

Continued from Page 581

Color Negatives. Following are some of their comments:

HARMON LOUGHER—*Cameraman and ABC WIDE WORLD OF SPORTS West Coast Director of Photography*

Since I'm more or less considered to be Director of Photography for WIDE WORLD OF SPORTS on the West Coast, my job started in Hollywood with getting together the crews for filming at Steamboat Springs, the kind of people who are adaptable to shooting shows of that type. I get these people together and fit them into the show and then, when I get to the location, I become a cameraman.

At Steamboat I was assigned to get roll-out shots at the bottom of the hill, using an Eclair NPR with a 9.5mm-to-95 mm lens. I would take the skiers off the last jump right down through the finish gate and then walk with them to the actual finish line, where they would get oxygen and whatever else they needed. We would be rolling with crystal-sync and if there were a talent, somebody like Frank Gifford, to go in for an interview, we would get a mike to him while still rolling and he would walk in and do his interview.

Primarily, on a location like this, I try to watch everything that is going on in our operation and make sure that the equipment the people need is moving up and down the hill smoothly.

My own shooting at the bottom of the hill is a constantly moving thing. It's off the shoulder—a *cinema verité* operation, and it gets a bit rough at times when everybody gets excited and crowds around the winner. You just have to move right into them and get pictures of everything that happens out there on the finish line. It's important to capture all that excitement on film.

On this shoot we brought in a helmet with two 16mm Beaulieu cameras mounted on it—one facing forward and the other backward, with both using 5.9mm lenses. We had the skier, Jake Hessler, take it down the hill for us and it worked very well. He would start down with the skiers in back of him, picking them up with the backward-facing Beaulieu. Then they would pass him and be picked up with the front-facing camera. He would continue down with them, giving us point-of-view shots going off the jumps and winding up at the finish line.

Using two Beaulieus on the helmet, instead of GSAP cameras, is a bit unusual, but we were using the new 7247 color negative and it isn't available in

50-foot magazines—not yet, anyway. So, he had to use the larger Beaulieu cameras in order to accommodate the 100-foot loads. He didn't have any problems at all, however, because the load was balanced by mounting a camera on each side of the helmet. When we use the GSAP camera, we balance the load by mounting the battery on the other side of the helmet. He was carrying quite a bit of weight on his head, but he wore a ski cap under his helmet and it didn't seem to bother him. He's worked for us several times before—at Heavenly Valley, Mt. Snow, Bear Valley and Vail.

I like shooting with the new 7247 color negative. I've run about 2,000 feet of tests on it and I like it. It's a little bit delicate to handle, but I think that a cameraman should handle all film a bit delicately, in the sense that it may pick up static dirt. But if everybody pays attention to cleanliness, especially in regard to their equipment, there's no problem.

The film has good latitude and there's no difficulty in running it at high speed. I ran a test with it in an aircraft doing about a 9G pull-out on a turn. It didn't buckle. It didn't jam. It ran through perfectly. You get a much better print out of this 16mm negative than you do from the reversal positive and I'm really happy with it. Up until now it's been very difficult to get producers to use 16mm negative, but I did a Honda commercial with this new 7247 and it worked beautifully. We had no problems with it. We blew it up to 35mm and it worked fantastically.

We had some cold weather at Steamboat (although, not as cold as it could get) and the 7247 showed no sign of brittleness. Positive film has a tendency to get brittle and break in cold weather. Maybe if we took the 7247 down to the Antarctic we'd have a problem, but I don't think so. I've been to the Antarctic and I think that if you handled it properly it would take care of itself. I love this new film. I think they should have had it years ago.

JOE LONGO, Cameraman

My position for shooting the Giant Slalom on Saturday at Steamboat was just below the first jump. I had an Arri-S with a 12mm-to-120mm lens. By preference, I shot it hand-held with a body-brace—the reason being that, through experience, I've found that when you're up in the cold country you can very rarely get a tripod to swing freely and quickly. Even a friction head will give you a little trouble.

I was standing on snow that later turned to ice as you packed it down.

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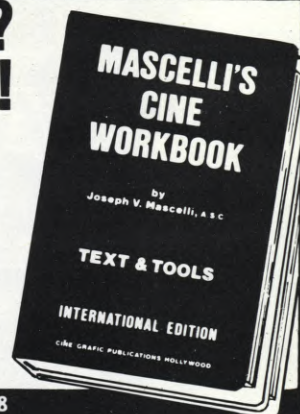
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The racers would come down the slope and take the jump right in front of me, going from right to left at breakneck speed and I would follow them down with the body-braced Arri-S. With them going right by me off the jump it created a feeling of great speed.

On Sunday, for the Slalom race, they moved me down to a position just below the finish line so that I could get a shot of the final jump, a very dramatic one, and the stretch where they made the last burst of speed toward the finish. This time I had to use a tripod because I was using a fairly long lens, 150mm. I would pick the racer up more or less straight-on as he came down, which gave me a chance to get him located properly in the frame; then, as he went by me, I'd hold him in a head shot.

We were lucky at Steamboat in that the weather was fine most of the time, but when you're shooting ski races in extremely cold weather there are special problems. For example, the cold makes your power-packs go dead relatively fast, especially if you're lying in the snow. As most cameramen who do this type of shooting know, the best thing is a body belt worn inside your jacket where your body heat can keep the pack warm.

Your hands get cold and, even though you've got an assistant, you have to pull your own focus, because, once the action starts, everything is moving so fast that you'd never be able to coordinate with an assistant.

Then, because brittleness develops in the cold, you have to be extremely careful in handling the film. If it's cold enough it will sometimes snap if you merely touch it.

On a shoot like the one at Steamboat, you get up to your camera position about 9:30 in the morning and—even though the races you're filming don't start until 1:30 p.m.—once you're up there, you stay there. It's simply a matter of logistics. Sure, it would be nice to go down to the coffee shop, but how are you going to get back up again? You have to ride the Sno-cat up and it only makes the two or three trips necessary to get all of the crew to their positions—which takes considerable time. So you're stuck up there, and it's a long day. But it's very rewarding when you get down to the short strokes and, all of a sudden, you feel the excitement of what's happening. You catch the feeling of exhilaration from the audience.

Skiing is a strenuous sport and the racers have to be physically fit. The cameramen who film them have to be physically fit, too. A couple of times I made a mistake and went out partying

the night before, and that's the worst thing you can do at high altitudes. There's a lack of oxygen and you find yourself gasping for breath. It's really hard and you need every bit of strength and wind that you've got. You can't handle a hangover at high altitudes.

As for the new 7247 color negative that we used at Steamboat, I like it very much. We ran the tests we'd shot with it the week before at Heavenly Valley and I particularly liked the flesh tones and the way it didn't pick up excessive contrast in the print. Even when shot in dull overcast the colors were beautiful; they seemed to just come alive.

The 7247 doesn't seem to be as sensitive to scratches as the 7254. This is important, because when you shoot documentaries you find yourself in some of the damndest places where it's easy to pick up dust and dirt. The tests I saw with the new negative looked very clean. Of course, it all boils down to having cameramen and assistants who really want to keep the cameras and gates clean.

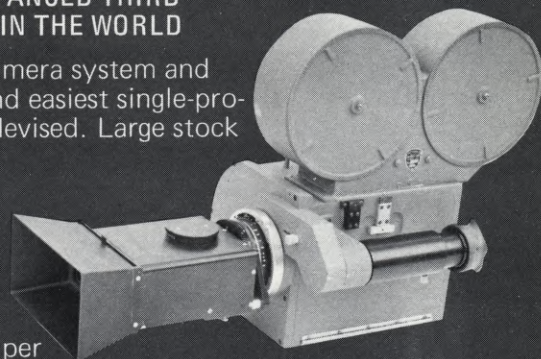
I did have one difficulty at Steamboat because of shooting the faster film. On Saturday the sun was very bright and it was coming over my shoulder flat onto the subject. I had an ND6 filter over the lens and I wasn't wearing very dark glasses when I wasn't shooting. My eyes were "stopped down" for the glare, so that when I put my eye to the viewfinder, it was like looking into a black hole. Luckily I had enough f-stop to get a wide depth of field, but if I'd had to pull focus critically I would have been in trouble. Next time I'll bring along a pair of very dark glasses to wear when I'm not shooting.

I would personally like to make a few more tests with the 7247, putting it through the kinds of conditions under which I usually work. I'm also interested in seeing how well it will blow up to 35mm, because there are a lot of producers who shoot in 16mm because they can't afford 35mm and they'd like to feel that they can get a good blow-up later. Of course, the labs have already come a long way in using the liquid-gate process to make blow-ups, but a little more help from the film manufacturer would make the results even better and I think a lot more people would be going from 16mm to 35mm.

I hope the new negative catches on, because I shoot a lot of 16mm and guys like myself would like to see it work. We'd like to think that we can get almost as good a result with 16mm as other cameramen get with 35mm—because 16mm is going to be around for a long time. On the ski shows we've been shooting, for exam-

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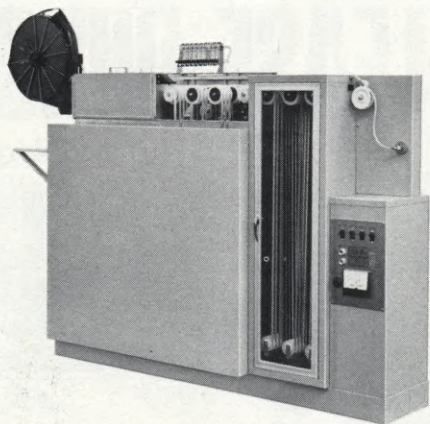
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ple, you couldn't drag a 35mm camera up the mountain and shoot with the size crew we use. You couldn't put two 35mm cameras on a helmet and have a skier run down the hill with them. Yet, it's shots like these that make the event seem more authentic.

I think the 7247 will be good for cameramen who shoot a lot of 16mm. I'd like to see it score because it will make my work look better—and if my work looks better, I'll work more. It's as simple as that.

PETER HENNING, Cameraman

At Steamboat Springs I was shooting an Eclair NPR, with three loaded magazines and a 9.5mm-95mm lens. My basic assignment was to shoot sync-sound at the top of the hill—filming the skiers preparing for the race, getting into the starting gates and then leaving the gates. The object was to pick up the little human interest details, such as the tensions of the racers and whatever else might happen in that area to add to the story. There were no real problems. Shooting at the start is probably easier than shooting anywhere else on the course, because everything's happening there. It's all excitement. So you just turn the camera on and shoot.

On the first day we had extremely bright sunlight all day. The second day started out that way, but ended up quite overcast by the end of the day. On both days, using the 7247 negative film, I shot with an 85N3 filter. At the top we were mainly shooting tight closeups of people's faces and that's what I was exposing for, letting the periphery go white. The trick is to not be fooled by any spillover bright reading you might get from the snow. Because we were shooting negative I could be a bit more relaxed about exposure because of the greater latitude negative stock has, as compared to reversal.

Exposing subject matter in snowy surroundings is always a bit tricky, of course, because of the danger of being fooled by the bright surroundings. I just use a Spectra meter to read the incident light and open up a third of a stop. I find it helps to tilt the meter down just a bit to avoid getting the full blast of the light hitting it. I don't use a spot meter for such shooting because it takes too much time to memorize the numbers or use the calculator.

There is one thing that can be tricky about exposure when you start tight on faces and then pan the skiers a bit of the way down the hill against wide expanses of snow. The procedure I use is to start tight on the face of the skier in the far gate, switch focus to the skier in the near gate, widen the frame and then

widen full as they are getting ready to go so that I can catch both skiers leaving the gates together. As they go out the gates I follow them around and ride the aperture ring with my finger to stop down. Sometimes I pan back up to the people at the top in order to pick up some reactions—maybe a shot of a coach giving an anguished cry as his racer falls, or something like that. This calls for rotating the aperture ring back to the original stop. Keeping this smooth is basically a matter of feel and judging from the way it looks through the eyepiece. Actually, I'm not too worried once they've left the gates, because I know another cameraman farther down the hill will have picked the action up from there.

As far as the new 7247 negative is concerned—it's like the Messiah has arrived. I think our hardest problem will be convincing producers who shoot 16mm that it's worthwhile to convert to negative stock. All of the producers I've talked to on the subject during the last six months have said: "No, it's awful. It gets dirty. It gets scratched. We'd better stick to reversal."

But from the tests that I've seen of this new negative, I'd say that it's the way to go now. I really believe that—and I'm not an ad for Eastman. I just think that this new negative can solve a helluva lot of problems, especially in documentary shooting, because now you can shoot a lot of things you couldn't shoot before, using a minimum of light without changing the whole atmosphere of the room you're shooting in.

URS FURRER, Cameraman

At Steamboat I had the master camera position at the bottom of the hill, which covered the entire course from the start all the way down to the finish. It's not a visually exciting position, but it's one that you need every so often in order to cut from an exciting shot to something solid. It was basically a straight-on shot all the way down to the finish line, except toward the end where I had to make a swing of about 200 degrees in order to take the skier to the windup position. There he'd be greeted or interviewed and he'd be taken over by another camera—a ground camera with sync-sound, if there was to be an interview.

My equipment was an Eclair NPR with a 12mm-240mm lens, which gave me the range to be able to start on a fairly tight shot of the gate and still be wide enough at the bottom of the hill for the finish. Other than the camera, the tripod and the lens, there was no special equipment involved. There were



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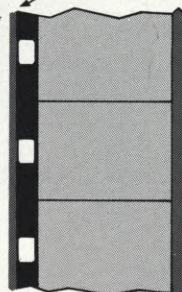
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no particular problems, except for the strictly operative problem of making a big pan at a very high speed, with the skiers very close to me.

The first day was very sunny with no changes in terms of the amount of light available. There was a change in angle of the sun from morning to afternoon, but that didn't really affect us much. I was positioned in such a way that I would be shooting a side-lit subject to start with and again at the very end. There was a very short period in between where the subject was totally front-lit, during the fast pan, but that period was probably less than half-a-second, so there was no compensation to be made.

The second day was perhaps harder to work with because of the diffused light on the white snow. I've found that this tremendous amount of bounce light floating around generally gives you a higher exposure reading, which is somewhat deceptive. Whereas direct sunlight can be easily computed, in a diffused situation with overcast and snow you tend to pick up a lot of bounce light that's not really there. It's there, but it's not there—depending upon what the size of the shot is. For example, the long shot of the racer coming down the hill would require a certain exposure, but when you zoom into a close shot of his face you would lose some of the bounce light that's there in the wide shot. By simply shading the meter from underneath or above you could lose a stop on the reading, so it can be deceiving. Ideally, I'd have liked to be able to make a precise adjustment of the stop during the pan, and we tried to do that. My assistant did pull about a third of a stop when I zoomed into 240mm on a face at the end of the run. The latitude of the negative stock helped us in this regard, as opposed to reversal stock.

As far as calculating exposure was concerned, I stayed with incident light readings. I'm actually not very used to using a spot meter. I carry one, but I use it very rarely, such as in a case where I can't get close to the object that I want to read. I don't honestly trust myself with a spot meter because I think that unless it is used with extreme care, it can be highly dangerous. I'd rather go with comparative readings. In other words, if I can't get close enough to the subject to read it, I can compare it with a similar lighting situation that's near me and use that as a guide, rather than resorting to a spot meter. I've used the spot meter occasionally on a surfing show where it's impossible to reach a surfer who's way out in the water. But I still think it's dangerous, because if I happened to pick up a bit of white surf

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We were shooting the new 7247 negative and there has been, of course, a lot of controversy about 16mm negative and its uses. I'm speaking now basically about the 7254 16mm negative when I say that I've heard about all the problems and known of shows that have had problems with dirt, for example. It's been very difficult over the past few years to talk producers into using the 7254, but I believe that, at least to some degree, the problem lies in the kind of myth that often develops in this industry. In other words, there may have been two or three cases in which someone had a real problem and, before you knew it, everyone was saying: "It's terrible. You can't use it." We encounter that same thing with equipment, too. A new piece of equipment comes out and it may have some "birth problems" in the beginning. The word gets around and, the first thing you know, it's been black-balled. That has happened with the 7254 negative, but I don't think it's been given a chance in this country. I've shot perhaps 10 hours of finished programming with 7254 negative during the last eight to twelve months and I've had no problems at all with it.

Now, I can't explain why we didn't have problems and other people did. Of course, dirt has always been a problem with 16mm negative stocks, and it does call for a clean approach in working with it, on the part of the assistant and, even more important I think, in the laboratories. The laboratory is probably the biggest cause of dirt, when it comes to 16mm negative. The 7247 negative is too new to be able to make any definite pronouncements about it, but I should think it would require the same precautions as the 7254.

If 7247 proves out to have all of the qualities promised for it I would certainly hope that it would be widely adopted in the industry. From the cinematographer's point of view (and I'm speaking from my experience in using 35mm color negative), negative is very definitely a superior stock to use. It makes shooting much easier and reduces your lighting requirements, while still giving you a high-quality image.

If 7247 comes through as promised, it will not only be quite a boon to the 16mm industry, but (hopefully) more shows that are now being shot in 35mm might switch to 16mm. I'm speaking particularly of films made to be shown on television, such as commercials and some of the location-type series. I would love to see a location-type series shot in 16mm negative. If 7247 proves out, I think it will do a lot for us. ■

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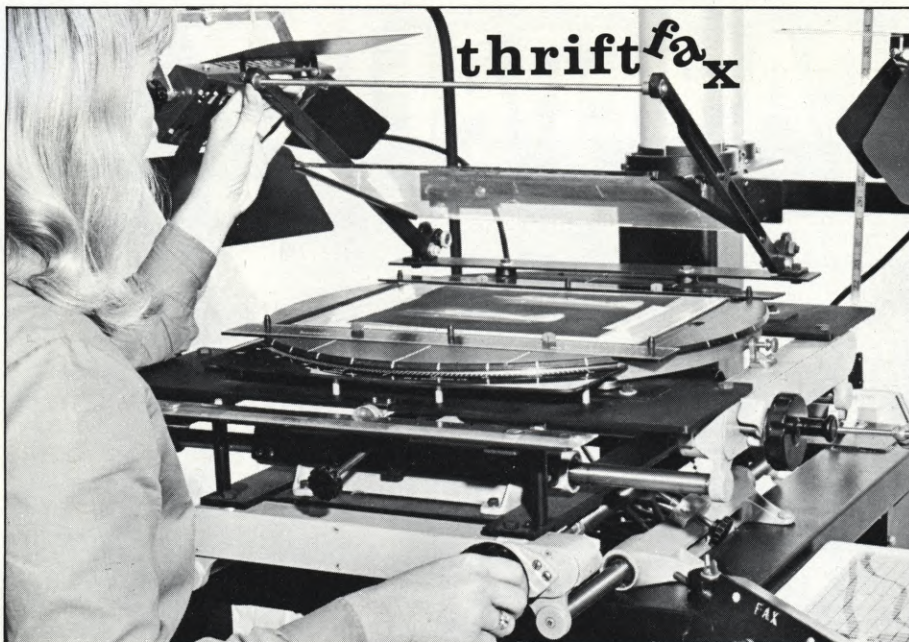


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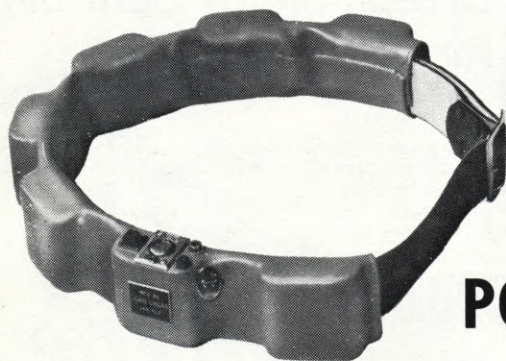
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"THE STING"

Continued from Page 537

lenges in executing the art direction for "THE STING"?

BUMSTEAD: We were combining studio-built sets (both on the stages and on the backlot) with actual interiors and exteriors around Los Angeles and in Chicago. The major challenge, I would say, was getting them to match, in terms of authenticity and realism. The main thing we had to do was dirty all of the studio sets down to tie in with what we shot in Chicago. When I made a scouting trip there, I noticed that pedestrians stuffed newspapers in the webwork at the base of the elevated pillars. So, when we built our elevated on the backlot, we included little touches like that and had steam coming out of the manhole covers. In Chicago we had to make all new signs and billboards for the 1936 period.

QUESTION: Were all of the exterior street sets that you had to build constructed on the backlot at Universal Studios?

BUMSTEAD: Yes. Universal is one of the few remaining major studios that has a very extensive backlot. It's probably the largest in the world and it had certain elements that could be adapted, such as the elevated, which was originally built for "GAILY, GAILY".

QUESTION: In a picture like "THE STING", where you used so many real interiors, how did your problems differ from those of a picture for which you build all of the interior sets?

BUMSTEAD: Actually, the real interior locations that we used as sets in this picture were the least of our problems, because there's still a lot of existing architecture that hasn't changed that much since 1936. The architecture of that period is easy to duplicate, but it's the set dressing—lighting fixtures and furniture—that does so much to re-create the period realistically. The costumes, of course, help a lot in that respect, too. In Los Angeles (and also in Chicago) we had difficulties with the sodium vapor lights, which didn't exist in 1936. There were no markings on the streets during that period, either. Parking meters were another anachronism that we had to cope with. Getting long shots of the streets was a problem, too. You might have a group of two or three good buildings, but right next to them there would be several modern buildings that

would be hard to disguise. We were very fortunate to find one block with intact period buildings in Pasadena and we converted the street by putting in our own signs and lamp posts. It worked out fine. When you just have to do individual shots on the streets it's easy to find two or three buildings that are right for the background—in Los Angeles down around Main Street and First street there are some good places—but when you have to pan and cover a big area, you're in trouble, because you keep running into skyscrapers and all kinds of modern conveniences.

QUESTION: I understand you converted Pasadena's venerable Green Hotel into a gambling den. Can you tell me a bit about that?

BUMSTEAD: Well, we were running short of money to build sets and we discovered that the architecture of the Green Hotel was perfect for the period. Mainly by means of set dressing we converted it into a plush New York gambling casino. We also did some corridor shots there that were supposed to be in a hotel in Chicago. We had to take out some modern firewalls and then replace them when we were through, just to keep the firemen happy.

QUESTION: What were some of the other more unusual locations on this picture?

BUMSTEAD: We shot the old carousel down at Santa Monica pier, the one that everyone's trying to save, and I hope they do. It looked fine in the picture. We finished the picture during one week of shooting back in Chicago. We needed the interiors of three train stations in the film and we were able to find them all in Chicago.

QUESTION: Did you have any special problems shooting in those train stations?

BUMSTEAD: Well, yes. A couple of them are no longer in use as train stations; they're now office buildings—which meant that we had to dress them extensively. The booths where they used to sell tickets were all covered over and we had to expose them again, and we had to put doors in here and there. It was mainly a job of set dressing rather than construction. We were able to shoot at the LaSalle Street Station just as it is, by blocking out a few things, because it still looks pretty much as it always did. We shot some exteriors

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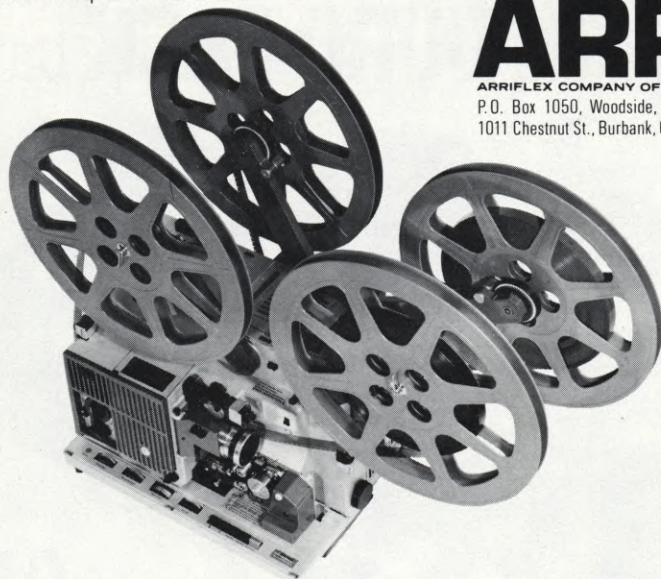
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there, too, and the big problem was the traffic, getting the cars to look right. We did it, all right, but it took a lot of coordination.

QUESTION: That bank in Pasadena that you used looks just about as it did in the 1930's. Did you have to change anything there?

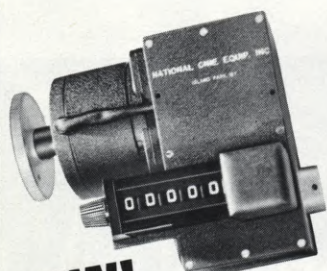
BUMSTEAD: Yes, the bank was perfect, with the exception of the fluorescent lights overhead, which they didn't have in that period. We really lucked out on the bank because we were shooting other scenes in an alley near there and found this bank that was so close that we were able to make the move over there in a very short time. There was another bank in Long Beach that possibly would have been even better, but with schedules the way they are these days, it wouldn't have paid to go all the way down there for a couple hours of work. It would have been too costly.

QUESTION: How much research did you have to do to arrive at the architecture and artifacts of that period? Did you find it harder to research than an earlier period, or about the same?

BUMSTEAD: I think it was a little harder, because it's not as definite as earlier periods. For this reason, it's a bit more delicate to work things out. Actually, researching a picture is really the most fun. For a lot of things on this picture we had to use our imaginations, because it deals with con artists and clearing houses and numbers racket places. There's no research on those places because no one ever took pictures of them. If they did, the cameras were smashed and the film taken away. But we talked with different people and some of the police who had seen such places in their younger days, and they were very helpful in telling us what the places looked like.

QUESTION: Aside from the elevated, are there other things that were peculiar to the Chicago of that period that were different from, let's say, the things you were able to find in Pasadena?

BUMSTEAD: Yes, it has a different look. The architecture is different, but not so much different that we couldn't get away with it. There were things we could have done to make it tie in a bit better, but we had limited money to work with. Now, \$100,000 sounds like a lot, but when you have to use it for interiors, too, it doesn't go that far. One



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thing I wanted to do, but didn't get the chance to do, was put up water tanks, because they're just all over Chicago. However, we were able to get some into the matte shots and also in the footage that we shot in Chicago.

QUESTION: What kinds of things did you build on the Universal backlot in addition to the elevated?

BUMSTEAD: We put in telephone posts and lamp posts along the streets and we were lucky to have that elevated left over from "GAILY, GAILY", but quite a bit of the budget went into building practical interiors that opened off the street, such as apartments inside the actual building fronts. We built a diner, a drugstore, a hotel lobby and a number of rooms right in connection with the street and there was quite a bit of money spent on those sets. It's a little bit more difficult to do it that way, but it gives you a nice look, because you can have real traffic right outside, old automobiles and people passing by, which you can't do when you're shooting on a stage. It's a bit more difficult for the cinematographer to shoot because he has to filter everything and balance the light. All in all, though, I'd say I'm happy with the way everything turned out.

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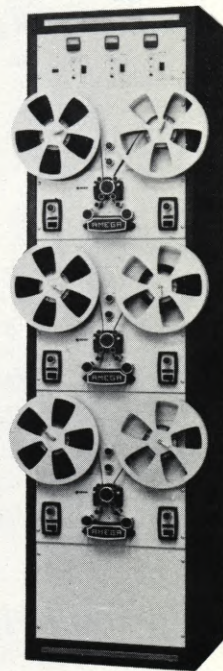
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CINEMA WORKSHOP

Continued from Page 512

doors in direct sunlight. Always leave a good eight-to-ten feet at both ends of a spool. This is far from wasteful and is probably the best insurance investment you can make.

Nothing is more frustrating than having that last dynamite shot on the roll flared out by edge-fog.

Use care when removing a spool from the camera. Never pull hard on the circumference of the flange, as this will spring the alignment and cause edge-fogging. Always employ the ejector on cameras that have them or the spindle release as used on the Arriflex.

There are some drawbacks to the use of daylight spools. As mentioned previously, displacement magazines, such as the Arriflex, will not accept spools. Cameras that can employ either spools or core loads will undoubtedly run quieter with a core load. This is an important consideration when using quiet cameras, such as the Eclair NPR or ACL. If filming is to be done inside in a quiet but "live" room, the difference between a core load and a spool will most likely be audible.

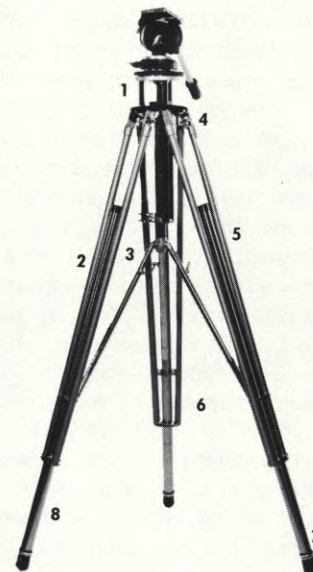
Another consideration is availability. In 16mm, 200' loads are almost always spools whereas 400' loads are usually available on both cores and spools. To obtain 200' cores, the film would have to be wound down from 400' or 1200' rolls. This is a practice that should be strictly avoided. Winding down film can cause static electricity marks, and will undoubtedly get some dust particles on the film. Only labs specifically set up to wind down film should attempt to do so.

FIGURE 2 illustrates some of the more popular core and spool types used by Kodak. The "T" core is 2" in diameter with a 1" inside hole with keyway. This core is used for 16mm stocks in lengths up to and including 400'. The "Z" core is a 3" diameter core used for 16mm stocks in lengths over 400'. The "K" core is a 35mm core of 3" diameter and is used mostly on rolls of 2000' and 3000' lengths and sometimes for 1000' lengths.

The three spools shown are the R-90 (16mm-100'), R-190 (16mm-200') and the S-83 (35mm-100'). Not shown is the S-153, which is a 400' 16mm spool.

If you order spools, make sure you take the aforementioned precautions when loading and unloading. If the camera uses a displacement magazine or maximum quietness is necessary a core load is the obvious choice. ■

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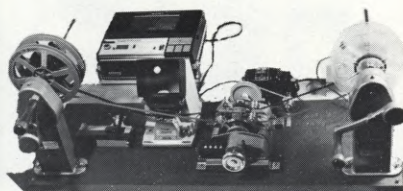
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"LIFE TIMES NINE"

Continued from Page 553

was reduced to a 16mm B-wind, and that was used as our original.

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She was pretty critical but, after all, she did ninety percent of the work herself and worked for over a year on her project.

PEANUT—by Ricky Clark, 11

Synopsis: *A man leaps out of a peanut, obeying the soundtrack's urging to "break out of your shell and LIVE!"*

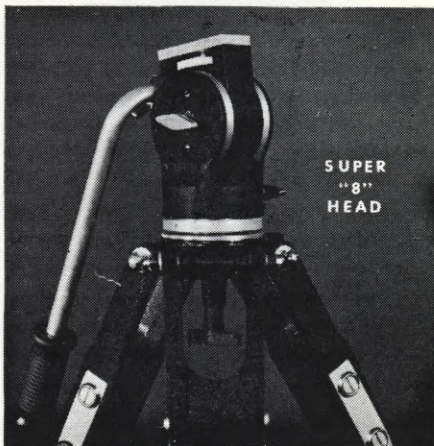
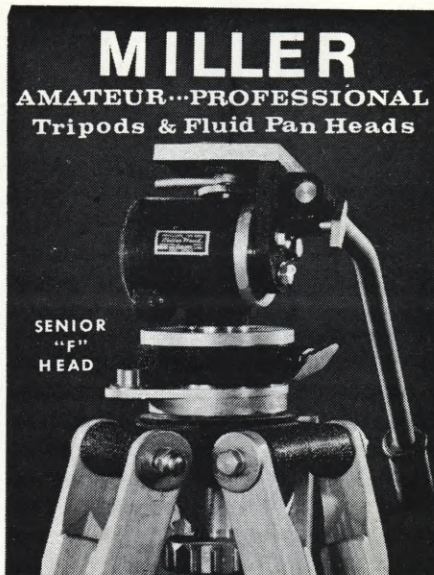
When Ricky told us he wanted to see a guy breaking out of a peanut, I felt we had been hammered into a corner. He wanted it in slow motion; to see the shell cracking and pieces flying off. An optical effect of that type would cost more than all the other films put together.

However, we finally compromised on a possible solution—to make a mock-up of the side of a peanut of huge proportions, built from a six-by-six sheet of styrofoam. We would start with a real peanut, zoom in so that it filled the frame, then dissolve to the mock-up.

We shot the actual peanut closeup with a zoom lens and I had so many closeup diopters on the end of that zoom that it stuck out an extra three inches. I took every diopter they had in the rental house, taped them together, and managed to zoom right in to the side of the peanut. Ricky called for a shot starting in black, panning left, zooming back, with a finger in sight to show that it was a real peanut, and then zooming in again.

I zoomed in knowing I would lose image quality, but I had a black background so the definition would be fairly good. I lit it to create a sculptured effect, exaggerating the ridges. What I was losing in putting all that glass over the lens I made up in making the lighting more contrasty. I had so little depth of field (about 1/32 of an inch) that only the center of the screen is sharp, with a blurred image all the way around where the peanut falls off into the distance.

Then we moved to the mock-up and matched my wide shot to where the character was going to leap out of the center. We vignetted with pieces of black tape and Vaseline so I had a



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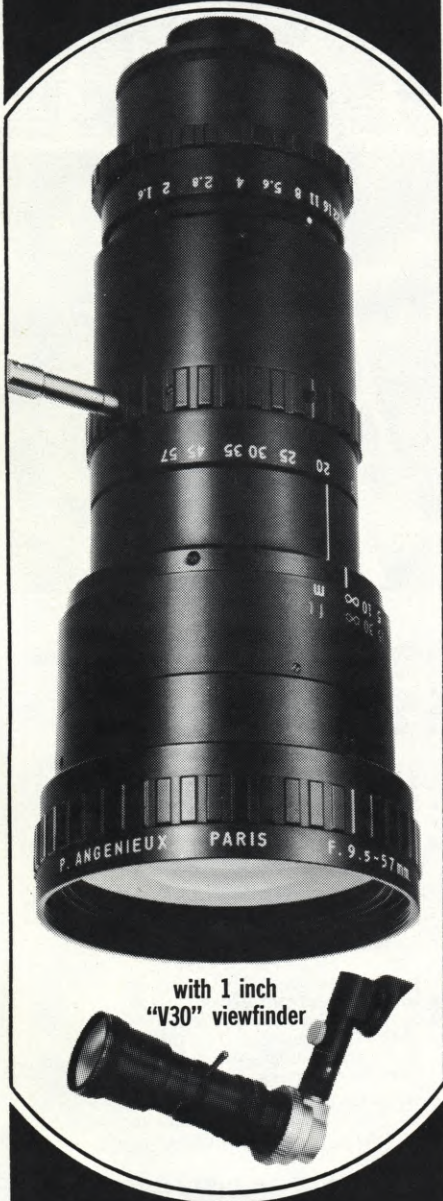
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similar effect to the tight closeup of the real peanut. The man actually leapt through the square board which fills the frame.

We had to predetermine where he was going to burst through, so we cut all of the cracks and the pieces that were to fall out and then refitted them like a jigsaw puzzle so we knew he would appear dead center in the frame. We shot it in about half a dozen takes, until we had one that pleased Ricky. The lab then matched the colors of the peanut to the color on the mock-up.

We used a professional narrator, and one of the highlights of the "LIFE TIMES NINE" production came when we were recording the track. Here was this eleven-year-old shouting over the studio intercom, to the professional announcer, Ron McKee: "Once more please, but this time with a little more feeling!"

PICTURES—by Celia Merkur, 14

Synopsis: *Stills of special moments in growing up—baby investigating its belly-button, child with flower, being hugged by an older person, hitting a homerun.*

Celia decided to photograph all these special moments herself, then cut them together in a continuous sequence from baby to young adult.

I gave her a crash course in still photography, showed her photographic manuals, my own stills and slides, then gave her piles of film to play with while she got the hang of using a Pentax. I told her about bracketing exposures, and taught her how to focus, and what to look for in a composition.

She came back with very pretty slides in her own style and in no way reflecting mine. She'd find a beautiful moment, photograph it from all sorts of different angles and exposures. She took one or two rolls of film for each shot. We discussed them and she selected the ones she wanted filmed.

We used an unusual technique to film the slides. We took an Ektagraphic high-reflecting screen which has a very metallic surface. Using an Ektagraphic carousel-type projector, we put the lens of the projector right next to the lens of the Arriflex camera, then shot directly from the screen.

Thus, without going to an animation camera, I had a chance to make some small camera movements and, by using a spot meter, I could get much better readings. We achieved very high-quality reproduction.

Celia selected music and John Watson edited the footage of her slides to

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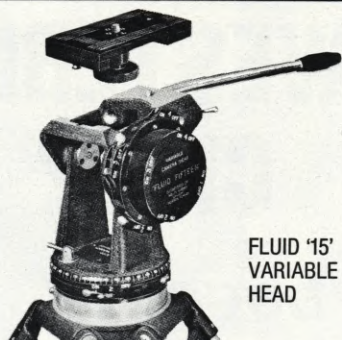


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the music.

MUD PUDDLE—by Andrew File, 13

Synopsis: *Two little boys discover and play in a mud puddle. Older authoritarian figures—a policeman, a businessman, a nun—try to stop them but can't help joining in the mud-fight themselves. Closing line: "You don't have to be clean to be happy."*

We shot the film twice, because the first time we ran into some bad film stock. We had to persuade everyone to repeat the muddy ordeal. Both days were bitterly cold. Both times it cost us about \$20. to dryclean everything, including the cameraman's clothes, because he managed to get covered in mud too.

This production required careful pre-planning with Andy, because you could only have one take of each character "getting it" and also because Andy insisted on taking part himself. He was still able to check out all the compositions, first wiping the mud from his eyes before putting it to the camera viewfinder.

He wanted jug band music, so we brought in some musicians and he supervised his own jug band for the soundtrack.

Later we asked Andy if he had chosen his characters as symbols of capitalism, authority, and religion. He shrugged at that. "They just seemed like good characters," he said.

We finished each individual film right on budget. Each had its own neg cut, its own mix, its own shooting schedule.

With the nine "commercials" completed, we showed them to the kids and they selected the order in which they wanted them to run. They approved the title "LIFE TIMES NINE".

We entered it in a couple of festivals because we were very excited. We got special mention for "corrosive humor" from the Nyon International Film Festival in Switzerland, and a silver Hugo for entertainment from the Chicago Film Festival.

Then the kids said that, seeing we had won a couple of awards, why didn't we go for an Oscar! We thought they were joking but one day, sitting in my bath, I suddenly thought: "Dammit, I'll have a go." I hit the phones the following day and eventually managed to get it entered. Out of 70 entries it was still in the running at 23.

When we got a telegram from the Academy saying that we had actually been nominated I phoned back twice to make sure that it was real . . . ■

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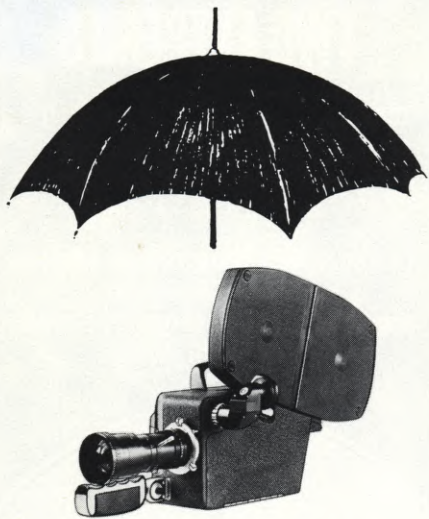


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"GREAT AMERICAN COWBOY"

Continued from Page 567

zoom lens and could not believe that it came out unscathed. I wanted to write and tell Arriflex, "The Arri might be able to take it, but we can't..." We never repeated that near-disastrous error. It was almost an ironic epilogue when, in the last week of shooting, during a simply staged interview inside a ranch house in Texas, the Eclair slipped on a rug, fell on its face, jammed the lens, and ended up costing \$500.00 to repair.

The film taken with the Actionmaster 500 is, in some ways, the most exciting footage of the entire picture. We were among the first to take delivery on this spectacular action camera from Instrumentation Marketing. Before the marketing campaign, it was called the IPD. Slow-motion is always interesting—sometimes a cliché—but for rodeo, at least the first expansive time around, it revealed a beauty and a dimension that cowboys themselves had never seen. In spite of the incredible range of the Actionmaster from 24 fps to 500 fps, we found the two best speeds to be 100 and 200 fps. Most of the high-speed photography was done by a fourth member of the crew, flown in to key locations for one to two weeks at a time. Reed Smoot, a seasoned cinematographer from Provo, Utah, had had experience filming rodeo action with an Actionmaster before. Reed really became the fourth member of the crew, joining us for several weeks of shooting. His ability to follow focus at 200 fps with a 300mm lens resulted in some incredible photography. Reed and I had become friends years back while working together on a picture in Europe.

The severe test of cameras and crew came during the Cheyenne Frontier Days rodeo in Wyoming. With three cameras in place and rolling, Cheyenne was suddenly hit with the biggest cloudburst in ten years. I've never seen it rain so hard. I sent the word to Preston and Reed, "Keep rolling 'til you drown." Rodeos never stop for rain. Within ten minutes the arena was literally the proverbial "sea of mud". I dispatched Alan Cassidy with a parka and umbrella to Reed Smoot in an effort to keep the high-speed camera rolling. The ballet of cowboys floating through the air and disappearing into two feet of soupy ground was too incredible to miss.

The viewfinder on the Eclair, unprotected, finally filled up with water and put my camera out of business... the others kept shooting. Within 40 minutes it was over, but the film will go on and

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on as one of the most unusual and amazing sequences in the picture. The sunken press pit from which Reed was shooting filled up, but Alan and Reed kept the high-speed camera rolling in spite of everything; condensation on the lens... water up to their pockets ... and non-stop sheets of water.

* * *

"THE GREAT AMERICAN COWBOY" positions the cowboy of today in the perspective of his western heritage and explores his incredible world of rodeo.

The story follows five-time, all-around World Champion cowboy, Larry Mahan in his bid for a sixth all-around crown against the tough contending young super-star of rodeo, Phil Lyne.

As we travel throughout America and Canada with this unique breed of western athlete, we are exposed to the broad spectrum of rodeo. We listen to 101-year-old Jack Hart reflect on rodeo history ... and become acquainted with 11-year-old Wade Hedger in Little Britches Rodeo—rodeo's Little League.

Oscar, the notorious unriden bull of RSC rodeo company, is challenged by Elias Arrayola, the famous Mexican bull rider, for an incredible duel of man and beast.

The parades, the carnival, the kids and the clowns are all present, setting the stage and serving as backdrop for the championship race between Mahan and Lyne.

We spend time with Phil Lyne on his ranch in South Texas to film him hunting, talking to his mom, and working cattle. But ranching gives way to roping practice for rodeo under the aged and watchful eye of a proud father.

Larry Mahan conducts a rodeo school for young hopefuls. He teaches them to ride, but more important, TRY ... and PMA, Positive Mental Attitude.

Rodeo goes on in all kinds of weather, even torrential rain that turns the deep dust of an arena into a lake of mud ... and rodeo into something else.

Mid-year, Mahan is seriously injured on the bull ride that would have pushed him ahead of the tough young Lyne. Lyne goes on to win the championship and retires from rodeo. But Mahan comes back ... pushes on, and demonstrates what makes him the greatest rodeo cowboy of all time.

In the final and ultimate challenge, Mahan climbs on Oscar, the unriden bull, with no money, no crowd; one man ... one bull. That's what rodeo and "THE GREAT AMERICAN COWBOY" are all about.

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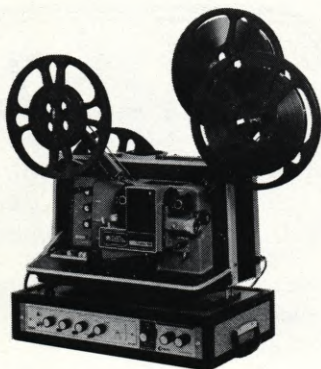
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tempted to capture the sport and events of rodeo in a way that would be fresh, exciting, and imaginative. If we had a single cinematic objective, it was to capture the "presence" of the sport . . . and not merely photograph it from "over there". As a result, we probably took more chances than would be normally prudent.

At the world-famous Calgary Chuck Wagon races in Canada, we somehow persuaded one of the top veteran drivers to allow Preston to ride with him in his wagon during an actual race. Preston had evolved as the "guts-ball" member of the team because of his fearless arena act with the Arri.

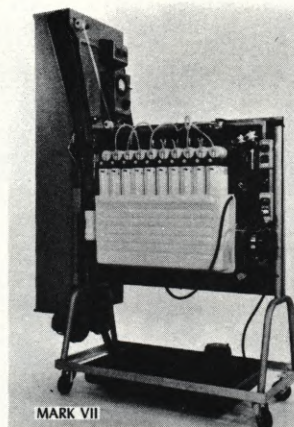
Chuck wagons are pulled by four very skittish thoroughbred horses, usually race-track rejects that are too high-strung to be manageable. That makes them ideally suited, of course, to the erratic wild sport of chuck wagon racing. We really didn't bother to get official sanction, and we figured that the 40,000 people jamming the stadium wouldn't mind if one wagon had an extra passenger. Using a hand-held Arri-flex and a 5.9mm lens, Preston braced himself in a standing position right behind the driver. Few cameramen will ever have the experience of riding in the chuck wagon races at Calgary. After Preston's wild ride made all the local papers the next morning, it is conceivable that no one will ever be allowed to stand in a charging chuck wagon during an actual race again. But the footage captured in that spectacular ride brings the epitome of "presence" to "THE GREAT AMERICAN COWBOY". I surmised that the experience was more frightening than any of us imagined when Preston declined the opportunity to ride in the same wagon the following day. He had scarcely finished his "no thank you" when the horses bolted, and dashed crazily through the tightly fenced area of the inner arena despite the powerful restraint on the reins by the driver. Funneled into a long narrow roadway, the charging team and wagon gave little warning to a horse and rider coming the other way. The rider leaped clear, crashing into the fence; his mount had nowhere to go and was killed. We were all sobered by the explosive danger of the chuck wagons. Preston was particularly reflective.

There were many other close calls during the many days of working on the film. Each of us had our moment on that narrow line. Filming at the College Finals Rodeo, with the Eclair and a 5.9mm lens, I was standing on the top of a chute, in front of a horse, as the cowboy climbed into his saddle and took his rein. Suddenly, without warn-

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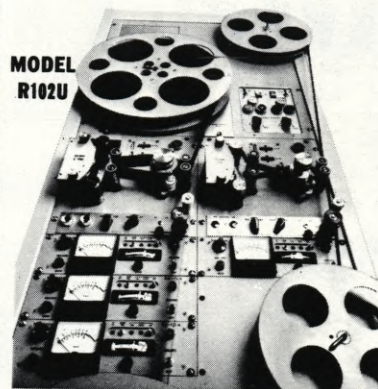
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ing, the horse reared fully on his hind legs and lashed out at me with his front hooves. Luckily, on his way up, his nose hit me in the stomach and sent me flying backward onto the laps of two hands sitting behind me on a fence. From there I dropped the eight feet to the ground, jumped back to my knees and stuck the camera between the bars of the gate. The camera purred quietly throughout the sequence and the shot was spectacular . . . almost as good as the second camera which captured the whole thing in slow-motion.

Even recording sound was not without incident. At the National Finals Rodeo in Oklahoma City, Oklahoma, a bull got loose behind the chutes where the only thing blocking his escape was Alan Cassidy, strolling casually in the other direction with the Nagra, the 804 shotgun and a handful of cable. By the time Alan realized why cowboys all around him were leaping for the fences, the bull was upon him. Somehow his pants were ripped from cuff to crotch . . . but the Nagra and microphone were untouched. To Alan's disappointment, the whole thing captured on film did not qualify him for SAG. We feel fortunate that none of the many close calls resulted in serious accidents.

The Bell helmet camera was used in several instances to give the viewers a cowboy point of view. One of the problems we encountered was the reduced ability of the cowboys to perform with the weighty camera and helmet replacing their traditional cowboy hat. Several times world champion Dean Oliver, however, demonstrated incredible adaptability in adjusting to the added weight with only marginal variations in his already incomparable roping skill.

Veteran rodeo clown and bull-fighter Wilbur Plauger was not able to adjust as easily. In fairness, it must be noted that he is not running against a stop watch, but rather for his life when fighting bulls in the arena. Rapid maneuvers in fighting bulls were almost impossible with the added weight above his shoulders. We removed the camera from the helmet and sent Plauger back into the arena with the camera hand-held. That seemed to work much better, allowing him complete freedom of movement. As a clown is always a clown, he took full advantage of the camera as a prop for his act. The crowds loved it. We have lots of footage that did not particularly relate to the story . . . but some that was quite good.

Tempting a bull with the large flowered patch on the seat of his pants, Wilbur succeeded in inducing a charge

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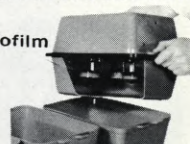
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which sent him and the camera rolling in the dirt. The camera was rolling the whole time, and we looked forward to using the footage. We were naturally disappointed to find that he had been holding the camera upside-down. Wilbur was super-helpful and a great friend. Like so many others in the rodeo world, he contributed greatly to the making of the film.

Barrel-man and bull-fighter. Quail Dobbs filmed with the helmet from the popular clown's barrel. An ad run by Eclair Corporation some time ago showing a cameraman breaking his arm while filming from the barrel prompted us to let the clowns do the filming from the barrel. We actually found that—all these special set-ups, cameras, and locations notwithstanding—the most spectacular action footage is the rock-steady 50 fps footage taken in the arena by Preston as he gradually became the most experienced arena action cameraman in the world. All the gimmick shots in the world can't replace a dedicated professional standing his ground in a critical situation to capture a spectacular moment of action.

Shooting from horseback added the perspective of a galloping dolly shot. Riding tandem with World Champion saddle-bronc rider Dennis Reiners, I personally chased a lot of action. Ultimately, we turned Reiners into a cameraman and had him hand-hold the Arriflex with an extended "floating arm" to track with the action.

Filming rodeo action involves a lot of chance . . . a lot of guesswork. Even by the end of our filming experience, it was difficult to predict which ride would result in that spectacular crash that just had to be captured. As a result, we necessarily exposed a lot of film, covering each ride with two, and sometimes three, cameras. We did become proficient in judging whether a ride was going to be something special, once the cowboy came out of the chute, but we still had to roll 'em every time . . . just to be sure.

Our film stock was the standard ECO 7252, 7241 high speed and 7242 for indoor arenas. We exposed a total of 160,000 feet, all of which was work-printed. Watching dailies on the road was almost impossible, so—outside of a couple of flights to Los Angeles to spot check our footage—we watched it all at once, end-to-end.

Overshooting was not only necessary, it was the only solution, and it paid off. The shots that ultimately ended up in "THE GREAT AMERICAN COWBOY" reveal more rodeo action in 90 minutes than the average rodeo fan will ever see in a lifetime, in a way that he may never

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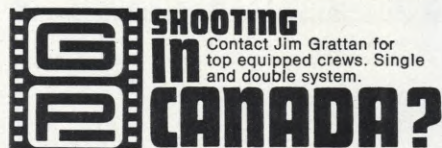
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HOW I SPENT MY SUMMER VACATION

as remembered by
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"Oh, them horses ain't so bad; it's them bulls that's a mite tricky . . . they wants ya!," counseled the drawling rodeo hand. "Scrunch down in that clown barrel yonder; ya'll get good pictures there," I was advised.

When I saw a mean-horned Brahma knock that barrel for a loop I decided that was no place for a lot of expensive equipment. So I remained, fenced from harm's way and feeling like another spectator peering through my Ange-nieux 12-120 binoculars.

Well, if we were to capture the rodeo rider's glorious moments astride it would have to be from the middle of the arena. It was in Calgary, Alberta, at the great Stampede that I decided to climb the fence.

An Arri S with 100-foot loads seemed the logical choice for inside-arena work. It is easy to grip and well balanced for a run and leap to the fence top. An eight-second rodeo ride is fast and furious; at 24 fps the action looks unnaturally fast. So, shooting at 50 fps gave a natural fluid effect which was very pleasing, and it minimized hand-held movements.

My choice of a lens was a Carl Zeiss 10mm-to-100m zoom which had great depth of field at the wider angles and again minimized camera shake. The short lens barrel further enhanced the balance of the Arri. I predetermined a focal length (usually 10 to 15mm) for a ride and concentrated on focusing. I figured on getting seven-to-eight rides per 100 foot roll before a reload, which cost me about one ride in time.

My equipment ready, I studied the animals—how the broncs leapt from the gate, twisted, kicked about, and generally ran off. The bull's sharp eye had you lined out even before it left the gate. I watched how the bulls spun, hooked, their charges, when they lost interest, and what moves the clowns made to avoid horns and the more dangerous hooves.

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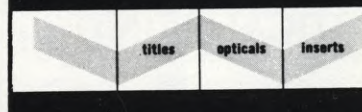
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the in-chute action with an Eclair NPR while I was free to experience the arena.

Nothing sharpens the eye more than the fear of getting the whistling cactus prickles stomped out of you. My biggest problem was mentally trying to correct for perspective through a 10mm lens so that I would have an idea how far away my subject was, and what designs he had on me. It's incredible how a 1500-pound animal can move so fast. Once they fix you with that strange gleam in their eye, it's hightail it for the fence, boys! A bull could literally move in any direction from any position when he was bucking . . . tremendous momentum.

In the beginning I spent half my time hanging one-handed from a high fence, but after a couple of days learned to judge the bulls better and moved closer and closer.

Of course, the arena is full of dirt and animal hair, and you would expect the equipment to get filthy. This was not the problem. The stock, be it bull or horse, had a uniform habit of voiding themselves when leaving the gate accompanied by a vigorous twirling of the tail. This twirling served mightily to increase the pattern and range of the spattering missiles. But filters were easily exchanged and cleaned; perhaps a spotted lens heightened the effect.

I began to feel more at ease in the arena. The camera was perfect. The wide-angle shots and the mobility of the camera lent a presence to the footage I hoped would bring the audience closer to the cowboy's experience. I began to work on more selective closeups: faces, man and animal, white-knuckled fist locked on a bucking rope, spurs raking horsehide, and pounding hooves. These shots were quick glimpses. A ride might start five feet from you and, in seconds, be 40 yards away, or it might suddenly turn and trample you.

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The Calgary Stampede was nearing its conclusion. We had been shooting the famous chuckwagon races nightly from points around the track when we decided we needed some footage from the wagon itself.

We arranged a ride with an agreeable driver for an early race when the light was still good. I used the Arri S again, now with a 400-foot mag and an Angenieux 5.9mm lens. When the crowd saw a camera in the back of a wagon it caused quite a commotion. It seems this had never been done before. I suppose it clouded their conception of the "most

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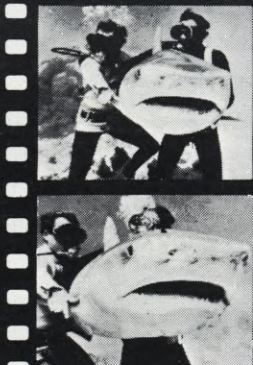

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dangerous game". They don't have our freeways in Canada.

We liked the effect of the 5.9mm lens in the wagon races so much that we decided to try it in the bucking arena. What a great lens; it's very close to the human eye. With its extremely wide angle of view and retro-focus, it could be held at arm's length while skirting around a rushing bull. When stuck in the bull's face it recorded snorting nostrils on up to the straining cowboy atop, with the rather dominant foreground acceptably sharp.

Calgary closed with a lot of great film in the can. It was only mid-June, and we planned to follow the circuit until late summer. We still had some great rodeos ahead of us. There was a lot of film yet to be shot, a few great individual efforts to be gleaned from the many we would see. We lived and filmed a unique western experience. I don't think there was much we missed, whether it was in rain, hail, darkness, a dim auditorium and darker barrooms, or even in a teepee clouded with the smoke of burning sage and prairie herbs. We always ended up in one place, however: the arena. This was the focus of the cowboys' existence.

I used to walk up to a cowboy after a good ride to congratulate him. Many times he would not even know we were he was, because the ride was so mentally and physically exhausting.


I wondered what eight seconds on top of a half-wild animal must really be like. The Arri at 50 fps was accomplishing what we felt was a relatively natural view of a ride, but now I wanted to go further with slow-motion.

We had a brand new Photosonics IPD Actionmaster and we decided I should take it into the arena.

This is a beautiful camera. It sits on the shoulder like a dream; it has an adjustable handgrip with two-speed trigger built in, and a dove prism; but it's a little heavy on the run and for leaping over the fence. The 30-volt battery belt is nearly three times heavier than a standard Arri or Eclair belt, and the camera itself overbalanced my get-ready-to-go stance. It also totally blocked my vision on my right side, so I had to be more careful.

It was worth the risk; at 300 fps a ride was a spaced-out ballet of violence. However, a 300 fps ballet is focus-critical. As I mentioned before, rodeo stock covers a lot of ground quickly. A one-half-second focus error on the part of the cameraman will appear as five seconds out of focus in the rushes . . . very painful.

I had my closest calls when using the


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Photosonics. I always arranged with a couple of cowboys sitting on the fence to lift the camera out of the way while I scrambled up.

In my months of shooting in the arena the only damage to equipment was a broken Photosonics battery cable torn loose when I jumped over a fence.

My body, however, was not so fortunate. It was late in the summer, at a small rodeo in a suburb of Denver, when I pushed my luck too far.

I was working fairly close to the stock and we decided that I should dress like a clown so as not to ruin the shots of the other camera positions while still getting close-up action with the Arri and 5.9mm lens.

Borrowed clothing, appropriate makeup, and advice of the working clown completed the transformation. I was at the high-point of my rodeo photographic career. I worked closer than I ever had before—spinning and dodging, just as I had been told.

It was one of the last bulls—a very large bull, but, fortunately, he had no horns. I was told by the clown that this particular animal always broke to the left. This was reasonable, as most stock did have their individual bucking patterns.

I positioned myself ten feet in front of the six-foot swinging gate and awaited my spectacular shot.

The bull, let out from the chute, looked at me, and I at him just three or four feet away. I was sure by the look in his eye he was headed left and I held my ground.

He must have been confused, because he swung his great burly head straight into my chest while I stood flatfooted.

Now I know what at least two of the eight seconds of a cowboy's ride are like . . . long!

I pushed hard away from his head as he butted me three times into the air. As I struggled, still on my feet, I fell to the side and he rushed past.

I was lucky! Everyone had a great laugh, and I took solace in the reassurance that all clowns get run over sooner or later.

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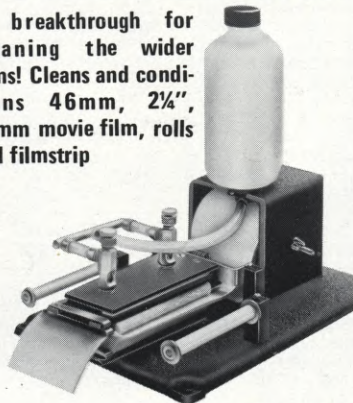
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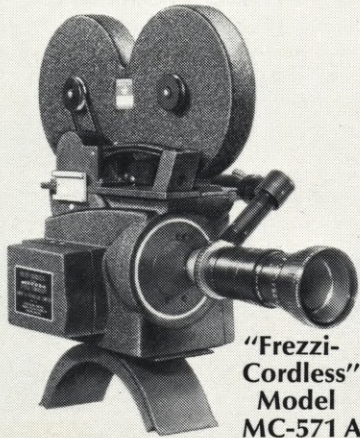
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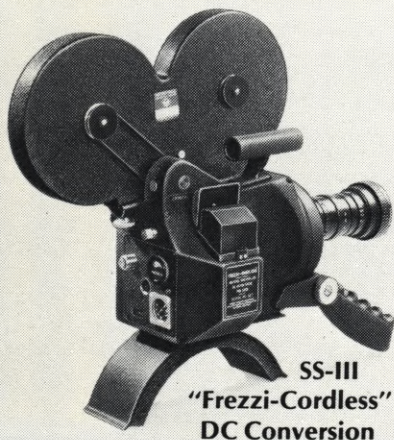
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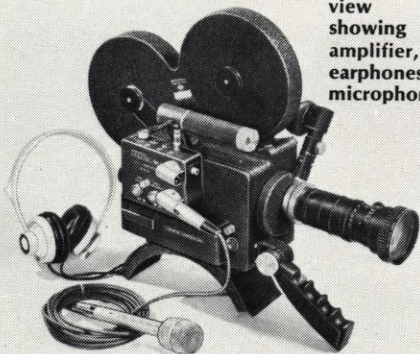


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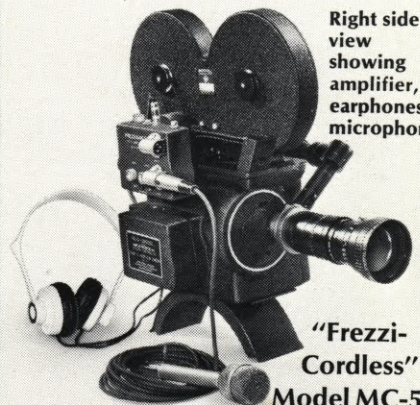
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