

American Cinematographer

International Journal of Motion Picture Photography and Production Technique

MAY 1977 / ONE DOLLAR

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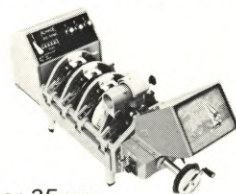
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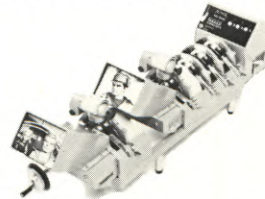
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- picture and three sound tracks



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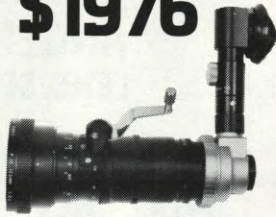
Twinpic
- two pictures and three sound tracks



16mm

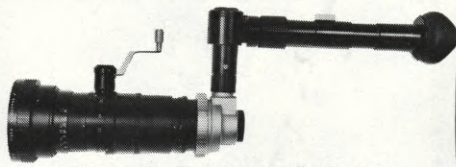


\$1976



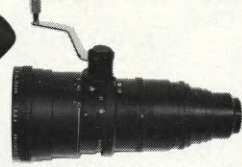
12-120mm F2.2
WITH 1"VF AV30

\$1976



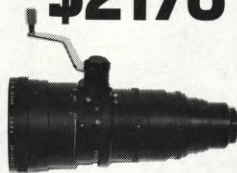
12-120mm F2.2 WITH 7 1/2" VF AVC

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12-150mm T2.3
WITHOUT VF

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10-150mm T2.3 WITHOUT VF

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9.5-57mm F1.6 WITHOUT VF

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American Cinematographer

International Journal of Motion Picture Photography and Production Techniques

The American Society of Cinematographers is not a labor union or 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 initials 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.

MAY 1977

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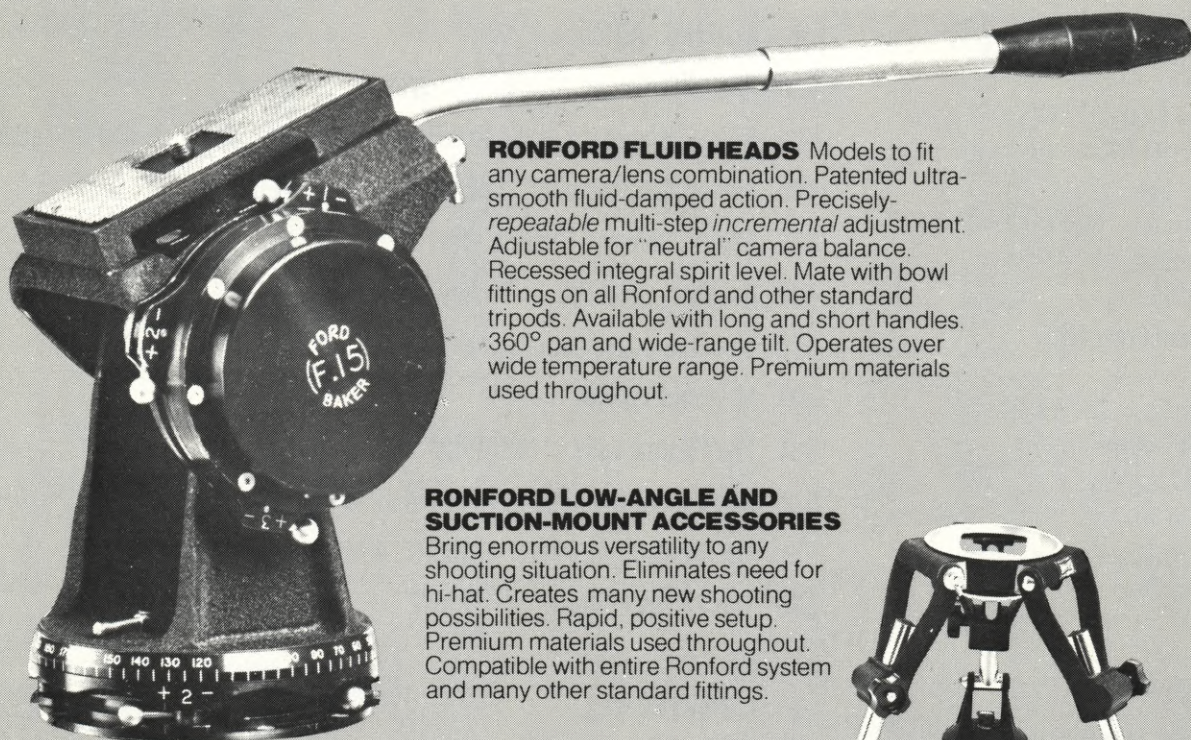
472 The Bookshelf

ON THE COVER: A glittering array of multi-colored "Oscars", the golden statuettes annually presented by the Academy of Motion Picture Arts and Sciences in honoring the top achievements in the art of the cinema. Photograph courtesy of the Academy of Motion Picture Arts and Sciences.

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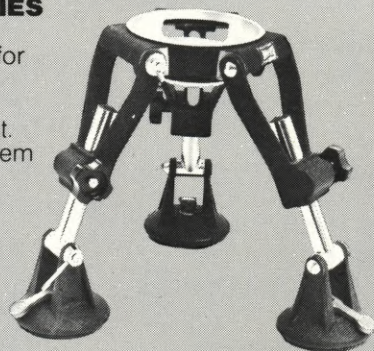
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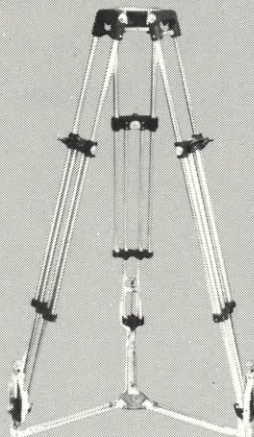
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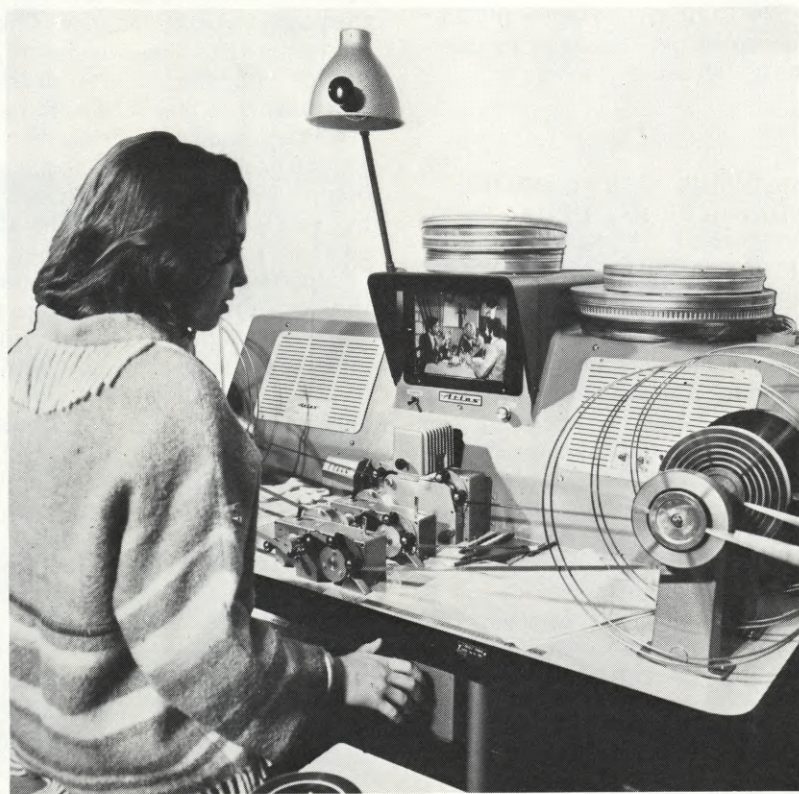
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INDUSTRY ACTIVITIES

KLINE, LASZLO, ROIZMAN, SURTEES, WEXLER RECEIVE KODAK RECOGNITION

Five leading directors of photography were recognized for important contributions to the state-of-the-art of theatrical filmmaking on Saturday, March 26, at an award banquet sponsored by the Motion Picture and Audiovisual Markets Division of the Eastman Kodak Company.

The recipients were the five nominees for the 49th Annual Academy Awards, including Robert Surtees, A.S.C., for "A STAR IS BORN", Owen Roizman, A.S.C., for "NETWORK," Ernest Laszlo, A.S.C., for "LOGAN'S RUN", Richard Kline, A.S.C., for "KING KONG" and Haskell Wexler, A.S.C., for "BOUND FOR GLORY".

The banquet was held at the Tail of the Cock Restaurant in Los Angeles.

"While the members of the academy will necessarily single out one of these cinematographers, we wanted to thank all of them for the technical skills and artistic excellence they brought to the motion picture screen in 1976," said Kenneth Mason, assistant vice president of the Eastman Kodak Company and general manager of the Motion Picture and Audiovisual Markets Division.

"Although talented directors and producers are sometimes more publicly associated and recognized when a feature film is a financial or artistic success," added Al Williams, Pacific Southern regional manager for the Motion Picture and Audiovisual Markets Division, "I think anyone who has been associated with the making of a successful motion picture can testify that it couldn't be done without the director of photography. By recognizing the achievements of these people, we hope we are doing something to further the appreciation of the work done by all directors of photography."

TWO AFI-SUPPORTED FILMS WIN OSCARS

Two films which were funded in part by The American Film Institute received Academy Awards at the recent 49th Annual Awards Presentation, marking the first time AFI supported motion pictures have been awarded Oscars.

"Harlan County U.S.A.", produced and directed by Barbara Kopple, won an Oscar for feature length documentary. Kopple received a \$10,000 grant from AFI in 1973 under the Independent Filmmakers Program, which is funded by the National Endowment for the Arts. "Harlan County U.S.A." had its Washington premiere recently at the AFI Theater and is now showing at the Outer Circle Theater in Washington. The film chronicles the union-organized strike in a Kentucky coal mining community.

"In the Region of Ice", produced by Andre Gutfreund and Peter Werner and directed by Werner, received the Academy Award for Live Action Short Subject. The film, based on a Joyce Carol Oates short story, was produced while Gutfreund and Werner were Fellows at the AFI Center for Advanced Film Studies in Beverly Hills, California.

In addition, Lynne Littman, a member of the AFI Directing Workshop for Women last year, received an Oscar for her Documentary Short Subject "Number Our Days", which she produced separately from her AFI activities.

Kopple, Gutfreund, Werner and Littman accepted the Awards at the internationally telecast ceremonies.

CINEMA PRODUCTS TO HOLD ONE-DAY REGIONAL CP-16 MAINTENANCE SEMINAR IN SEATTLE, WASHINGTON, ON MAY 22, 1977.

Following the "10th Motion Picture Seminar of the Northwest" in Seattle, Washington, Cinema Products Corporation will conduct a special regional CP-16 Maintenance Seminar from 9 AM to 3 PM on Sunday, May 22, 1977, at the Seattle Center House, Room 204.

Experienced quality control and maintenance technicians from the Cinema Products plant in Los Angeles will be on hand to lead special sessions on the operation and maintenance of CP-16 and CP-16R cameras, with special emphasis on effective trouble shooting and preventive care under field conditions.

One of the highlights of the CP-16 Seminar will be a special demonstration of STEADICAM, Cinema Products' new film/video camera stabilizing system currently revolutionizing

production methods all over the world. Documentary filmmakers, TV-news cameramen and all members of Local 659 (IATSE) are invited to attend.

For further details on this one-day regional CP-16 Maintenance Seminar, please contact Gary Gross at Cinema Products Corp., 2037 Granville Avenue, Los Angeles, CA 90025. Tel: (213) 478-0711; Or, for IATSE Local 659 members, call Terry Burley at (213) 876-0160.

BELL & HOWELL/MAMIYA COMPANY TO DISTRIBUTE PRESTIGIOUS BEAULIEU CAMERA LINE

Bell & Howell/Mamiya Company has announced that effective immediately, BHMC will assume exclusive U.S. distribution of all Beaulieu cinematographic products which include the complete line of Beaulieu professional 16mm and Super-8 movie cameras currently distributed by Hervic Corporation.

Gary S. Bryson, president of BHMC, William Herskovic, president of Hervic Corporation, and Maurice Choquet, director of Beaulieu-Cinema in Paris, France, transferred the distributor agreements at meetings held recently in Chicago and Los Angeles.

"The position of BHMC in the photographic industry is definitely enhanced by this important addition to the company's line, as the Beaulieu name and professional products are known the world over for outstanding precision and quality," said Bryson.

"Hervic has been a fine distributor for Beaulieu, and we are fortunate to be able to assume this highly valued distributorship. BHMC will do everything possible to ensure that the transition is smooth and without complications for both BHMC and Hervic dealers."

Products included in the Beaulieu line are: the Beaulieu R16 automatic 16mm camera, the Beaulieu 5008 S multi-speed sound Super-8 camera, the 3008 S multi-speed sound Super-8 camera, and the Beaulieu 4008 ZM4 Super-8 camera; plus related accessories for all cameras.

Inquiries regarding BHMC's distribution of Beaulieu products should be directed to Robert Lundquist, V.P., Beaulieu Products at BHMC's Chicago offices.

Introducing **Goldtop[®]** **Battery Belts**

Goldtop is a new concept in battery belts, combining the convenience of quick-charge with the economy of added recharge lives and the flexibility of use within a wide range of temperatures.

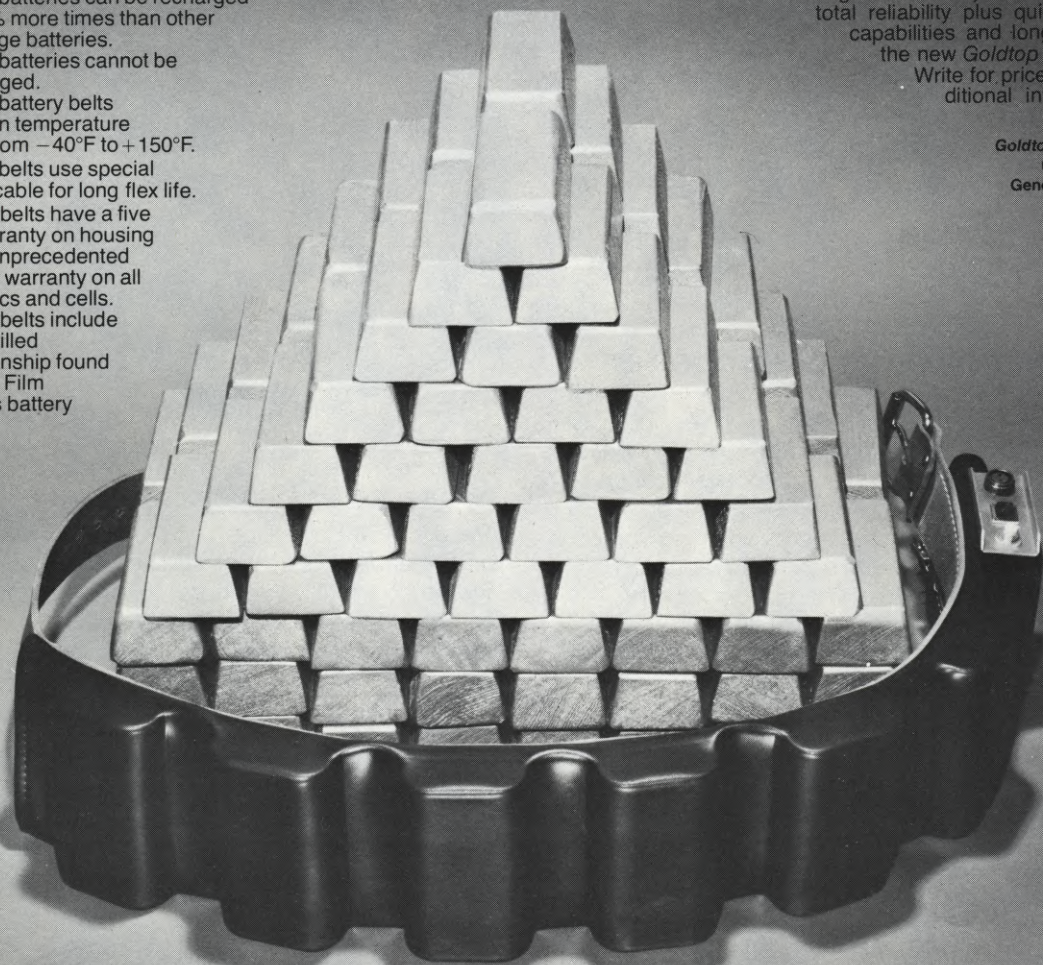
Manufactured by Chiles Film Products, the belts are powered by General Electric Goldtop batteries, which were developed to perform under extreme temperature and power demands. Goldtop batteries add new high-low temperature, quick-charge and long-life capabilities to the proved features of the standard nickel cadmium battery.

FEATURES:

- *Goldtop* battery belts can be completely recharged in three to four hours.
- All *Goldtop* battery belts have built-in chargers.
- *Goldtop* batteries can be recharged over 50% more times than other fast charge batteries.
- *Goldtop* batteries cannot be overcharged.
- *Goldtop* battery belts operate in temperature ranges from -40°F to $+150^{\circ}\text{F}$.
- *Goldtop* belts use special braided cable for long flex life.
- *Goldtop* belts have a five year warranty on housing and an unprecedented one year warranty on all electronics and cells.
- *Goldtop* belts include all the skilled craftsmanship found in Chiles Film Products battery belts.

There's a *Goldtop* battery belt for use with any professional 16mm and 35mm motion picture camera and all ENG cameras. If you're looking for a battery belt that offers total reliability plus quick-charge capabilities and long life, get the new *Goldtop* today. Write for prices and additional information.

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to eliminate print through and tape hiss

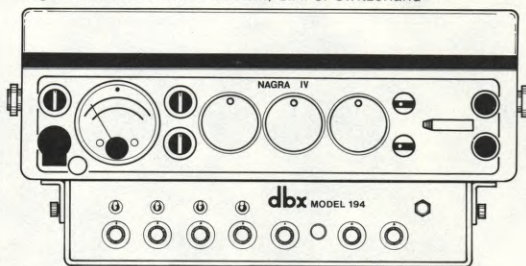
The new dbx 194 five-input mixer and noise reduction system piggybacks with your Nagra III, 4.2 or 4L recorder to produce location sound tracks with tape hiss as low and dynamic range as high as anything you can make in the studio. dbx noise reduction preserves the full dynamic range of the original action (up to 100 dB) with 30 dB noise reduction and 10 dB extra headroom. You can forget all about print through. You can also forget level matching and gain riding. Your location tapes will be totally free from hiss, and completely compatible with your dbx encoded studio masters.

The mixer section of the dbx 194 includes four mic inputs with high-gain low-noise FET preamps and one line level input, all with individual level controls and optional low frequency cut. The 194 makes an ideal

separate mixer and has its own monitor amplifier for headphones or speaker.

The dbx 194 bolts directly to the Nagra case and operates from the Nagra battery supply. Try the dbx 194 on your next location job. For complete information and list of dbx professional equipment dealers, contact:

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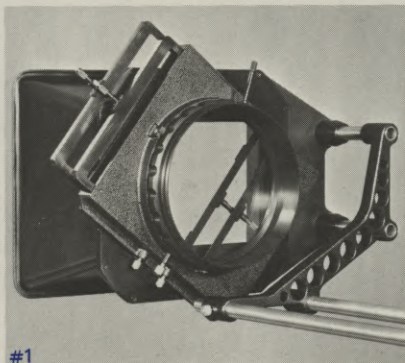


NEW 35BL ACCESSORIES

The Arriflex 35BL continues to grow as a comprehensive 35mm filming system. A multi-part accessory group is the latest addition to 35BL and 35BL2 camera systems. These accessories were developed to strengthen the 35BL's capability as a primary production camera and they follow closely suggestions made by cinematographers who have been active with the 35BL in major films. The prime components of the group are described below:

THE NEW 35BL PRODUCTION MATTE BOX

The new Matte Box shown in illustration #1 is a major component in the new accessory



#1

The 35BL Matte Box

group. It combines with the other accessories for a variety of applications as described below.

The versatility of the Matte Box is typified by its system for filters. The front of the Matte Box has stages for two 6½" x 6½" filters. The two stages rotate together so that a polarizer can be properly oriented. In addition, the rear of the Matte Box

accepts one 6" round filter. One more filter can be fitted on the front of the lens itself, and when a lens housing is used, still another filter can be accommodated in its front port.

THE MULTI-PURPOSE BRIDGE PLATE

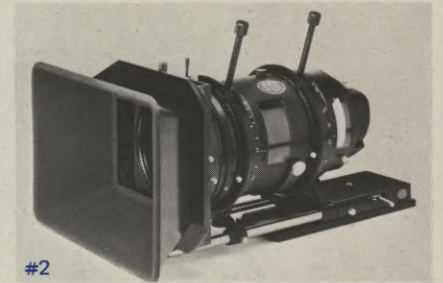
The Bridge Plate is a complete 'under the camera' support system that has been described in these columns before. It accommodates any flat base Arriflex camera and serves to support any of the larger, heavier lenses commonly used, including the most widely used zoom lenses and accessories. The Bridge Plate is shown in several typical applications in the accompanying photos.

THE BRIDGE PLATE-MATTE BOX COMBINATION

The Bridge Plate/Matte Box is one of the most useful combinations in the new system, it provides the most essential facilities: Lens support, shielding against stray light and accommodation for a variety of filters.

NEW 35BL PRODUCTION ZOOM LENS HOUSINGS

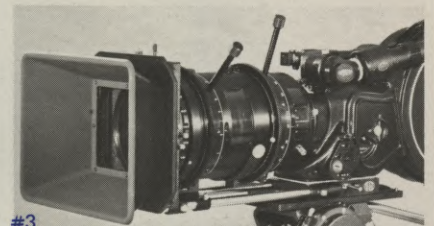
The addition of the Production Zoom Lens Housings to the Bridge Plate and the Matte Box makes a complete sound film production system. A typical assembly is shown in photo #2 and a complete camera set-up in #3. Individual Zoom Lens Housings are available for: the 20 - 100mm Taylor Hobson zoom



#2

The 35BL Zoom Lens Housing

lens; or either the 20 - 120mm or the 25 - 250mm Angenieux zoom lens. Focusing, zoom control and diaphragm settings are all coupled to controls on the outside of the Housings. Equipped this way, the 35BL will hold noise level down to the most critical requirements, (better than 26dB, weighted A, with the 35BL2.)



#3

Sound Production 35BL Camera set-up with the Zoom Lens Housing

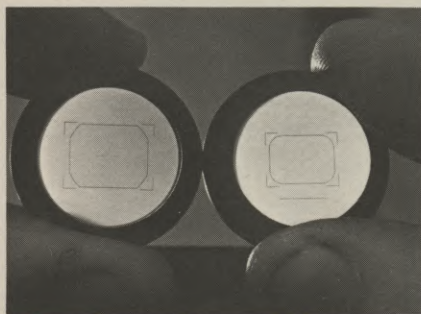
Note: The final production Matte Box units now being delivered have a modified rear stage. With this change, the Production Matte Box may also be used with the 35BL Universal Housings for fixed focal length lenses. A single matte box takes the place of two, and at the same time allows using a single set of filters to accommodate practically any of the lenses likely to be used. Complete information is available from all authorized Arri Dealers, or our Woodside, or Burbank, offices.



Meet K. Ferrell Forehand, ARRI's new Western Sales Manager. He is responsible for all Arriflex sales and marketing efforts in the western zone.

Ferrell can be called upon for routine customer service, or requested to conduct an Arri seminar or equipment demonstration.

He is a Texan and has worked in Dallas and Los Angeles in the professional motion picture camera business for the last six years.



NEW FIBER OPTIC FOCUSING SCREENS

New Fiber Optic Focusing Screens are now on hand, ready for installation on Arri 16S and 16BL cameras, as replacements for the older ground glasses. The new Screens are very similar to those that are now used on Arri 16SR cameras as standard equipment.

The Fiber Optic Screens have two main advantages. For one, light transmission is distinctly better. This is really most evident in those situations where light levels are very low or where it is necessary to stop lenses down to very small apertures.

The second advantage is much more apparent. With the Fiber Optic Screens, light scatter is

significantly reduced and the grain structure of the focal plane surface is practically eliminated. These characteristics combine to make a large improvement in image contrast and resolution in the finder. The result is that as the taking lens is racked in and out, correct focus tends to pop in and pop out. Thus, the cameraman is able to judge correct focus more precisely, more quickly and surely.

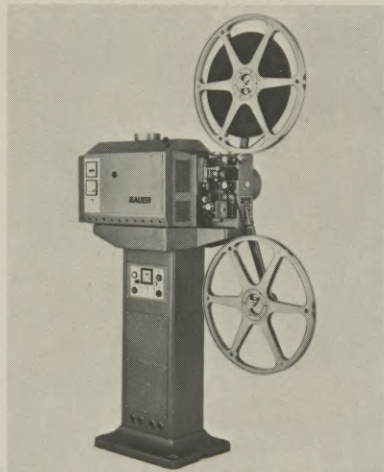
The new Fiber Optic Screens are marked to show camera and projector apertures and TV safe-action area.

Screens are available for cameras with serial number 8980 or higher. Information on installations is available from all authorized Arriflex Dealers and from our East Coast and West Coast offices.

NEW BAUER SELECTON II/0 16mm PROJECTOR

This heavy duty 16mm projector is designed for film studios, screening rooms, auditoriums, and small theaters.

The Selecton II/0 features Horizontal Xenon lamphouse (for 1000W or 1600W lamps), a cold-light mirror and a Geneva movement for outstanding picture steadiness. This movement is found exclusively in heavy duty theater projectors. Other features include: Magnetic playback-



The Bauer Selecton II/0 illustrated here, features the new Horizontal Xenon lamphouse.

head; Optical-magnetic pre-amplifier, 5000 foot film capacity; Control electronics and elapsed time meter all built-in and prewired at the factory.

For additional information, please call or write: Arriflex Company of America, Bauer Projector Division; Woodside, N.Y.

PAUL KLINGENSTEIN RETIRES



The gold and silver miniature Arriflex camera and tripod illustrated was a presentation to Paul Klingenstein when the founder and President of Arriflex Company of America announced his retirement. The engraving on the semi-precious mineral base of the miniature, reads:

*"To Paul Klingenstein
In Grateful Appreciation
Arnold and Richter—1976"*

The presentation marked a long and fruitful association that began in 1951, when Arnold & Richter was just beginning to emerge from the destruction of World War II. Paul Klingenstein was a prime mover in helping Arriflex, then almost unknown, to become one of the most renowned and admired motion picture camera names in the world.

Mr. Klingenstein will be succeeded in the presidency by Volker Bahnmann who has been associated with Arnold & Richter since 1959 and with the Arriflex Company of America since 1963.

SETTING THE STANDARD FOR ARRI SERVICE

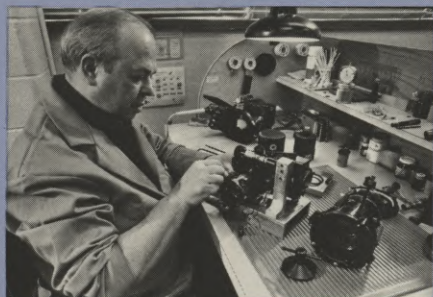
ARRIFLEX Cameras have a well earned, world-wide reputation for designed-in strength and reliability. Once they are in use, maintaining peak camera performance and reliability require excellent technical service.

ARRIFLEX Company of America has traditionally made a special effort to provide it's clients with the finest ARRI repair and maintenance service.

The larger of the two ACA repair facilities is located on the east coast, in Woodside, New York. A west coast operation is located in Burbank, California. Both U.S. facilities provide total ARRI repair services.

ACA's maintenance shops are similar to the repair department in the ARRI plant in Munich. ACA facilities utilize ARRI-designed systems of repair techniques, special fixtures, gauges and other mechanical-optical and electronic instruments, essential for the proper testing and servicing of ARRI products. You will find some of this equipment only in ACA facilities.

The Woodside, New York repair shop is supervised by Uwe Gallert, Service Manager. He started his career at Arnold and Richter, and brings twelve and a half years experience to the job. About half the technicians on his staff also trained at the ARRI factory in Germany.



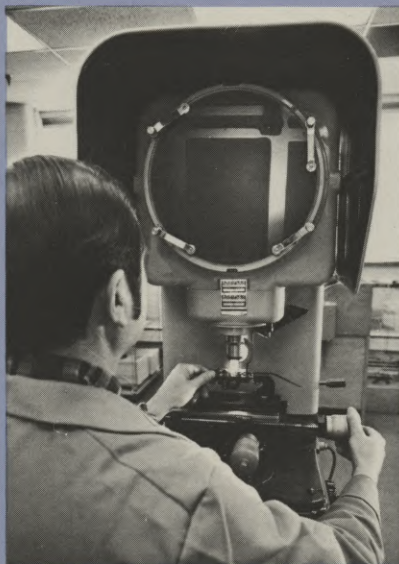
Technician Louis Capatosto repairs and adjusts the precise speed of a governor controlled motor for an ARRI 16BL in a specially built fixture.

Uwe constantly monitors the workmanship, quality of repairs, and time schedules, making certain ACA services fulfill the needs of the ARRI customer.

Uwe is available for consultation, and he is in close contact with ARRI Dealer Maintenance Staffs to bring them new technical information, trouble-shoot a problem they may have encountered, or simply to demonstrate a new ARRI tool. And, when appropriate, he conducts special maintenance seminars for Dealer repair technicians in the ACA shop.

ARRIFLEX Company of America maintains an extensive parts inventory for all ARRI products on both coasts. Data Processing to assure proper inventory levels at all times. The inventory is valued at over a quarter of a million dollars.

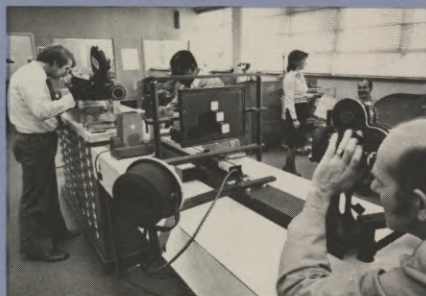
Although ACA's objective is to provide its clients with fine ARRI service, one of ARRI-FLEX's strong points is the easy availability of excellent service almost anywhere in the world, a tribute to a great network of dedicated ARRI DEALERS.



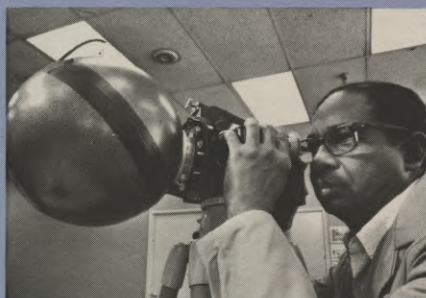
An ARRI-equipped shadowgraph is used by technician Wolfgang Schmidt. The instrument helps in the measurement and verification of film pulldown and registration to factory specification.



Camera users frequently consult with ARRI-FLEX Company of America service departments regarding special applications. Here, Freddy Schuler, cinematographer confers with shop foreman Juergen Schwintzer regarding his new 35BL Lens Housing and Bridge Plate set-up.



ARRIFLEX Company of America's Woodside, optical technical facility. ARRI servicemen check camera and lens systems to factory standard.



ARRI serviceman Hyaline Greavers uses factory designed and built optical instrument to check and calibrate an ARRI Precision Exposure Control system (APEC) currently built into certain models of 16BL, 16SR and 16S cameras.



Proper flange focal seating, the infinity setting and the performance of an ARRI 35BL zoom lens is checked out by repairman Fabio Franco, on a special, factory equipped collimator.

LETTERS TO THE EDITOR

Arriflex 16S cameras may now be equipped with Arri's built-in Exposure Control system (APEC). The 16S Exposure Control is very similar to the system that has been available on 16BL cameras for about seven years. How well does this system serve professional filmmakers? We reproduce the following letter as one answer to the question. It comes from Wolfgang Bayer, of Bayer Productions, Inc., Jackson Hole, Wyo:

Dear Volker:

A year ago, when the Arri S with the new Arri Precision Exposure Control came out, I was the first person knocking at your door to get this unit. Since I have an APEC on my Arri 16BL, I wouldn't be without one on my Arri S. Now, 200,000 feet later, I have put the Arri S with the new APEC through some rather tough conditions with remarkable results. Whether using super long lenses, extreme close up equipment, filming in dark rainforest or blazing desert heat, I obtained perfect exposures without ever having to take a lightmeter reading.

It started in January chasing grey whales off the coast of Mexico for a Time-Life TV film, where both men and equipment got drenched with salt water. On we went to Panama in search of the savage army ants. Using



extreme close up lenses on the jungle floor with unusual light conditions, the APEC proved to be an indispensable piece of equipment.

Onward to Israel to do an underwater film on life in a coral reef in the Red Sea. The Sinai desert greeted us with sandstorms and sizzling temperatures. First sign of fatigue appeared on the crew, Arriflex worked fine.

A quick change of scenery put us onto the Serengeti plains, where we

made a film on African wild dogs. Keeping up with those creatures often required driving cross country over bumps and hyena holes at speeds of up to 40 mph.

At one time, I was standing upright with the roof hatch open holding on for dear life with one hand, the camera in the other when the inevitable happened—we fell into a giant hyena hole. The camera dropped out of my hand and bounced onto the roof of the car. I hit my side hard against the camera mount—result: camera still operating, cameraman temporarily out of commission.

One would think this is enough for a season. Not us! My wife, Candy, the Arri and myself, having masochistic tendencies, left East Africa for a three month filming expedition to the



Amazon. Conditions we hadn't come across yet came upon us all at once. A miserable, wet, hot, humid, mosquito infested rainforest. We were in search of the strange creatures of the Amazon, and we found them! During this exercise, I lost 15 pounds. As far as I can tell, the Arri gained a pound, all of it dirt and mud.

Now back home again in Jackson Hole, I can finally relax a bit and plan some films for the coming year. Meanwhile, the Arri got a good cleaning and I regained my lost weight.

So here we go again!
WOLFGANG BAYER

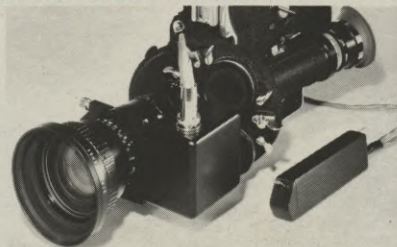
"THE ARRI IMAGE" FILM AVAILABLE FOR SCREENING

Our "Arri Image" film has been screened for more than 15,000 working filmmakers and advanced students. Schools, studios and in-plant film departments will want to note that the film still makes good viewing for many students and new staff

members. Its chief value is the opportunity that it provides to see just what goes into the design and manufacture of professional motion picture equipment.

"The Arri Image" is available for screening without charge to film studios, government photo agencies, in-plant photo departments and accredited schools. Requests for screening should be made on company letterhead and addressed to our Woodside, N.Y. offices, marked to the attention of Richard Schreiberman.

ARRI ZOOM-MOTOR SYSTEM



Combining precision with reliability, the new zoom-drive system was specifically designed for the 12-120 Angeniex zoom lens and the 16S and M Arriflex cameras.

This variable speed zoom-drive system will operate through the Angeniex 12-120 focal-length range as fast as 5 seconds, or as slow as 40 seconds. It is powered from the battery that operates your Arriflex camera.

The new ARRI zoom-system is supplied with a hand-held control with which the cameraman operates zoom direction, zoom speed, and stop/start.

A tech data sheet is available for this item.

The ARRI News Update is published periodically by the Arriflex Company of America. All inquiries for comprehensive technical information or additional copies of News Update should be directed to:

ARRI

Arriflex Company of America

25-20 Brooklyn-Queens Expressway West
Woodside, N.Y. 11377 (212) 932-3403

OR:
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Sixteen years ago, we invented the Powerbelt. And helped location filming take a giant step forward in maneuverability. Since then, we've continually *reinvented* it—with higher capacity, more flexibility, greater reliability... and a host of improvements that only our unmatched experience in portable power can provide. Sixteen years ago, we were first because no one had designed a battery supply so compact, versatile and easy to use. *Today we're first, because we're best.* With all you put on the line every time you pick up a camera, can you afford anything less?

Individual cell modules—custom-matched nickel-cadmium cells in high-impact protective containers.

Form-fitting compartments—cells cannot shift or move regardless of Powerbelt position; minimizes undesirable flexing of belt wiring.

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Heavy-duty zipper—Assures easy access to wiring and cell modules for on-the-spot internal inspection.

Built-in solid-state charger with indicator light and AC cable—provides overnight charging.

Prime material—Most durable material known for imperviousness to extremes of temperature, humidity and abrasion.

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Automatic circuit breaker—helps protect camera, lights, etc., as well as batteries, in case of external shorts. Resets automatically.

Special fast-charge in FC models—provides full charge in one hour with optional Model 9400 Fast Charger.

Patented design—U.S. Pat. No. 3,274,476 and German Pat. No. D.B.P. 1,264,001 awarded to Cine 60 president, Paul Wildum.

Heavy-duty wiring—with AMP friction-lock connectors. For extra protection against loose connections due to shock and vibration. AMP connectors are additionally soldered to cell tabs for increased security and reduced internal resistance.

Optional coiled power cord shown.

Riveting and double-stitching—provides heavy-duty reinforcement.

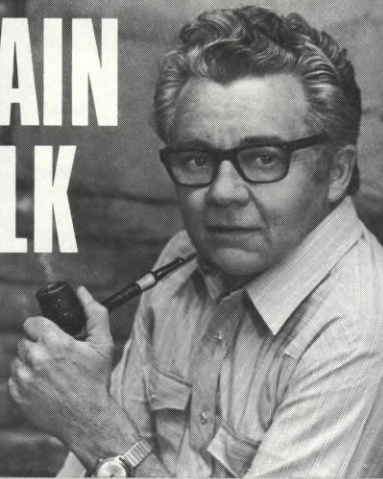


CINE 60

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PLAIN TALK



by *J. Carl Treise*

We find it amazing that some firms will be suckers for a low price tag — not once, but several times!

We've seen it happen again and again.

A firm will order a film processor, wait for it weeks (and sometimes months) beyond the promised delivery date, discover it doesn't perform to specifications . . . and still reorder from the same guy the next time around!

Why? Is it the few bucks saved on a meaningless quote? Is it a locked-in habit pattern? Or just further proof of P. T. Barnum's famous statement?

Before you order a film processor from any manufacturer (— it doesn't matter who it is), find out who some of his customers are and ask them a few questions.

Does he have a reputation for prompt delivery? Will he build exactly what you want? Will the processor do everything it's supposed to do? If something goes wrong, will he come back and make it work?

In other words, does he really care, or just pretend he does?

If we sound tough on this subject, we mean to be. We're upset by any manufacturer who promises first-rate gear and delivers marginal equipment. But we're bothered even more by any buyer who doesn't take the trouble to look for the difference!

QUESTIONS & ANSWERS

Conducted by CHARLES G. CLARKE, ASC.
and WINTON HOCH, ASC.

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



Q I wish to use my Beaulieu 16mm camera for close-up filming and special effects. I would like to use a 55mm lens from my 35mm still camera with a C mount adapter. I have heard two views on the use of 35mm lenses. One says that the quality exceeds the 16mm lenses, while the other says that the quality is never good. In either event, should I use the f-stops as engraved on the 55mm lens, or do they need adapting?

A There is no reason why a good lens from another camera, properly mounted, should not produce equal results when used on a 16mm camera. As to the f-stops, you should remember that the f-stop is determined by the ratio of the diaphragm opening to the focal distance of the lens when focused at infinity. As you intend to do very close filming and the lens must be extended forward, the ratio no longer applies as engraved on the lens. Particularly, if you use extension rings, you must use a larger lens opening than the indicated f-stop as given by your light meter.

Q What is a TV print?

A A TV print in the United States is generally no different from a print intended for projection on a screen so far as 35mm is concerned. In 16mm practice, a TV print is one that is balanced for Xenon projection, whereas a print intended for screen viewing is usually balanced for incandescent projection.

Q Is a TV print suitable for projection?

A A TV print is not really suitable for projection with an ordinary amateur type of projection machine which is equipped with an incandescent lamp since this print has been made for projection with a Xenon light source. If there is the necessity for projecting a TV print before a large and important audience, then it is a simple matter to

obtain a 16mm projector which is equipped with a Xenon light source. It is less satisfactory, but acceptable, to use a projector with an incandescent light source equipped with a bluish filter to obtain the right color balance on the screen.

Q Can you show a good projection copy for TV when there are also night scenes?

A The question of night scenes on TV is in the hands of the cameraman rather than in the hands of the laboratory. A completely black screen with a few small areas of lighter image is not as acceptable on TV as it is in screen projection. Therefore, it is good practice when planning the photography of such scenes to use more illumination and create the impression of night by proper lighting. Natural night exteriors are also far more satisfactory for TV projection than scenes that are shot "day-for-night."

Q How do you shoot an exterior with ECO 7252, 16mm, under poor light conditions? My lights are very small. Everything must be shot in medium and long shots. I thought covering the lamps with suitable blue to keep the daylight-color balance and put the 85 on the camera, is that right?

A If you have to make a print from 7242 that has already been developed and was not pre-flashed prior to development, then it is good practice to flash the print to reduce the contrast. More effective, however, is the practice of flashing the camera material before the original is developed. If the subject is very contrasty, it is possible to reduce the contrast still further by flashing the print after exposure. It is also possible to obtain higher quality by the use of an appropriate print stock, since there are several types of reversal print stocks made by the manufacturers which have different contrasts or which can be developed to various degrees of contrast. Obviously, the lowest contrast material should be selected for the print that will compensate for the higher contrast of the original. ■

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Latest generation of a motion-picture camera which has become the most popular self-contained news and documentary model in the world. Now, far more versatile and flexible than ever.

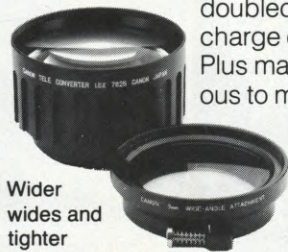


Sound economy with built-in crystal sync.

Our latest Scoopic embodies and refines the most popular qualities of the famous original Scoopic 16: Compactness. Light weight. Extreme ruggedness and reliability. Easy point-and-shoot handling. Economy. Features that quickly

made it the 'standard' camera for networks and documentaries, as well as many educational and industrial applications.

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Wider wides and tighter telephoto shots.

that boosts continuous capacity to 400', without losing the camera's internal 100' capability. For sync sound, there's an optional internal crystal control, accurate



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But whether you consider the basic Scoopic 16MS with lens, battery charger, sunshade, CdS cell hood, gel filter holders, lens cap and deluxe hard case (*all standard!*)...or fully-loaded, with all its accessories, perhaps the best news is that it's still *priced to be one of the best values on the professional market today.* For news documentaries, educational and industrial films...and now, even features and commercials. Why not see your Canon dealer for a demonstration...or contact us for more information.



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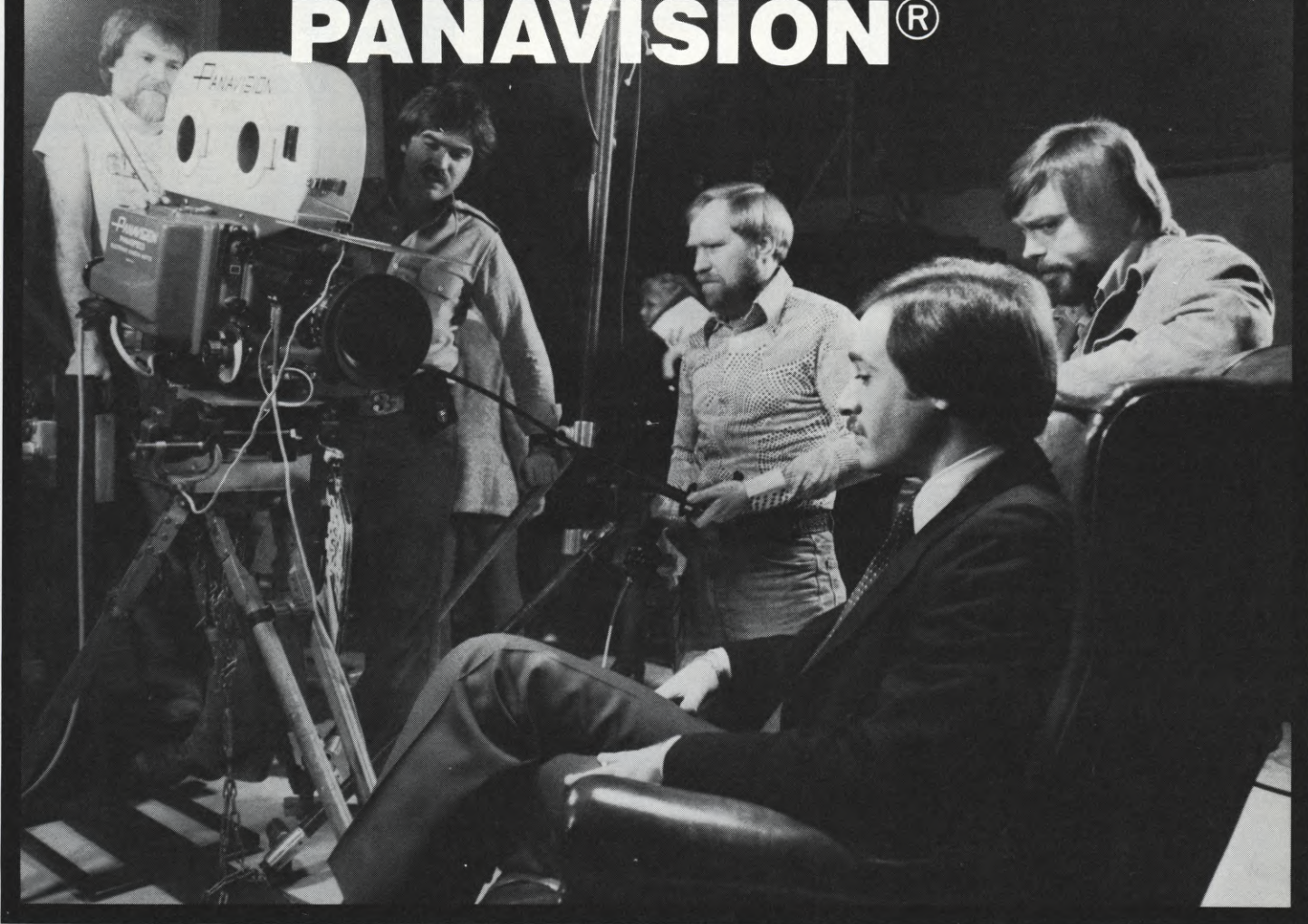
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Director of Photography Bill Dear shooting for GTA, Inc. of Detroit.
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SUSTAINING
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CINEMA WORKSHOP



By ANTON WILSON

T-STOPS REVISITED

I know that we have discussed "T" stops in the past and I am sure that most cinematographers are familiar with the so-called "photometric aperture". However, after a recent experience I am compelled to return to this subject. I was working as a freelance cinematographer for one of the major networks using their equipment. In checking out the camera I was horrified to find that iris data rings were installed on the Angenieux 9.5mm-95mm zoom lens. Data rings are not inherently a bad idea; however, in this case the data rings were calibrated in "f" stops instead of "T" stops. As if this weren't bad enough, the rings were installed in such a way that the "T" stop calibrations on the lens were obliterated, which meant that even if a cameraman knew enough to use "T" stops, he would be unable to do so.

I proceeded to do what any other sane cameraman would do. I pulled out

CHART #1

Type	Focal length	Geometric aperture	T/stop Photometric Aperture
16mm			
R7	5.9mm	f/1.8-f/22	T/2 -T/22
R21	10mm	f/1.8-f/16	T/2 -T/22
S41	25mm	f/1.4-f/22	T/1.5 -T/22
M1	25mm	f/0.95-f/22	T/1.1 -T/22
M2	28mm	f/1.1-f/22	T/1.2 -T/22
S5	50mm	f/1.5-f/22	T/1.6 -T/22
4x17	17 - 68mm	f/2.2-f/22	T/2.5 -T/22
4x17.5	17.5- 70mm	f/2.2-f/22	T/2.5 -T/22
6x12.5	12.5- 75mm	f/2.2-f/22	T/2.5 -T/22
6x 9.5	9.5- 57mm	f/1.6/2.2-f/22	T/1.9/2.4 -T/22
10x 9.5	9.5- 95mm	f/2.2-f/22	T/2.8 -T/22
10x12	12 -120mm	f/2.2-f/22	T/2.5 -T/22
20x12	12 -240mm	f/3.5-f/22	T/4.2 -T/22

35mm

R62	14.5mm	f/3.5-f/16	T/3.8 -T/16
R2	24mm	f/2.2-f/22	T/2.4 -T/22
S2	28mm	f/1.8-f/16	T/1.9 -T/16
S2	32mm	f/1.8-f/16	T/1.9 -T/16
S2	50mm	f/1.8-f/16	T/2 -T/16
M1	50mm	f/0.95-f/22	T/1.1 -T/22
4x35 T1	35-140mm	f/3.5-f/22	T/4.4 -T/22
6x20 L2	20-120mm	f/2.6-f/22	T/3 -T/22
10x24 A	24-240mm	f/2.6-f/22	T/3.8 -T/22
10x25 T2	25-250mm	f/3.2-f/22	T/3.9 -T/22

my handy-dandy tool kit, located my trusty screwdriver and surgically removed the offending appendages. This radical, dissident act did not go unnoticed and it was only a very short interim before the proverbial matter hit the fan. It took an hour in the ensuing who-ha to convince the involved parties that an "f" stop is meaningless to the modern cinematographer. The "f" stop signifies only the physical dimension of a hole in the lens. It has little to do with the exact amount of light falling on the film plane. As much as 50% of the light can be lost to diffraction, refraction, reflection and viewfinder optics, before reaching the film plane.

The "T" stop, or photometric aperture, on the other hand, is a true and accurate measure of the light reaching the film plane after the aforementioned optical phenomena have taken their toll. It is obvious that the cameraman is concerned with the light reaching the film plane when setting his exposure and that the arbitrary physical dimensions of the lens orifice is irrelevant and immaterial.

The most amazing aspect of the story concerns the manufacturer of the data rings. Simply stated, "f" stop data rings *should not exist*. All manufacturing of such items should cease immediately, as these rings tell you nothing. They have no socially redeeming value whatsoever and only serve to cover up the "T" stop indices on the lens. Not only should the production of "f" stop rings cease immediately, but lens manufacturers should eliminate the engraving of "f" stop data altogether. Angenieux deserves a round of applause for landing the first blow in this cause. Their new 10mm-150mm zoom lens is manufactured with only "T" stop calibrations; there isn't an "f" stop in sight. The only possible significance of the "f" stop is for depth-of-field calculations, which are based on geometric parameters, as opposed to photometric data. However, with modern reflex cameras one rarely calculates depth-of-field. This is especially true of the news or documentary cameraman. When was the last time you saw a news cameraman pull out a tape measure and calculate the distance between the camera and a

burning building? The acceptable area of focus is quite visibly apparent on the ground glass. What this boils down to is the fact that "f" stops are virtually useless and only serve to confuse the masses. They should be persecuted and harassed until they are purged from our system.

Getting down to specifics, the lens in the aforementioned story was an Angenieux 9.5mm-95mm zoom with reflex viewfinder (for a non-reflex camera). This lens has a maximum aperture of f/2.2, but a maximum "T" stop of T/3. Thus, if a cameraman calculated a T/2.2 stop with his light meter and set the lens to f/2.2, as per the data rings, he would be almost a *full stop underexposed*, as the light reaching the film plane is only a T/3.

Lastly, the amount of difference between the "f" stop and "T" stop will vary from lens to lens and no fixed formula can be employed. Generally speaking, the more complex lenses will exhibit greater differences between "f" and "T" stops. A relatively simple fixed-focal-length lens may have "f" stop calibrations almost identical to "T" stop indices, while a complex zoom lens may have as much as a full stop difference between the "f" stop and the actual "photometric" "T" stop.

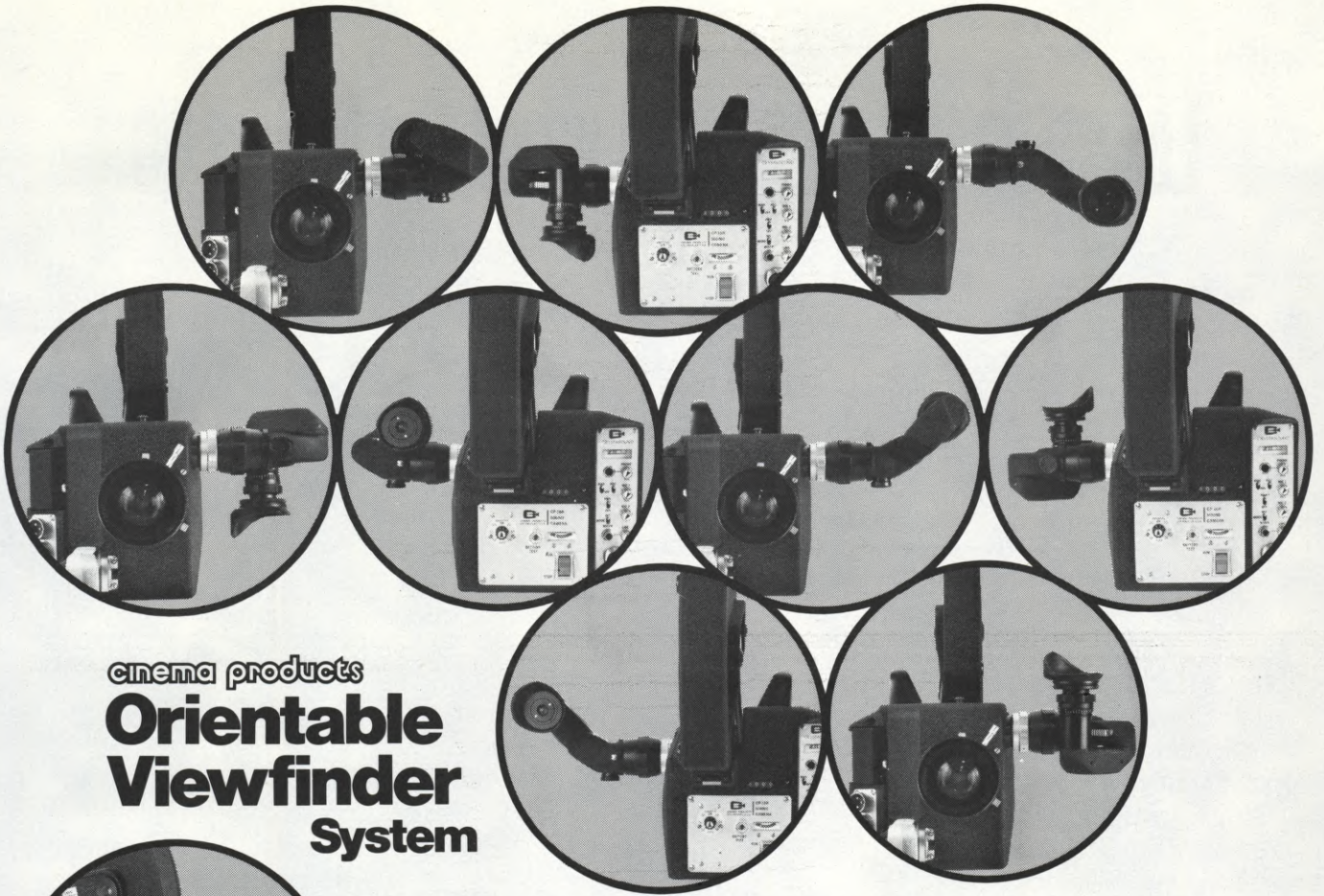
As a reference, CHART #1 lists some of the more popular Angenieux lenses with both "f" stop and "T" stop maximum apertures. A careful perusal of this list will help the cameraman gain a "feel" for photometric aperture. Note, for instance, that both the 12mm-120mm and the 9.5mm-95mm lenses have a maximum aperture of f/2.2, yet the 12mm-120mm is a T/2.5 and the 9.5mm-95mm is a T/2.8.

If you use data rings, make sure they are "T" stop rings and not "f" stop. And if you should happen to find yourself working for a network, and they give you a camera with "f" stop data rings, just take them off and tell them I said it was O.K. ■

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☑ Optionally available, as part of the system, is a special **extender** which places the eyepiece approximately 7" (178mm) behind the film plane for utmost comfort in tripod or dolly operation.

☑ The CP orientable viewfinder delivers a brilliant, sharp image (12X magnification) even at low light levels. All optical elements have anti-reflective coatings for maximum

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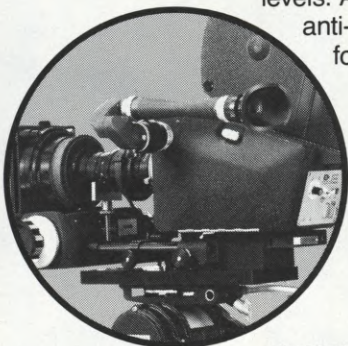
☑ Without having to be removed from the camera, the CP *erect image* orientable viewfinder can be rotated a full 360° while maintaining a constant image orientation.

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☑ The CP orientable viewfinder pivots for left or right eye viewing without requiring any additional accessory.

☑ A *credit* of \$350 is granted when the CP orientable viewfinder is ordered together with a new CP-16R or CP-16R/A camera (in place of the standard CP-16R viewfinder).

☑ In addition to the CP-16R camera, the CP orientable viewfinder is compatible for use with many other 16mm cameras.



The CP orientable viewfinder with special extender (shown mounted on CP-16R camera equipped with "Studio Rig") places the eyepiece approximately 7" behind the film plane for utmost comfort in tripod or dolly operation.



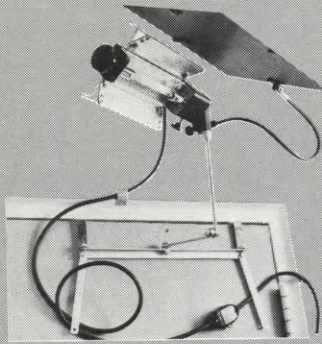
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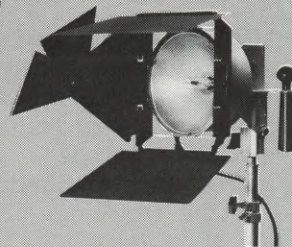
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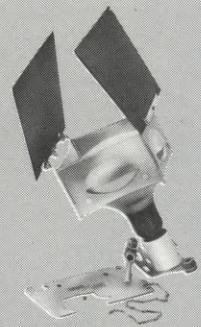
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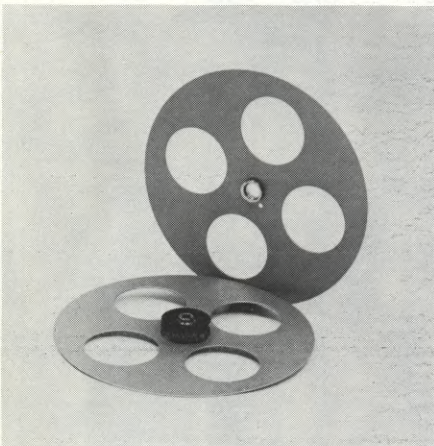
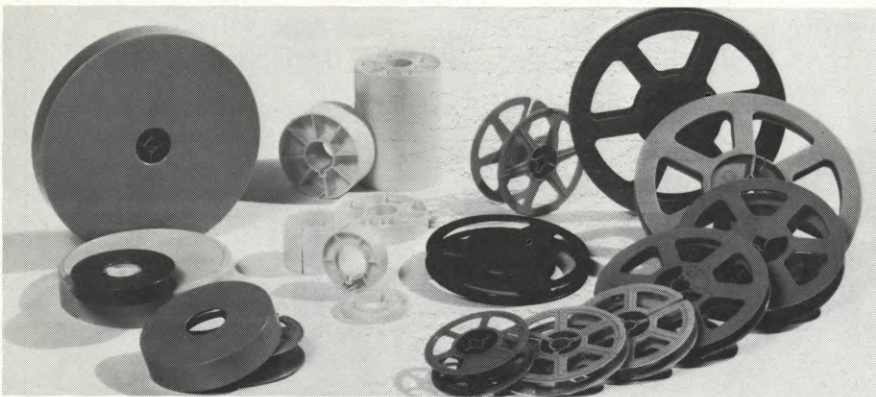
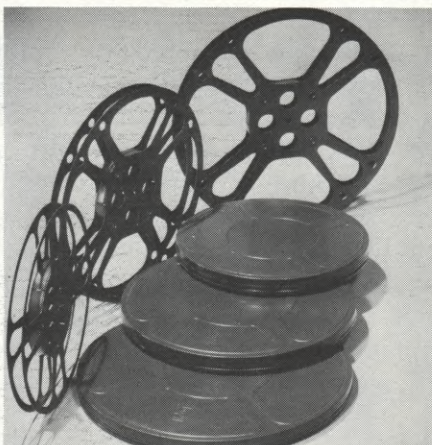
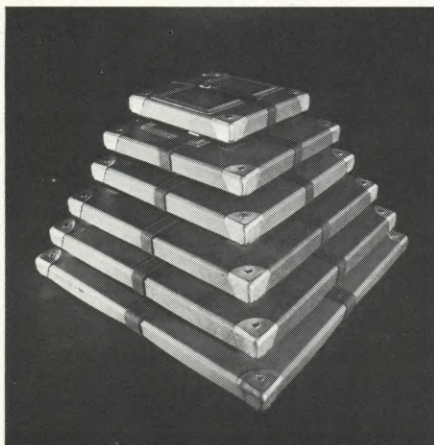
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THE BOOKSHELF

By GEORGE L. GEORGE

THE DIRECTORIAL TOUCH

A major work of biographical research, *FRITZ LANG* by Lotte H. Eisner examines the career of the late director in a penetrating analysis of his style, his working methods, the plots of his films and his underlying philosophy of life. (Oxford U. Press \$25.)

In *GILLES CARLE*, the work of the Canadian director is perceptively discussed by Micheline Ferron and Piers Handling in an informative, juxtaposition of his own comments, film reviews, a filmography and a bibliography. (Canadian Film Institute \$1.50)

Two Ph.D. theses published by Arno Press examine the director's work. In *AMERICAN VISIONS: THE FILMS OF CHAPLIN, FORD, CAPRA AND WELLES, 1936-1941*, Charles J. Maland contributes a substantial study of the filmmaker's relationship to his environment. (\$27.) In *EVOLUTION OF STYLE IN THE EARLY WORK OF DZIGA VERTOV*, Seth R. Feldman considers Vertov's writings and his innovative directorial approach in a noteworthy analysis of post-Revolutionary Soviet cinema. (\$15.)

* * *

DATA BOOKS

In *A TITLE GUIDE TO THE TALKIES, 1964 THROUGH 1974*, Andrew A. Aros provides a master list of all films exhibited in the US during that decade. Data include director, scenarist, literary source, producer, distributor and year of general release. (Scarecrow \$12.50)

Helen W. Cyr's *A FILMOGRAPHY OF THE THIRD WORLD* offers an exhaustive annotated list of 16mm movies, fictional and factual, depicting the history and culture of the emerging countries. (Scarecrow \$11.)

The 5th edition of a useful directory compiled by James L. Limbacher, *FEATURE FILMS ON 8mm AND 16mm* catalogs some 16,000 movies available for non-theatrical showings. Each title lists the director, stars, date of release, producer and current distributor. (Bowker \$19.95)

Members of the National Society of Film Critics, in *MOVIE COMEDY*, contribute their expert responses to a rich

and diverse genre. Edited by Stuart Byron and Elisabeth Weis, this entertaining anthology gathers the views of such top movie critics as Vincent Canby, Pauline Kael, Andrew Sarris and Rex Reed. (Grossman/Viking \$15.)

A practical, well organized and consumer-oriented multimedia guide edited by James S. Barnes, AUDIO-VISUAL MARKET PLACE 1977 lists over 5000 soft/hardware producers and distributors, rental facilities, stock shot libraries, awards and festivals, publications and related goods and services. (Bowker \$19.95)

Soap operas, those vicarious intimations of life, are covered in a comprehensive study by Madeleine Edmondson and David Rounds, FROM MARY NOBLE TO MARY HARTMAN. The genre's provocative strides in story line, treatment and technical proficiency are stressed. (Stein & Day \$9.95)

An illustrated paperback history of soap operas, Robert LaGuardia's FROM MA PERKINS TO MARY HARTMAN surveys mainly current TV serials, but includes a backward glance at the radio era and the early TV soaps. (Ballantine \$1.95)

A one-volume collection of 19 issues of the quarterly THE SILENT PICTURE gathers valuable data on the pre-talkie era in articles on the progress of the art, interviews with directors and performers, filmographies and bibliographies. (Arno Press \$50.)

East European film production after 1945 is surveyed in extensive detail in THE MOST IMPORTANT ART by Mira and Antonin J. Liehm. A knowledgeable historic perspective balances artistic achievements against political and economic necessities of the nationalized film industries in the USSR, Poland, Romania, Czechoslovakia, Hungary, Bulgaria, Yugoslavia and the German Democratic Republic. (U. of California Press \$23.50)

Three recent volumes deal with the many-faceted talent of James Agee — poet, journalist and screenwriter (*The African Queen* et al). Geneviève Moreau's THE RESTLESS JOURNEY OF JAMES AGEE is a full-scale portrait of a compulsive man and the fascinating life he created for himself. (Morrow \$10.95). From Arno Press, two Ph.D. dissertations also offer insightful and documented studies of Agee's work in films: FILM THEORY OF JAMES AGEE by Mark W. Flanders (\$18.) and JAMES AGEE: A STUDY

OF HIS FILM CRITICISM by John J. Snyder. (\$15.)

Another Ph.D. dissertation analyzes an early film theoretician, THE AESTHETIC OF ISOLATION IN FILM THEORY: HUGO MUNSTERBERG by Donald L. Fredericksen. Munsterberg's *The Photoplay: A Psychological Study*, published in 1916, made use of his grounding in applied psychology to draw conclusions on the nature of the film experience. (Arno Press \$22.)

* * *

PERSONALITIES

Milton Josefsberg, in THE JACK BENNY SHOW, covers the late performer's career in radio, TV and films, recreating entertainingly and sensitively the popular comedian's life and times. (Arlington \$12.95)

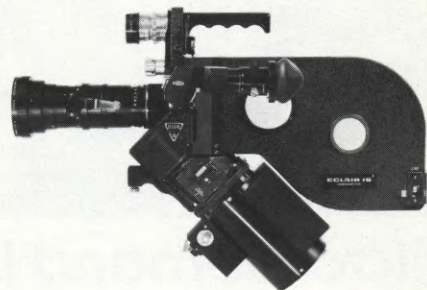
Versatile press agent and journalist Irving Drutman spins many light-hearted tales about his days in the entertainment world in GOOD COMPANY, a book of reminiscences studded with celebrities' names and their uninhibited capers. (Little, Brown \$7.95)

Photographer George Hurrell has assembled in THE HURRELL STYLE a superb gallery of his portraits of Hollywood stars of the last 50 years. Whitney Stine's text discusses Hurrell's methods and his relationship to his glamorous subjects. (John Day/Crowell \$15.95)

No less than four books deal with The Fonz, a.k.a. Henry Winkler, hero of TV's *Happy Days* series and now a movie star. THE OTHER SIDE OF HENRY WINKLER by himself (Warner \$3.95), THE OFFICIAL FONZIE SCRAPBOOK by Ben Davidson (Grosset & Dunlap \$3.95), HOLLYWOOD'S NEWEST SUPERSTAR by Suzanne Munshower (Berkley \$1.25) and THE FONZ by Charles E. Pike (Pocket Books \$1.50). All tell essentially the same success story of an appealing, exuberant and "cool" young actor, unspoiled and modest despite his rapid rise to fame.

Erica Jong, in the quasi-documentary part of her novel HOW TO SAVE YOUR OWN LIFE has little good to say about Hollywood, where she went to write the screenplay of her first novel, *Fear of Flying*. Her new book is alive, engrossing and cheerfully outrageous, and her thinly disguised film industry characters are sharp dissections of the species. (Holt Rinehart Winston \$8.95)

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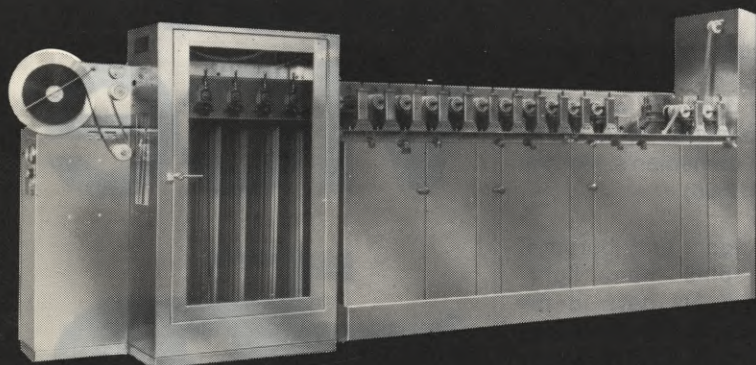
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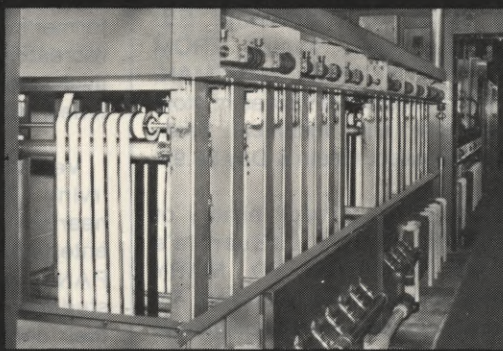
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THE 49th ANNUAL ACADEMY AWARDS PRESENTATION

By HERB A. LIGHTMAN

Color, excitement and a galaxy of the film industry's biggest stars highlighted the 49th Annual Oscar Awards of the Academy of Motion Picture Arts and Sciences, which were presented live from the Dorothy Chandler Pavilion of the Los Angeles Music Center and telecast worldwide by the ABC Television Network on the evening of Monday, March 28.

As usual, the annual ritual proved to be Hollywood's most important event of the year. Despite the almost circus-like aura that surrounds it and the fact that it is beamed to a global audience (almost one billion television viewers this year) the occasion is, for those who work in the professional film industry, a curiously private affair. It marks the one moment each year when the artists and artisans of the industry pause to honor their own — and this unique peer recognition, despite refusals of the Oscar by a couple of disgruntled actors in the past, is highly valued by the men and women who work so hard in front of and behind the cameras to bring the magic of the movies to audiences all

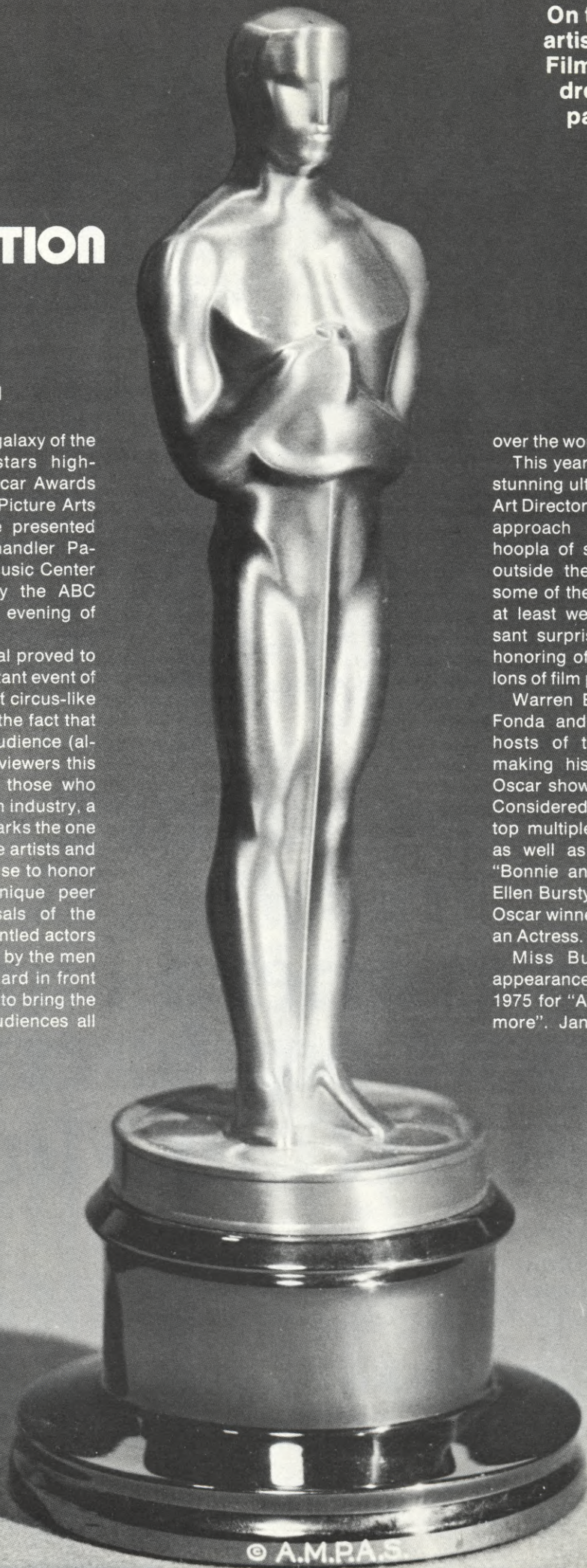
On this special night, the artists and artisans of the Film Capital of the World dress up and turn out to pay tribute to their own

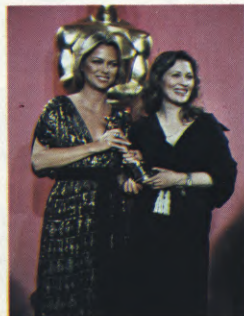
over the world.

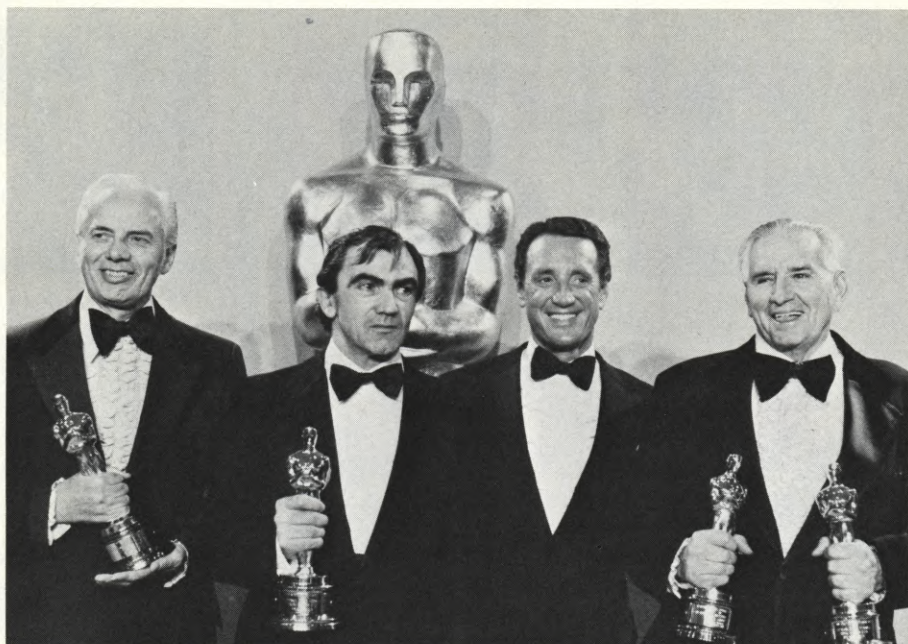
This year's Presentation, staged in a stunning ultra-modern set designed by Art Director Ray Klausen, had a no-frills approach that dispensed with the hoopla of stars arriving in limousines outside the Pavilion and if it lacked some of the spark of previous years, it at least went off without any unpleasant surprises — a dignified, tasteful honoring of talent in the highest echelons of film production.

Warren Beatty, Ellen Burstyn, Jane Fonda and Richard Pryor served as hosts of the program. Beatty was making his third appearance on an Oscar show, but his first as an emcee. Considered to be one of Hollywood's top multiple talents, he has produced as well as starred in such films as "Bonnie and Clyde" and "Shampoo". Ellen Burstyn and Jane Fonda are both Oscar winners for Best Performance by an Actress.

Miss Burstyn, making her first appearance on an Oscar show, won in 1975 for "Alice Doesn't Live Here Anymore". Jane Fonda won in 1971 for

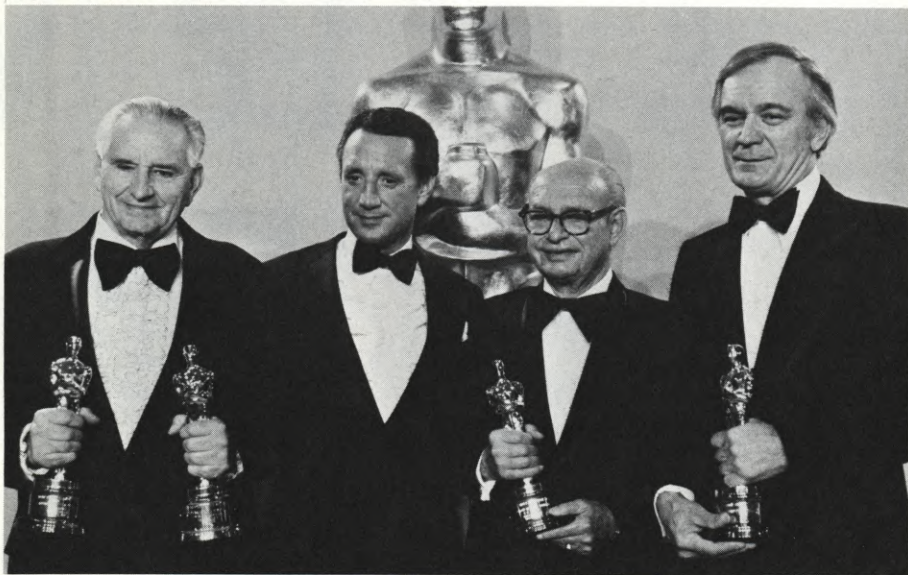






Winners of Special Achievement Awards in the "Visual Effects" category, for "KING KONG", a Dino De Laurentiis Production, Paramount. (Left to right:) Frank Van Der Veer, Carlo Rambaldi, Roy Scheider (presenter) and Glen Robinson. The "Visual Effects" award is not mandatory, but is presented only when there is a production of sufficient merit to warrant it. This year there were two such productions.

Winners of Special Achievement Awards in the "Visual Effects" category, for "LOGAN'S RUN", a Saul David Production, Metro-Goldwyn-Mayer. (Left to right:) Glen Robinson, Roy Scheider (presenter), L.B. "Bill" Abbott, ASC, Matthew Yuricich. Robinson, winning two Oscars this year, won for "THE HINDENBURG" last year and "EARTHQUAKE" the year before. Abbott had previously won Oscars for "CLEOPATRA", "DOCTOR DOLITTLE" and "THE TOWERING INFERNO".



(LEFT) Very early in the day, the bleachers lining the entry to the Dorothy Chandler Pavilion began to fill with more than 1,000 fans eager to watch their favorites arrive. (LEFT TO RIGHT:) Twice-nominated as star and screenwriter of "Best Picture" award-winner, "ROCKY", Sylvester Stallone arrives. Jody Foster, teenage "Best Supporting Actress" nominee for her role in "TAXI DRIVER", arrives with her escort. The irrepressible Mickey Rooney (in spirit, still "younger than springtime") arrives with his lady. The enthusiastic fans, most of them very young, roundly cheered those they hoped would win.

"Klute" and was making her third appearance on the Academy Awards show. Richard Pryor was making his first appearance on the Academy Awards. His comedic talents have made him an international star, and he can currently be seen in the films, "Car Wash" and "Silver Streak".

A feature of the 49th Annual Oscar Awards was the presentation of the Irving Thalberg Award to veteran producer Pandro S. Berman. As studio executive and producer, Berman has been responsible for many of the screen's most memorable films, including "The Gay Divorcee", "Top Hat", "Gunga Din", "Father of the Bride", "Ivanhoe", "Blackboard Jungle", "Sweet Bird of Youth" and "A Patch of Blue".

Presenters included (alphabetically) Pearl Bailey, James Caan, Neil Diamond, Tamara Dobson, Marty Feldman, Louise Fletcher, William Holden, Marthe Keller, Norman Mailer, Jeanne Moreau, Jack Nicholson, Tatum O'Neal, Red Skelton, Sylvester Stallone, Cicely Tyson and Liv Ullmann.

A highlight of this year's show was the live performances by three of the world's most dynamic entertainers, Barbra Streisand, Ben Vereen and Tom Jones. Miss Streisand sang her own nominated best song, "Evergreen" (love theme from "A Star is Born"). This was her first appearance as a performer on an Oscar telecast and, predictably, "Evergreen", for which Miss Streisand wrote the music to Paul Williams' lyrics, won the Oscar in its category.

Vereen, who won critical acclaim for his portrayal of Chicken George in "Roots", sang the nominated song, "Gonna Fly Now", from "Rocky".

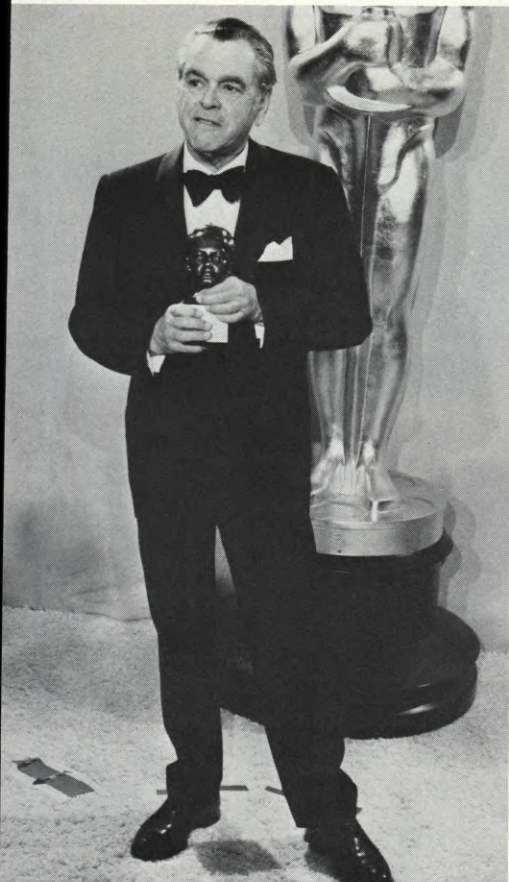
Tom Jones sang another nominated song, "Come to Me", from "The Pink Panther Strikes Again".

William Friedkin, an Oscar-winning director for "The French Connection", served as the producer of this year's show. The youngest man ever to produce an Oscar telecast, Friedkin



ACADEMY AWARD WINNERS FOR CINEMATOGRAPHY — 1928 to 1976

Year	Class.	Cameraman	Picture Title	Studio
1976		Haskell Wexler, A.S.C.	"Bound for Glory"	U.A.
1975		John Alcott, B.S.C.	"Barry Lyndon"	WB
1974		{ Fred Koenekamp, A.S.C. Joseph Biroc, A.S.C.	{ "The Towering Inferno"	20th-Fox and WB
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 Shuffan	"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	One 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 LaShelle, 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.	"The Great Waltz"	MGM
1937		Farciot Edouart, A.S.C.	"Spawn of the North"	Para.
1937		Karl Freund, A.S.C.	"The Good Earth"	MGM
1936		Tony Gaudio, A.S.C.	"The Good Earth"	MGM
1935		Hal Mohr, A.S.C.	"Anthony Adverse"	WB
1934		Victor Milner, A.S.C.	"Midsummer Night's Dream"	WB
1933		Charles B. Lang Jr., A.S.C.	"Cleopatra"	Para.
1932		Lee Garmes, A.S.C.	"A Farewell to Arms"	Para.
1931		Floyd Crosby, A.S.C.	"Shanghai Express"	Para.
1930		{ William Van Der Veer Joseph T. Rucker	{ "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



Distinguished veteran producer Pandro S. Berman holds the special statuette presented to him as recipient of the prestigious Irving Thalberg Award. As studio executive and producer for several decades, Berman was responsible for many of the greatest film hits during the "Golden Age of Hollywood".

Mrs. Peter Finch holds the Oscar statuette awarded to her late husband for his role in "NETWORK", the first "Best Actor" Award to be granted posthumously. Shown here with "Best Actress" ("NETWORK") winner Faye Dunaway, her heartfelt acceptance speech was the emotional highpoint of the evening.





was also the director of "The Exorcist", "The Boys in the Band" and "The Night They Raided Minsky's". His latest film, "Sorcerer", will be released next summer.

Marshall Flaum, long associated with David L. Wolper in the documentary field, served as co-producer and writer. His credits include serving as executive producer of the Jacques Cousteau and Jane Goodall specials for the ABC Television Network.

Marty Pasetta, one of the most innovative directors in television, directed the Academy Awards telecast for the sixth consecutive year. In addition to the Oscar Awards show, Pasetta's directing credits include the Grammy Awards, Emmy Awards and specials starring Elvis Presley, Frank Sinatra and Bing Crosby.

Bill Conti, who has composed the scores for such films as "Rocky", "Harry and Tonto" and "Next Stop, Greenwich Village", was the music director. Conti is the composer of one of this year's nominated songs, "Gonna Fly Now", from "Rocky".

Ann-Margret, whose career was virtually launched on an Oscar show, returned to the awards presentation this year to perform a special opening and closing number for the 49th Annual Academy Awards.

The unusual production number marked the first time that the talented star has performed on the Oscar Awards program since her memorable rendition of "Bachelor in Paradise" stopped the show in 1962. The appearance made the then rising young star an overnight celebrity.

The actress has made three Oscar appearances since 1962, all as a presenter. She also has received two Academy Award nominations — for her supporting performance in "Carnal Knowledge" and as best actress for "Tommy".

A record number of foreign broadcasters carried the 49th Annual Oscar Awards of the Academy of Motion Picture Arts and Sciences, according to Richard A. O'Leary, President of ABC International.

With the addition of seven new

(TOP OF PAGE) Several moments from the lavishly staged 49th Academy Awards telecast, featuring the Donald McKayle Dancers, Jack Nicholson and Tom Jones (singing the nominated song, "Come to Me"). (ABOVE LEFT) Barbra Streisand singing "Evergreen" (Love Theme from "A STAR IS BORN", the music for which she wrote to lyrics by Paul Williams). "Evergreen" won the "Best Song" Award. (BELOW) Hollywood magic pervaded the surroundings of the Dorothy Chandler Pavilion of the Los Angeles Music Center, as a star-studded audience arrived for the 49th Annual Academy Awards Presentation.





foreign broadcasters, a total of 43 broadcasters in countries outside of the United States, plus Puerto Rico, televised ABC's special coverage to over 75 million foreign homes.

"This is the largest number of foreign countries ever to televise this event," said Mr. O'Leary. "We are indeed pleased that seven new countries have joined in the recognition of the international importance of the ABC Television Network's telecast of the 49th Annual Oscar Awards."

The program was televised live in Australia, Brazil, Canada, Mexico, and The Philippines, as well as Puerto Rico. Other countries carried it via videotape or film.

Jack Singer, Director of ABC International, handled arrangements for the international telecast.

Following is a list of the 43 foreign countries licensed by ABC International to televise the 49th Annual Academy Awards: Antigua, Australia, Barbados, Bermuda, Brazil, Brunei, Canada, Chile, Colombia, Costa Rica, Dominica, Dominican Republic, Ecuador, El Salvador, West Germany, Greece, Guatemala, Honduras, Hong Kong, Indonesia, Iran, Israel, Jamaica, Malaysia, Mexico, Netherlands Antilles, New Zealand, Nicaragua, Pakistan, Panama, Peru, Philippines, Saudi Arabia, South Africa, South Korea, Spain, Surinam, Taiwan, Thailand, Trinidad, Uruguay, Venezuela and the British Virgin Islands.

What does it take to put on an Academy Awards telecast? According to the people who know — the engineers and technical crews of the broadcasting network — it's a lot more than most people realize. Behind the color and excitement of the on-stage activities existed a virtual beehive of activity that the home viewer never sees.

"Oscar night is one of the toughest assignments we have all year," Bob Furiga, one of the show's unit managers, said. "We use more manpower and equipment than on just about any other entertainment program

we do, and the fact that the show is done live makes matters a lot more complicated. We can't afford any mistakes."

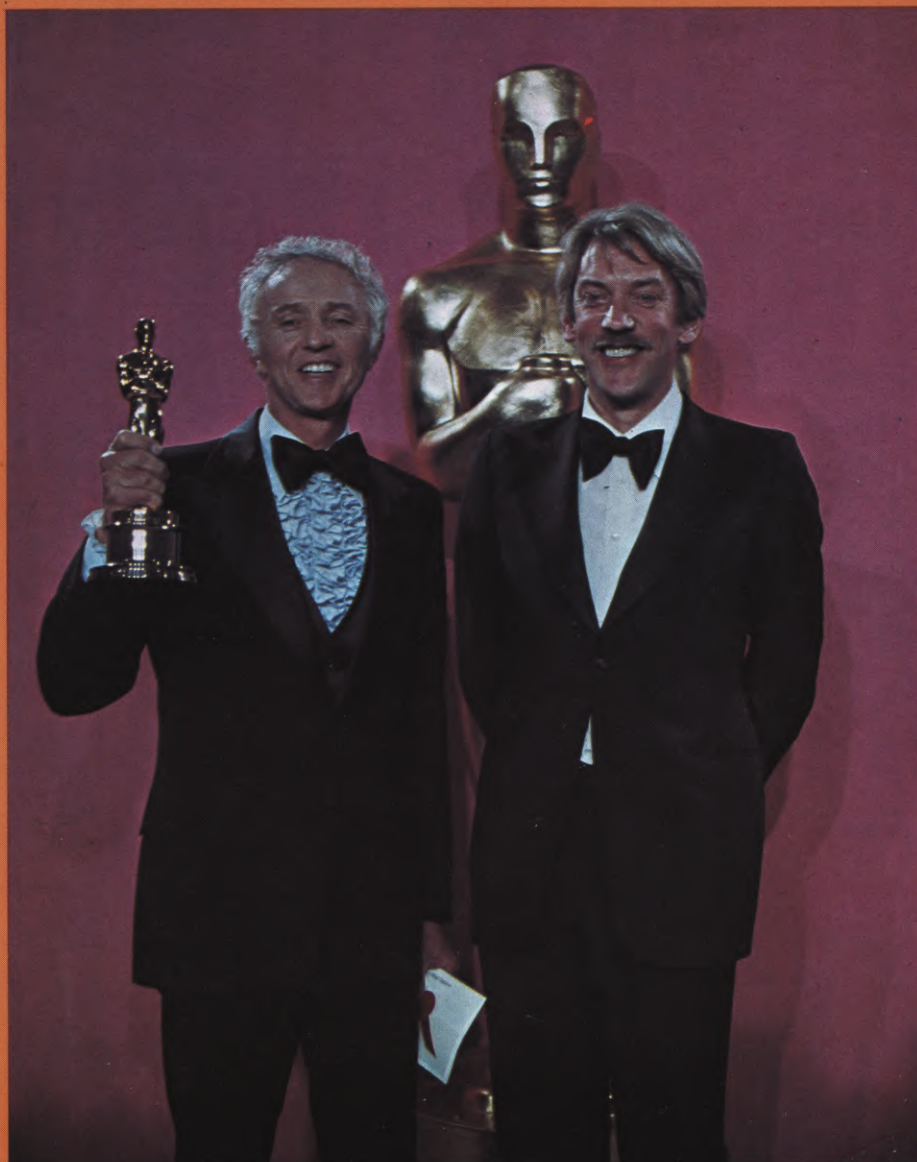
This year, director Marty Pasetta ordered 14 cameras to be placed throughout the Dorothy Chandler Pavilion of the Los Angeles Music Center, compared with the four to five for an average entertainment special. There were 66 video engineers and 14

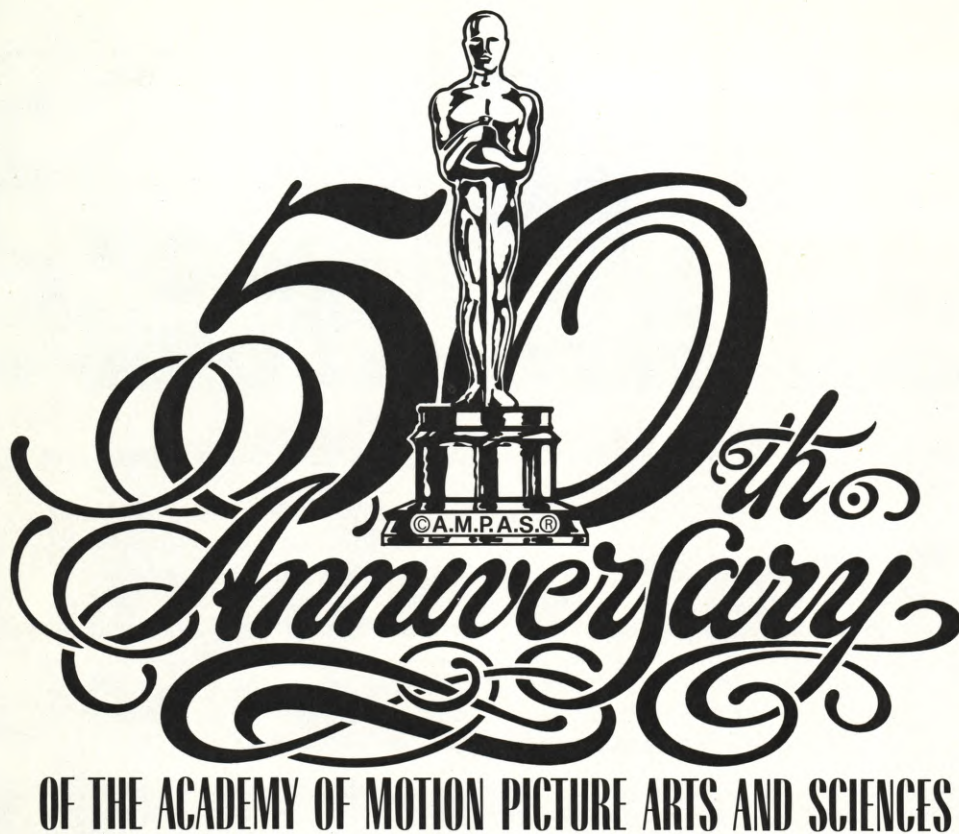
sound engineers to run the complex equipment, compared to 24 or 25 that are used in most special programs.

Communications were handled by the installation of more than 60 telephones and by direct lines from the control booth to the floor managers. Audience, press and backstage personnel viewed the show on the 50 television monitors placed throughout

Continued on Page 544

Haskell Wexler, ASC, happily holds the Oscar awarded him in the "Best Achievement in Cinematography" category for his work as Director of Photography on "BOUND FOR GLORY". A previous Academy Award winner for his black and white photography of "WHO'S AFRAID OF VIRGINIA WOOLF?", Wexler was also nominated last year (together with Bill Butler, ASC) for "ONE FLEW OVER THE CUCKOO'S NEST". He is shown here with Donald Sutherland, star of "FELLINI'S CASANOVA", who presented the award.





50th Anniversary
OF THE ACADEMY OF MOTION PICTURE ARTS AND SCIENCES

The organization founded by visionary film craftsmen to further the progress of this newest of art forms, now, in its Golden Year, commands worldwide respect

The Academy of Motion Picture Arts and Sciences, celebrating its 50th anniversary this month, represents one of the four major industries in Southern California's economy.

According to the U.S. Bureau of Census, the motion picture industry nationwide is a \$5 billion-a-year business, with more than 200,000 employees earning about \$1.5 billion.

As the major film center in the nation, Hollywood shares substantially in these figures. This, of course, impacts directly, or indirectly, on every segment of business in Southern California, because those in the film industry spend most of their income locally on food, clothing, shelter, transportation, health care and luxury items.

From the 1920s to the 1940s, the film industry practically dominated the economy of the southern half of the state, but since then, the economic base of the region has widened substantially, reducing the financial impact of the cinema industry on the business community.

Commercial film-making in Los Angeles began about 1909, and Hollywood rapidly became a Mecca for those interested in movie careers. Between 1900 and 1920, Hollywood's population zoomed from 500 residents

to 50,000, with real estate prices skyrocketing.

While many movies were made in the giant film factories that sprang up around Hollywood, a lot of directors took their casts and crews into the field for authentic scenery, filming on location at desert, mountain and sea from Santa Barbara to San Diego. Early studios also existed in Santa Barbara and Long Beach.

By the mid-1940s, the artistic and technical excellence of Hollywood-made movies was recognized throughout the world, and audiences were huge. In 1946, for example, 4,230,000,000 admission tickets were sold.

Having reached the pinnacle, the Hollywood movie industry could only proceed in one direction — down! The decline of Hollywood came through a number of factors. Taxes and higher costs, including labor, resulted in Hollywood moviemakers shifting productions to Europe and the Orient. Foreign film-makers began competing aggressively with U.S. films.

By 1968, so-called "runaway" film production had hurt Hollywood's movie labor pool seriously. Of Hollywood's 30,000 film union members, more than 12,000 — or more than 40 per cent —

were unemployed.

Ironically, television, which initially hurt movie attendance, starting in the mid-1950s, later helped stave-off total disaster. With its insatiable appetite for entertainment, television turned to the picturemakers. Hollywood's film factories soon were grinding out television films by the hundreds.

Hollywood moviemakers also adapted to the changing conditions. Where a major studio once made 60 pictures a year, the same studio might make only 15 today. But many of the films produced now are blockbusters, costing millions of dollars, featuring top name stars in profusion. They are also films that require large screens, not TV-sized screens. Films like "The Towering Inferno", "Earthquake", "Jaws" and "Midway".

By 1975, the number of admission tickets sold had slipped to 1,035,000,000. But audiences, who once paid 40 cents for admission, today are willing to pay an average of \$2.05 to see a movie. This domestic revenue is augmented by income from foreign screenings, accounting for about 50 per cent of the total earnings of the average film.

A recent survey disclosed that the total of moviegoers in America, age 12 and above, was 109 million people, of which 89 per cent were under 40. Since 1969, the number of moviegoers has increased by 15 per cent, while the civilian population went up by only 10 per cent.

"It bodes well for our industry's future that so many young people go to the movies," says Walter Mirisch, president of the Academy of Motion Picture Arts and Sciences and a multiple Oscar-winning producer. "Using the Census Bureau's figures, those total 109 million moviegoers should increase to 115 million by 1980, and to 120 million by 1985."

"Large as those numbers are, keep in mind that they are for the United States alone," Mirisch adds. "Today, more than 50 countries produce some 3,500 feature films per year.

"The United States does not rank high in the numbers of films produced, but there is no doubt that the label 'Made in Hollywood' is still the benchmark of technical excellence, artistic preeminence, and plain old audience appeal throughout the world."

Mirisch adds that the Academy is optimistic about the artistic and economic future of the American motion picture, and hopes to transmit that enthusiasm to others, particularly the business and financial communities.

"There is too big a gulf between the creative filmmakers and the business

community," he told the *Southern California Journal of Commerce*. "We need a closer amalgam between the creative genius and the financial genius . . . There is a commonality of interests between the creative and business community here, and there must be an increasing interchange of skills, opinions and methodologies."

Creating a bridge of understanding between professionals in the movie industry and the public at large was one of the major reasons for the founding of the Academy.

On May 4, 1927, a group of 36 film leaders, including Mary Pickford and her husband, Douglas Fairbanks, Sr., decided Hollywood needed such an organization, and set about to form the Academy.

From a succession of rented quarters, the Academy has grown in size, scope and influence. Today, the Academy is housed in its own seven-story headquarters on Wilshire Boulevard in Beverly Hills.

Behind its glass facade are an elegant lobby designed for exhibits and displays, the Samuel Goldwyn Theater, a small screening room, executive offices and the Margaret Herrick Library.

James M. Roberts, executive director, oversees a staff of 51 persons, who operate under policies established by a 36-member Board of Governors, which includes the organization's president.

The Academy's 3,900 members pay \$100 per year after being invited to join their distinguished peers. Membership in the Academy is limited and, therefore, a desirable distinction available only through individual achievement.

Many people erroneously believe that the annual Oscar Awards presentation is the primary function of the Academy. Far from it.

The Academy's Margaret Herrick Library is another of its major activities. Occupying two floors in the Academy Building, the library is acknowledged by experts as one of the world's finest sources of reference materials on movie-making and movie-makers dating back to the last century.

The Margaret Herrick Library contains one of the world's most complete collections of film-related material. Its 10,000-square-foot house a collection of more than 9,000 books, pamphlets and periodicals about the movie industry.

There also are a half-million still photographs, and files on approximately 40,000 films dating back to Thomas Edison's 1894 Kinetoscopic study of "The Sneeze".

Collections of rare books, scripts, films, slides and posters from RKO, Paramount, Mack Sennett, Eadweard Muybridge and others are contained in the Library.

Librarian Mildred Simpson and her staff served more than 11,000 visitors and handled in excess of 22,000 telephone calls for information last year. Library users include Academy members, the news media, other libraries, students and the public.

The library constantly seeks to add to its reference materials through donations which may be tax deductible. It is open to the public Monday, Tuesday, Thursday, and Friday, 9 a.m. to 5 p.m.

The Academy's film library includes approximately 2,000 titles in its vaults. Among them is a group of 28mm films made by George Melies, Biograph and other early motion picture producers. Films from this library are available for viewing and study by qualified film historians and serious researchers.

The Academy's 1,100-seat Samuel Goldwyn Theater is capable of accommodating every projection and sound system in use or being planned for the next 25 years.

The screen, sound system, projection room, acoustics and seating arrangement were custom-designed to make it the finest movie theater in the world.

Members, news media and sometimes the public visit the theater for screenings of current and past films.

Because of its size and technical facilities, the theater also is used for a variety of other purposes — lectures, demonstrations, testing new equipment etc.

In addition, there is an 80-seat theater used for committee work and other purposes.

Among the least known, but most vital activities of the Academy are its publishing services — The Players Directory and Screen Achievement
Continued on Page 516

The elegant new headquarters of the Academy of Motion Picture Arts and Sciences is this ultra-modern seven-story structure in Beverly Hills, California. It houses the Academy's offices, the Margaret Herrick Library, an 80-seat preview theatre and the 1,100-seat Samuel Goldwyn Theater, the world's most advanced facility for presenting motion pictures.

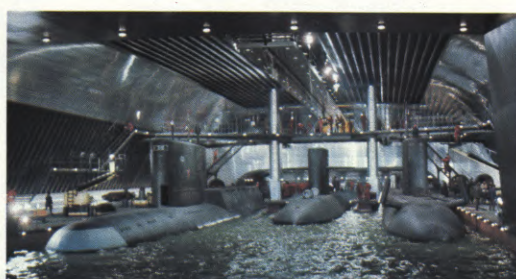




(ABOVE) The largest interior set ever built for a motion picture is this huge construction designed by Ken Adam for the latest James Bond thriller, "THE SPY WHO LOVED ME", currently in post-production in London. The set represents the innards of a massive supertanker which "kidnaps" nuclear submarines, as represented by the three shown here — one British, one American and one Russian. (LEFT) Built especially to house the supertanker was this giant permanent structure located on the backlot of Pinewood Studios in Buckinghamshire. It is the largest motion picture sound stage in the world and, hopefully, will be used in filming other pictures produced on an epic scale.



Key technicians on "THE SPY WHO LOVED ME" include: (LEFT) Production Designer Ken Adam who first set the style for the James Bond series with "DR. NO" and followed through with "GOLDFINGER", "THUNDERBALL", "YOU ONLY LIVE TWICE" and "DIAMONDS ARE FOREVER". (CENTER) Director of Photography Claude Renoir, grandson of the great Impressionist painter, Auguste Renoir, and nephew of the illustrious director, Jean Renoir. (RIGHT) Director Lewis Gilbert also directed one of the most popular previous Bond films, "YOU ONLY LIVE TWICE". (BELOW) Other views of the supertanker set, which is even larger than the enormous volcano interior designed by Ken Adam for "YOU ONLY LIVE TWICE".



BEHIND THE SCENES OF "THE SPY WHO LOVED ME"

For the latest, splashiest and most expensive James Bond adventure thriller to date, Ian Fleming's colorful super-spy, the unsinkable "007", hunts kidnapped submarines in the world's largest sound stage

The enormously successful James Bond films, based on the 007 character created by the late Ian Fleming, are not only great fun to watch, but, from the standpoint of sheer filmmaking, are always technically challenging and innovative.

The latest, and tenth, in the series, Albert R. Broccoli's production of "THE SPY WHO LOVED ME", is the biggest and most expensive James Bond film to date. Bearing out that fact was the construction of the world's largest sound stage at Pinewood Studios, especially for filming the interiors of a supertanker that "kidnaps" three nuclear submarines.

The principal locations for "THE SPY WHO LOVED ME" were Egypt and Sardinia, where major first-unit shooting took place over a five-week period.

The studio and set-construction was once again done at Pinewood Studios in the Buckinghamshire countryside outside of London. Pinewood has been an essential ingredient in the James Bond chemistry from the very beginning of the film series, as it was here that the fantastic sets and brilliant special effects were created for the previous successes.

Other locations for the film included Faslane Submarine Base on the Clyde River on the southwest coast of Scotland in the vicinity of Glasgow, where the Royal Navy super-secret base for Polaris nuclear submarines is located. It is a small miracle that permission was granted for shooting certain scenes which would have cost millions of dollars to reproduce elsewhere.

Exteriors of a 600,000 ton supertanker were shot at sea in the Bay of Biscay off the coast of France, Spain and Portugal.

One of the most unusual locations was twenty miles north of the Arctic Circle — Baffin Island, a sparsely populated province of Canada. Here, in a national reserve of extraordinary mountain peaks, a film unit was based in the town of Pangnirtung, with the services of two helicopters and ski-jump expert, Rick Sylvester, at its disposal for the shooting of an opening sequence for the film.

The Egyptian locations included the streets of Cairo, the Great Pyramids of Giza, the temple of Ramses II in Luxor

Continued on Page 550



Leading actress Barbara Bach, Producer Albert "Cubby" Broccoli and "007" (Roger Moore), shown in the giant set representing the inside of a 600,000-ton oil tanker, built for filming of the latest James Bond film adventure, "THE SPY WHO LOVED ME". The American Miss Bach plays the largest role in any of the Bond films, that of a Russian spy. This latest is Broccoli's first Bond production without his original partner, Harry Saltzman. "SPY" marks Moore's third appearance in the role of James Bond, created on the screen by Sean Connery.

James Bond has grappled with some bizarre baddies during his previous ten cinema capers, but in "THE SPY WHO LOVED ME" Roger Moore (no pygmy himself) is dwarfed by a character called "Jaws", played by Richard Kiel, who is 7 feet, 2 inches tall, weighs 315, wears size 16 shoes and eats five meals a day. He's what's known as a real "heavy". Nearly one billion admissions have been registered for the Bond films since cameras turned on "DR. NO" on Jan. 5, 1962.



ABOUT PINEWOOD STUDIOS' NEW

007 STAGE

Search for an enclosure spacious enough to contain the latest shenanigans of James Bond scored zero — so the world's largest sound stage was built

Like a submarine breaking surface alongside a lot of other big ships, the silver-sided 007 Stage heaved into sight on the Pinewood Studio lot in Buckinghamshire, England. It's the world's biggest film stage, built to house the expansive thinking of producer Albert R. Broccoli, his production designer, Ken Adam, and their gargantuan piece of design and engineering for *THE SPY WHO LOVED ME*. It's the first film stage to be built in

the western world for eight years. It had to be if Cubby Broccoli's ideas for his tenth and current Bond film were to become reality. There was no other film stage which could take in the set design, which includes 1,200,000 gallons of water, a massive area of a full-scale 600,000-ton oil tanker, one United States nuclear submarine, one British nuclear submarine and one Soviet nuclear submarine, and hundreds of people, ships' crews and

Production Design sketch rendering for the largest motion picture stage in the world, built on the backlot of Pinewood Studios in the Buckinghamshire countryside, 35 miles from London. For the latest James Bond thriller, "*THE SPY WHO LOVED ME*", it had to accommodate a massive set representing the hold of a supertanker large enough to "kidnap" and hide three full-sized nuclear submarines — a big order in any language. Requiring seven months to completion, the new structure cost \$1,650,000, including the supertanker hold, largest interior set ever built for a film.

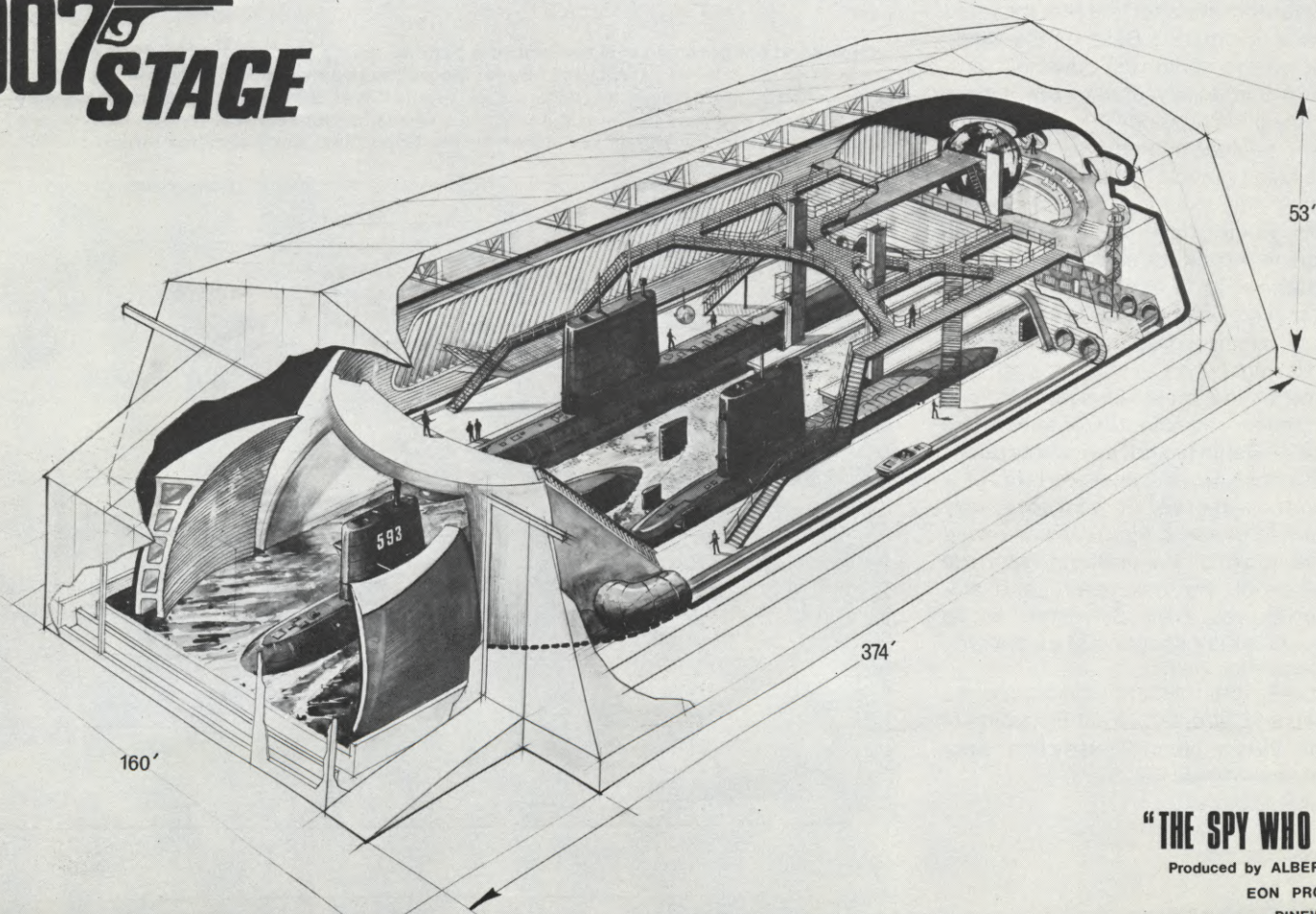
film crews.

Because there were no film stages big enough, Cubby and Ken Adam circumnavigated whole areas of Britain and some continental countries for a structure to house their towering designs, but as Cubby Broccoli says: "We saw a lot of people and places. They couldn't promise anything. We told them we had to dig a big tank to take in the water and we'd have to have a guaranteed period. It became absolute farce. So it appeared to me it was more sane, after talking to the United Artists people, to explore the possibility of putting up a new stage. At that time we were hoping that the Rank Organisation would come in with us. They decided we could build the stage on the studio lot and we would control it; we — Eon Productions and United Artists — would be able to rent it out, so we went for it."

A young architect, Michael Brown, who had designed some of the world's most sophisticated film and television stages, was called in to work with Ken Adam, whose studio art department was taking on the shape of a shipyard design centre.

Appropriately enough, the new stage was baptised Number 007. It is 336 ft.

007 STAGE



"THE SPY WHO LOVED ME"

Produced by ALBERT R. BROCCOLI

EON PRODUCTIONS LTD

PINEWOOD STUDIOS

long, plus an exterior tank of 38 ft., making an overall length of 374 ft., with a width of 160 ft. and a height of 53 ft.

As a basis of comparison, the largest stage hitherto in England is at Shepperton Studios (used for *SPACE ODYSSEY* and *OLIVER*) — the "H" stage, with dimensions of 250 ft. by 119 ft. by 45 ft. At Cinecitta in Rome (where *CLEOPATRA* and *BEN-HUR* were shot), the Number 5 stage is 261 ft. by 118 ft. by 45 ft. The largest in Hollywood is MGM Stage 15, which is 311 ft. by 136 ft. by 40 ft.

Before the construction decision was taken, various industrial sites were considered, including an old R.A.F. facility where World War II dirigibles are still being stored.

Government authorities had to scrutinize the stage plans before permission could be given for the go-ahead; this was given, and, to Cubby's knowledge, this means that United Artists, along with Cubby's Eon Productions, now own their only film production property — the 007 Stage.

Says Broccoli, "We didn't just go into it as a matter of investment; we did it because of the specific needs of this picture — and hopefully we will ultimately recoup what we have invested in it. We will keep the stage as long as possible over the years. United Artists and Eon will rent the 007 Stage through the guidance of Rank. The purpose is to keep it up and make a profit out of it, because I think a stage of this size is important in a studio that is alive like Pinewood."

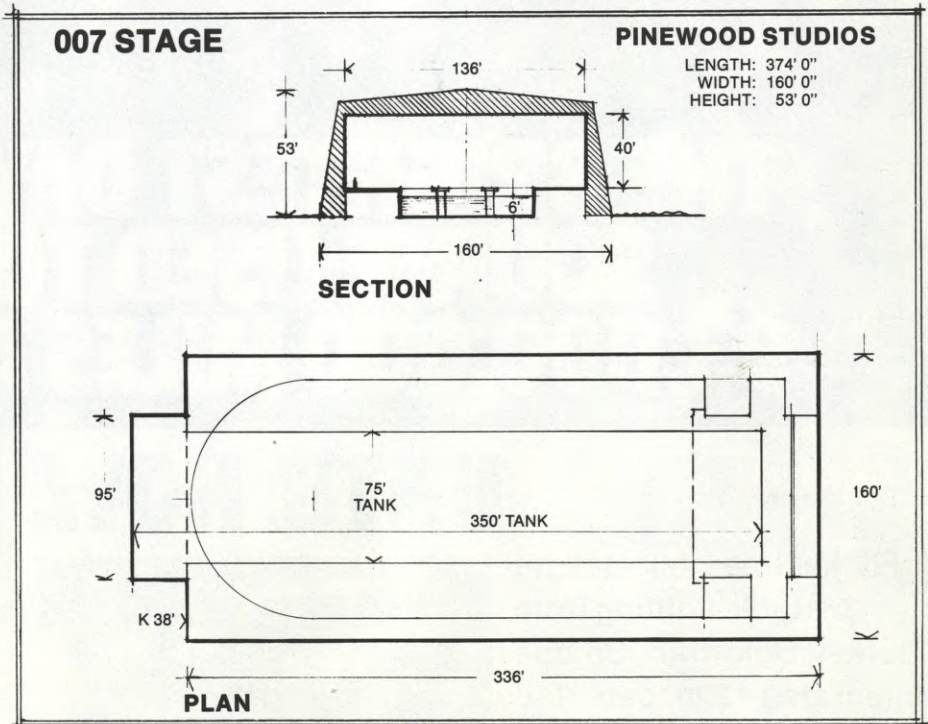
When the glistening steel work for the new stage was being bolted during the parched summer in Britain, and not a cloud was forecast for months, the Government decreed an emergency situation with the nation's taps and rationed the fast-disappearing water.

Meanwhile, the water tank under the 007 Stage was being bored out to take more than a million gallons of water — itself a reservoir many towns in Britain would have prayed for. Urgent question, as weather forecasters gloomily shook heads to hopeful enquirers for rain: "Where are the 1,200,000 gallons of water coming from for this oceanic Bond scene?" The answer, in two senses, was subterranean. Very few people knew that right underneath the stage there are millions of gallons of well water, and the studio has a license to draw it at the rate of 30,000,000 gallons a year for studio purposes, and when it has been drawn it is banked for repeated use.

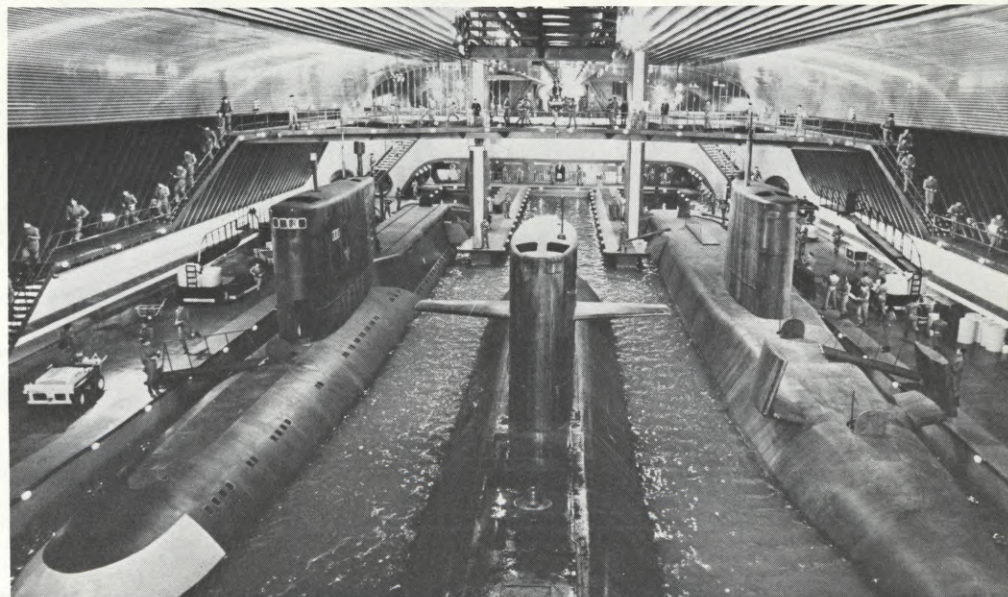
Constructed by Specialist Builders of Uxbridge, and requiring seven months to completion, the new structure cost



Producer of "THE SPY WHO LOVED ME", Albert R. ("Cubby") Broccoli (in background), and Production Designer Ken Adam (foreground) inspect the skeleton of the massive stage during its early phase of construction. One of the film industry's most imaginative designers, Adam has been responsible for most of the far-out sets featured in the Bond films.



(ABOVE) A schematic diagram of the stage showing the 75' x 350' tank. (BELOW) The completed stage with its wall-to-wall supertanker set and the three nuclear submarines — one British, one American and one Russian — required by the film's macabre script. It is hoped that the 007 Stage can be used for other epic-scale productions.





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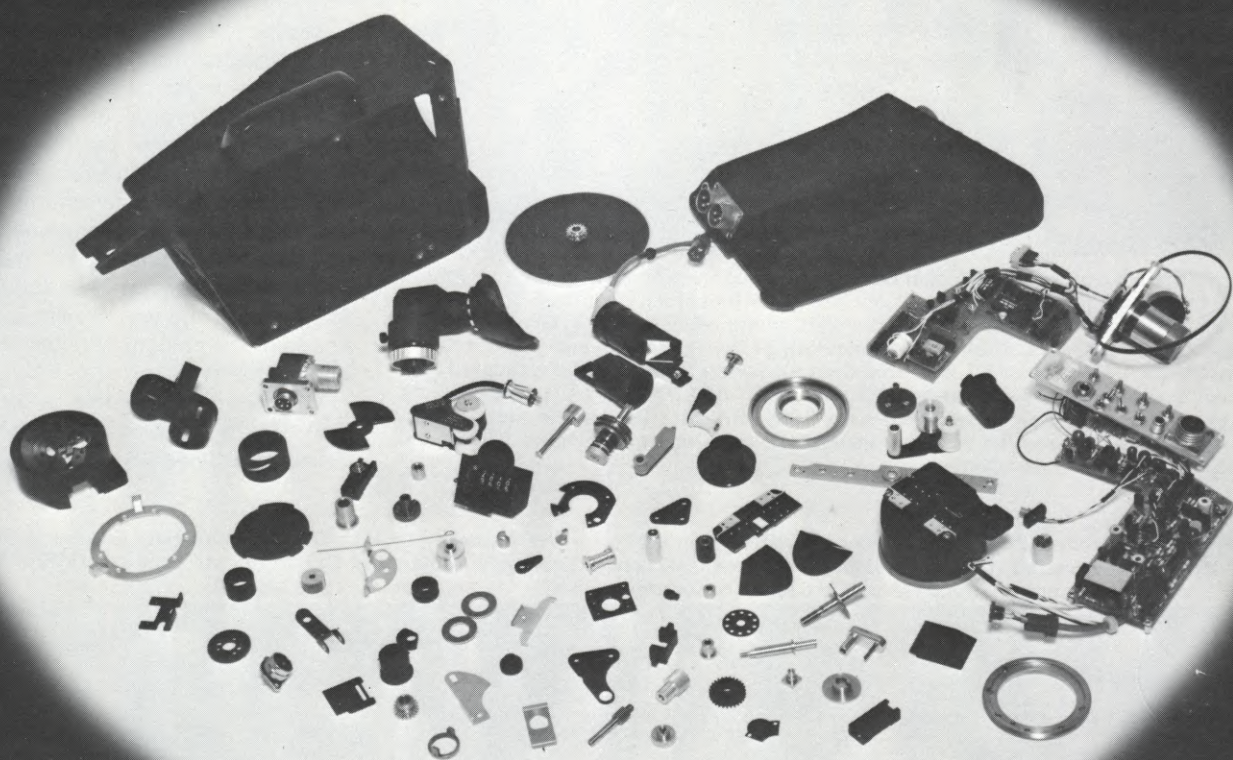
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ACADEMY SCIENTIFIC OR TECHNICAL AWARDS

A fitting tribute to those behind the scenes whose technical and scientific achievements make today's motion pictures possible

To the average filmgoer, the "magic of the movies" is personified by film stars and an occasional director loaded with charisma, such as Alfred Hitchcock. Audiences are not concerned about the mechanics involved in putting their favorites on the screen — and this is as it should be. But to those engaged in the actual making of film, those mechanics are of utmost importance, because without them, there would — quite literally — be no movie stars nor indeed, a film industry. The simple fact is that (including television) no other art form has been so completely dependent upon technical elements to express its artistry. That is why those engaged in this industry stand in special awe of the men behind the cameras — those engineers and technicians who invent and develop and improve the devices which make films and television possible. This, too, is the reason why the Academy of Motion Picture Arts and Sciences sees fit to honor these men in a specific way by granting awards for Scientific or Technical Achievement.

Realizing that such awards are of little interest to the general public, the Academy, quite wisely, no longer makes such awards on the televised annual Academy Awards Presentation, but honors the recipients at a special presentation ceremony.

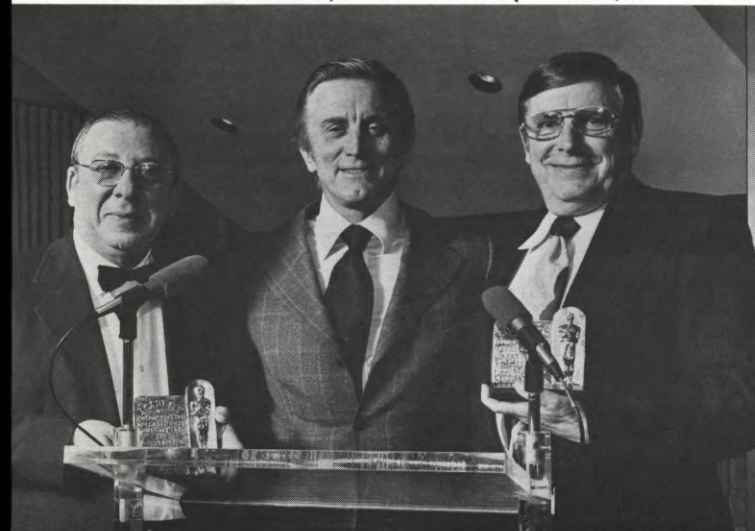
This year that ceremony was held on March 24 in the lobby of the Academy's magnificent new headquarters in Beverly Hills and was presided over by Academy President Walter Mirisch, with the participation of Kirk Douglas.

The awards were voted by the Academy Board of Governors from the
Continued on Page 554



Participants in the Academy Technical or Scientific Awards Ceremony. TOP ROW: Siegfried Seibert (Technicolor), Manfred G. Michelson (Technicolor), Geoffrey F. Norman (Technicolor), Harry Hirai (Canon) and M. Senoh (Canon); CENTER ROW: Glenn Berggren (Schneider Corp.), William L. Graham (Technicolor), Volker W. Bahnemann (Arriflex Co. of America), Wilton R. Holm (AMPTP Research Center), Robert M. Grubel (Consolidated Film Industries, acceptor for the Barnebey-Cheney Co.); BOTTOM: Dick Walker (Photo Research), James K. Branch (President, Photo Research), Kirk Douglas, Walter Mirisch, Edward H. Reichard (Consolidated Film Industries) and Donald C. Rogers (Chairman, Scientific or Technical Awards Committee)

(LEFT) Robert M. Grubel (Consolidated Film Industries), accepting for the Barnebey-Cheney Co.; Kirk Douglas; Edward H. Reichard (Consolidated Film Industries. (RIGHT) Geoffrey N. Norman, William L. Graham and Siegfried Seibert (all of Technicolor); Kirk Douglas; Manfred G. Michelson; James K. Branch (President, Photo Research).





(LEFT) Wilton R. Holm (AMTP Research Center); Academy President Walter Mirisch; Kirk Douglas. **(RIGHT)** Raymond Woolsey (Photo Research); Mrs. Raymond Woolsey; James K. Branch (Photo Research).



(LEFT) Volker W. Bahnemann (President, Arriflex Corp. of America); Walter Mirisch. **(CENTER)** Glenn Berggren (Schneider Corp.); H. Waegelein (Schneider Corp.). **(RIGHT)** Walter Mirisch; Robert E. Gottschalk (President, Panavision, Inc.); Kirk Douglas.

(LEFT) Donald C. Rogers (Chairman, Scientific or Technical Awards Committee); Walter Mirisch; Kirk Douglas. **(RIGHT)** Walter Mirisch; Kirk Douglas; M. Senoh (Canon Corp.).



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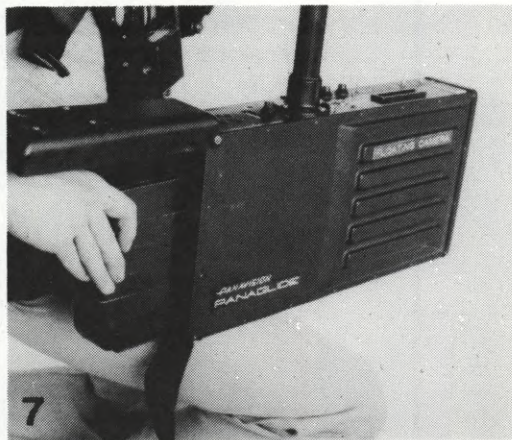
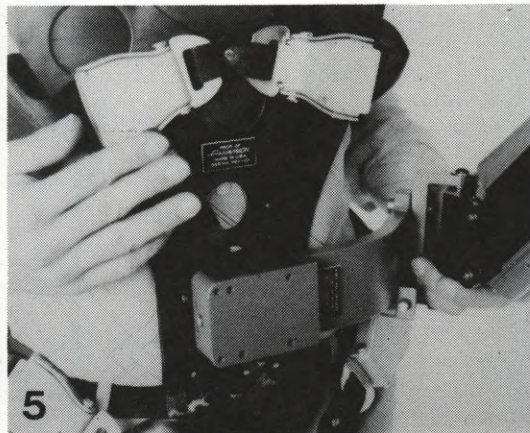
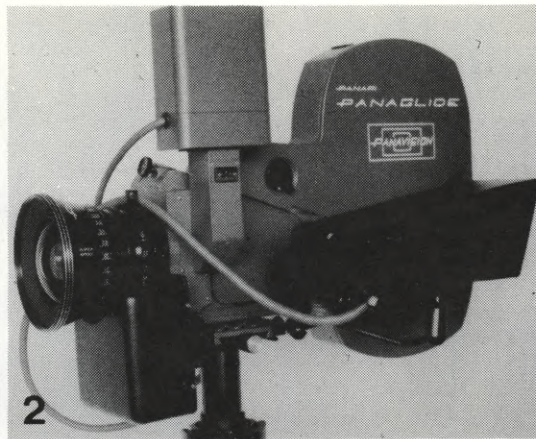
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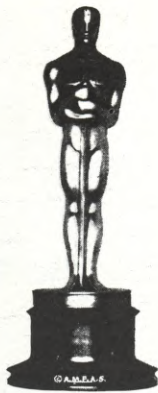
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THE FIVE BEST PHOTOGRAPHED MOTION PICTURES OF 1976

It is said that imitation is the sincerest form of flattery — and so, in these days when award ceremonies are being held for everything from nail-biting to dog-catching, it is wise to remember that, at least in the field of entertainment, the Annual Academy Awards Presentation is the original.

To the general public it has become a television spectacle exuding Hollywood glamour, and over the years it has not lost its allure. This year, the largest audience in the history of the event — an estimated 75,000,000 in the United States alone — watched Hollywood honor its own, with at least that many more viewing the program in foreign countries.

To these people, the movie stars who enliven the telecast are the focal point of interest, and understandably so — but to the people who work in the motion picture industry, worldwide, the event has a far greater significance. It is the night on which the artists and artisans of this great industry-art are honored by their peers, the people best qualified to judge excellence in this very special area.

As in all of the film crafts, candidates for the "Best Achievement in Cinematography" award are nominated by their fellow craftsmen — in this case the cinematographers, the men who know best what is or is not great photography.

Since the final five pictures nominated for cinematography vary so widely in style and content, it is virtually impossible to choose a single one and say: "This is *the* best," — although the Academy general membership must ultimately make such a choice.

But to the members of the American Society of Cinematographers, all five are "winners" in the most literal sense of the word. And so, it is with the deepest sense of pride that the ASC membership salutes and congratulates the following Directors of Photography who received nominations in the category of "Best Achievement in Cinematography" for the Academy's 49th Annual Awards Presentation:

RICHARD H. KLINE, ASC
"King Kong"

ERNEST LASZLO, ASC
"Logan's Run"

OWEN ROIZMAN, ASC
"Network"

ROBERT SURTEES, ASC
"A Star is Born"

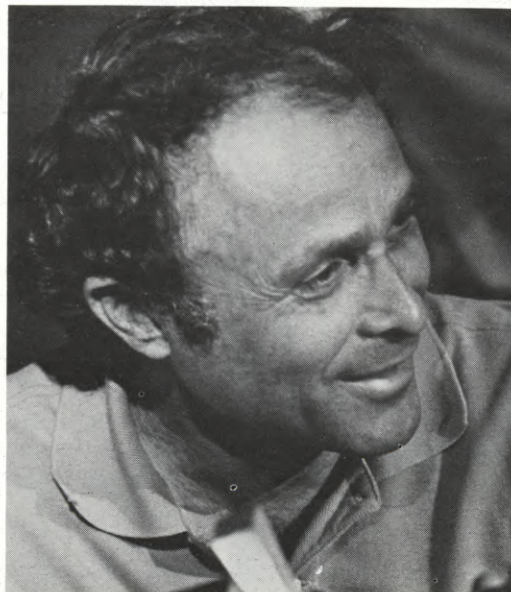
HASKELL WEXLER, ASC
"Bound for Glory"



"KING KONG"

"KING KONG" — photographed by Richard H. Kline, ASC, is Dino De Laurentiis' spectacular remake of the 1944 "beauty and the beast" classic about a 40-foot gorilla who falls in love with a mere slip of a girl. In photographing it, Kline overcomes technical problems of incredible complexity to make a far-out fantasy very believable. His camera artistry lends rich mood, suspense and even romance to what is, in its bare bones, an adventure film played on a huge canvas.

RICHARD H. KLINE, ASC





ERNEST LASZLO, ASC

"LOGAN'S RUN" — photographed by Ernest Laszlo, ASC, is a visually stunning cinematic excursion into the 23rd Century, when life (until the age of 30) is lived for pleasure alone in a domed, fully computerized city-state. With the sure skill and artistic taste of the veteran cinematographer, Laszlo flashes far forward in time and gives an elegant and consistent visual gloss not only to Dale Hennessy's striking studio sets, but to equally spectacular structures and areas filmed on location.

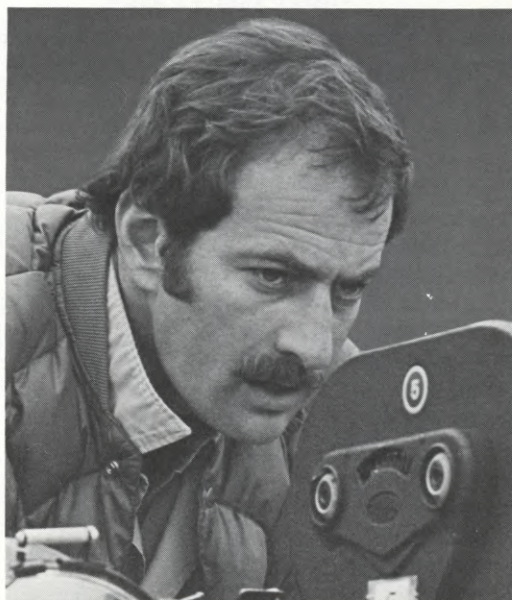
"LOGAN'S RUN"



"NETWORK"

"NETWORK" — photographed by Owen Roizman, ASC, is Paddy Chayefsky's brilliant dramatic satire on those who work behind the scenes of an enormous television complex. Filming almost entirely on location in actual interiors, Roizman exercises exquisite control of his lighting, creates a wide range of visual moods and manages to lend true artistry to sets and situations which, by their very mundane nature, did not present vast opportunity for creative cinematography.

OWEN ROIZMAN, ASC

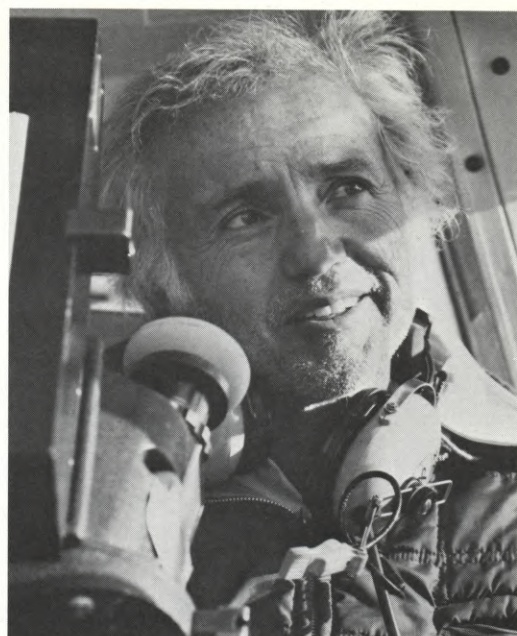




"A STAR IS BORN"

"A STAR IS BORN"—photographed by Robert Surtees, ASC, is the third remake of a twice-told film tale about an unknown girl who soars to stardom, while her big-star husband hits the skids made slick by alcohol. Three-time Academy Award-winning cinematographer Surtees faithfully captures the tinsel glamor and frenetic beat of the contemporary rock scene, while lending a visually romantic aura to what is essentially a tender love story that inexorably ends in tragedy.

ROBERT SURTEES, ASC



HASKELL WEXLER, ASC

"BOUND FOR GLORY"—photographed by Haskell Wexler, ASC, is a meticulously detailed filmic biography of the late folksinger-poet Woody Guthrie. Set in the Depression and Dustbowl era of the Thirties, the period is vividly re-created in a series of haunting images. Wexler uses precisely modelled soft light to lend an almost palpable texture to scenes of America's not-too-distant history when poverty and despair stalked the land and a kind of innocence still prevailed.

"BOUND FOR GLORY"



Peter Rosen just made an "impossible" shot.



Chem-Tone made that shot possible.

"Filming a TV special for the Children's Television Workshop (creators of Sesame Street and the Electric Company) in two Texas prisons created some unusual production problems.

"What is Sesame Street doing in prison? It seems that many children spend hours in prison visiting rooms. Bored and restless, they add to other visiting room problems.

"It was therefore decided to set up a program where Sesame Street could be viewed, and where trained inmates could tutor the kids in educational activities.

"C.T.W. asked us to make a film on this subject.

"Naturally, prison presented us with terrible lighting conditions. We had neither the time nor the permission to install additional lights, yet we had to shoot inmates' cells, mess halls, shops, recreation areas and down long bleak corridors lit only by a few fluorescents and tiny amounts of daylight

filtering through barred windows.

"Thanks to Chem-Tone we were able to handle the worst lighting conditions without excessive expense and set-up time.

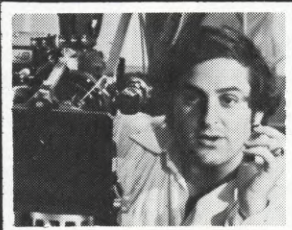
"Chem-Tone enabled us to push ECN 7247 one stop to ASA 250, and even two stops to ASA 500 without grain increase or loss of resolution.

"What's more, TVC's lab color corrections created a soft, natural look without the excessive contrast and brightness associated with 7247.

"And shooting thousands of miles from New York didn't make us a bit nervous. We knew that TVC's daily lab phone call would immediately pinpoint any exposure or color problems.

"The film will be aired in early '77. We think TVC should be as proud of it as we are."

Peter Rosen—Producer/Director/Cameraman
Peter Rosen Productions, Inc. New York City



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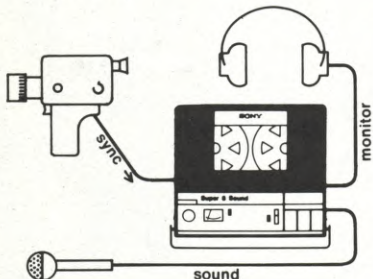
Re-Introducing the Super8 Sound Recorder

In 1973, just six months before Eastman Kodak introduced single-system sound to Super 8, a group of filmmakers, scientists, and engineers in Cambridge, Mass. formed Super8 Sound, Inc. and introduced the Super8 Sound Recorder, the first fullcoat magnetic film recorder for Super 8.

Today Super8 Sound, Inc. is pleased to offer two Super8 Sound Recorders.

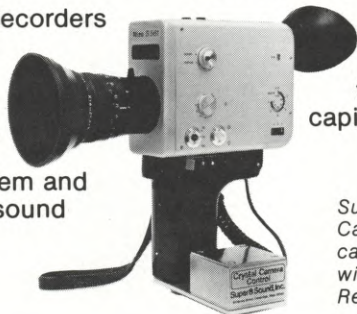
Super8 Sound Recorder I is an improved version of the world's most widely used Super 8 full-coat magnetic film recorder. It now includes a built-in sync meter and reel extenders are optionally available to provide one hour of running time.

Super8 Sound Recorder II is smaller and lighter than Super8 Sound Recorder I, yet with a metal case, instant start/stop/pause control, and higher fidelity: better signal/noise ratio and frequency response.

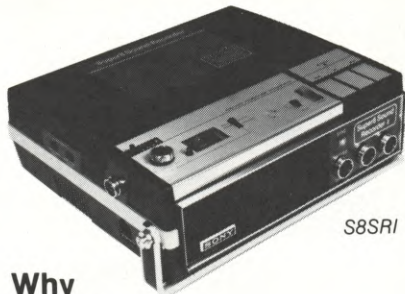


Both Super8 Sound Recorders combine all the functions of location recorder, laboratory resolver, sound studio dubber, and transfer recorder for stripe-to-fullcoat, fullcoat-to-stripe, and fullcoat-to-video sync transfers.

The Super8 Sound Recorders are compatible with all sync sound systems, including crystal and pilotone, and with nearly one hundred double-system and single-system sync sound Super 8 cameras.



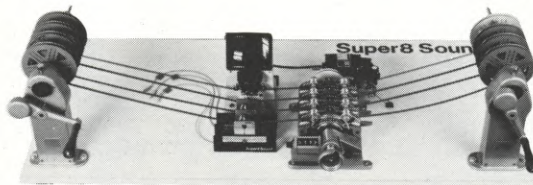
Super8 Sound Crystal Camera Controls provide cableless sync filming with both Super8 Sound Recorders.



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Why You Need a Super8 Sound Recorder

The Super8 Sound Recorder puts into your hands all the capabilities of a 16mm or 35mm film sound studio. You can transfer your own location sound to magnetic film, you can dub your own music and narration tracks, you can cut separate tracks and mix them without the high labor charges of the sound studio engineer, and because you do it yourself you keep direct creative control of your own sound track.



Super8 Sound multiple-gang motorized editing benches allow frame-for-frame editing of sound and picture.

Unlike 16mm where optical sound is normally prepared by a laboratory, with Super 8 you can then transfer your finished composite master sound track to the edge stripe of release prints, or to the sound channel of a video tape recorder.

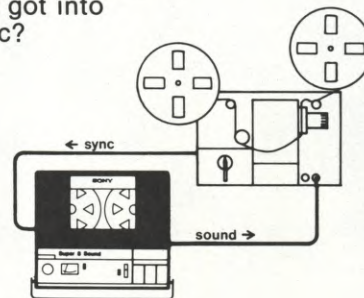
Now that Super 8 offers all the professional techniques of sync sound filmmaking at a capital cost one-fifth



Optional Reel Extenders increase the 19-minute running time of Super8 Sound Recorder I to one hour.

that of comparable 16mm equipment, isn't it time you got into Super 8?

Whether you're just entering filmmaking, or a veteran 16mm filmmaker trying to lower your film stock and equipment costs, you should be working in Super 8. And if you're already using Super 8 as a silent film — isn't it time you got into sync?



How to Get into Sync

1. Send us your name. We'll put you on our mailing list and send you technical brochures on our Super8 Sound Recorders and Editing Benches.
2. Send us \$3. We'll send you the User's Manuals for both Super8 Sound Recorders, and our 80-page comprehensive equipment Catalog.



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ALL ABOUT "OSCAR"

The youngest nominee for an acting Oscar was Jackie Cooper, nominated as best actor at the age of nine for his performance in "Skippy". Youngest player to receive an award was Shirley Temple, who was five years old when she was voted an Honorary Juvenile Award in 1934. Youngest ever to be voted an Oscar was Tatum O'Neal, who was 10 when she won for her supporting performance in "Paper Moon".

Forty-five different actors have been best actor winners. Only Fredric March, Spencer Tracy, Gary Cooper and Marlon Brando have won twice. There was one tie, in 1931/32 between March ("Dr. Jekyll and Mr. Hyde") and Wallace Beery ("The Champ"). Spencer Tracy leads all actors in nominations — nine.

Forty women have been voted best actress. Katharine Hepburn, whose eleven nominations lead all thespians in this field, is the only three-time winner in the best actress category. Two-time recipients are Ingrid Bergman, Bette Davis, Olivia de Havilland, Glenda Jackson, Vivien Leigh, Luise Rainer and Elizabeth Taylor. There has been one tie, in 1968 between Katharine Hepburn ("The Lion in Winter") and Barbra Streisand ("Funny Girl").

In the supporting actor field, only three have repeated: Walter Brennan, with three, and Anthony Quinn and Peter Ustinov, with two each.

Shelley Winters is the only actress to win two Oscars in the supporting category.

Helen Hayes, Ingrid Bergman and Jack Lemmon are the only performers in Academy history to win in both acting categories. Hayes won the best actress award in 1931/32 for "The Sin of Madelon Claudet", and the supporting actress award in 1970 for "Airport". Bergman won the best actress award for "Gaslight", 1944, and "Anastasia", 1956, and the supporting actress award for "Murder On the Orient Express", 1974. Lemmon won the supporting actor award in 1955 for "Mister Roberts", and the best actor award in 1973 for "Save the Tiger".

There have been ten posthumous awards, but only one for acting — that awarded to Peter Finch this year for his performance in "Network".

Only sister act among the Oscar winners: Joan Fontaine, who won the best actress award in 1941 for "Suspicion"; and Olivia de Havilland, who won two awards in the same category, 1946 for "To Each His Own" and 1949

for "The Heiress".

One brother-sister achievement: Lionel Barrymore, best actor for "A Free Soul" in 1931, and Ethel Barrymore, best supporting actress for "None But the Lonely Heart" in 1944. Brother John never won an Oscar.

On two occasions father and son walked off with Oscars. Walter Huston was the best supporting actor of 1948 for "Treasure of Sierra Madre". For directing and scripting the same movie, son John Huston won two Oscars. Similarly, in 1974, Francis Ford Coppola won Oscars for writing and directing "The Godfather Part II" while his father, Carmine Coppola, won an award for his original dramatic score for the same film.

There have been 45 different masters of ceremonies, with Bob Hope holding the record for the most appearances, 15.

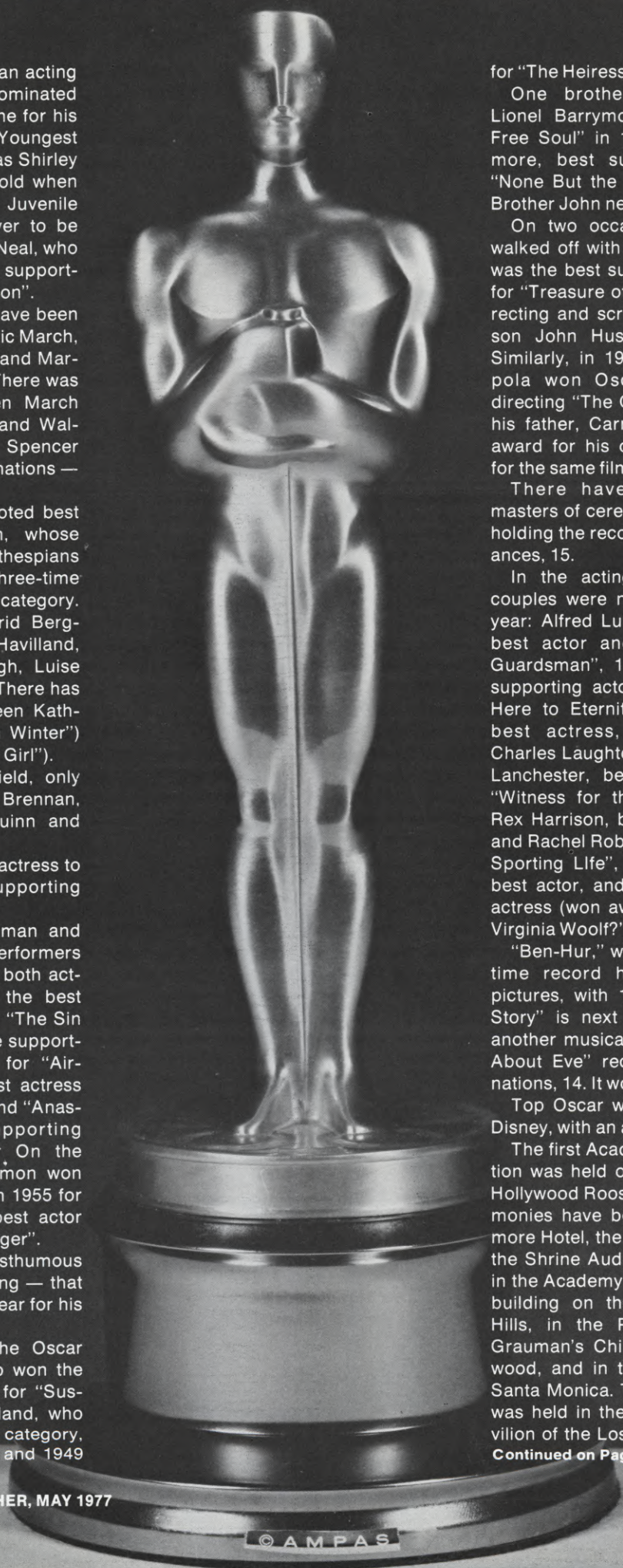
In the acting ranks, five married couples were nominated in the same year: Alfred Lunt and Lynn Fontanne, best actor and best actress, "The Guardsman", 1931/32; Frank Sinatra, supporting actor (won award), "From Here to Eternity", and Ava Gardner, best actress, "Mogambo", 1953; Charles Laughton, best actor, and Elsa Lanchester, best supporting actress, "Witness for the Prosecution", 1957; Rex Harrison, best actor, "Cleopatra", and Rachel Roberts, best actress, "This Sporting Life", 1963; Richard Burton, best actor, and Elizabeth Taylor, best actress (won award), "Who's Afraid of Virginia Woolf?", 1966.

"Ben-Hur," winner in 1959, is the all-time record holder among motion pictures, with 11 awards. "West Side Story" is next with ten, followed by another musical, "Gigi", with nine. "All About Eve" received the most nominations, 14. It won six awards.

Top Oscar winner of all time? Walt Disney, with an astonishing total of 31.

The first Academy Awards Presentation was held on May 16, 1929, at the Hollywood Roosevelt Hotel. Other ceremonies have been staged at the Biltmore Hotel, the Ambassador Hotel and the Shrine Auditorium in Los Angeles, in the Academy's own theater in its first building on the outskirts of Beverly Hills, in the Pantages Theater and Grauman's Chinese Theater in Hollywood, and in the Civic Auditorium in Santa Monica. This year's Oscar Show was held in the Dorothy Chandler Pavilion of the Los Angeles Music Center

Continued on Page 547



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THE PHOTOGRAPHY OF AIRPORT '77

Versatile cinematographer discusses the problems and challenges of photographing the crash of a custom-built 747 into 50 feet of water — with most of it being filmed on a studio sound stage

After "THE POSEIDON ADVENTURE", "EARTHQUAKE", "AIRPORT", "THE TOWERING INFERNO", "AIRPORT '75" and "THE HINDENBURG", it might seem that the "disaster" cycle of super-spectacles would have just about run its course. But not quite. There is another one currently in release, and, like its predecessors, it reaffirms the incredible talent and expertise of Hollywood technicians when it comes to putting horrendous happenings onto the screen on an epic scale.

Take a lavishly accoutred, privately owned 747 jumbo jet. Load the plush airship with a cargo of priceless art treasures, people it with a gathering of glamorous jet-setters, and set it flying over the hazardous Bermuda Triangle. Add a few desperate hijackers for good measure, and you've got one of the most harrowing adventure stories ever put on film, "AIRPORT '77", a Jennings Lang Production for Universal.

Produced by William Frye and directed by Jerry Jameson from an original screenplay by Michael Scheff and David Spector, "AIRPORT '77" boasts a dazzling all-star cast, including Jack Lemmon, Lee Grant, Brenda Vaccaro, Olivia de Havilland, Joseph Cotten, Darren McGavin, Christopher Lee,

Shown under construction at Universal City Studios is one of the major sets for "AIRPORT '77", a section of a custom-built 747. The set was constructed on gimbals so that the entire lounge section could be moved up, down, forward or backwards, and tilted to either side. Above the set were three huge containers, each holding 2,000 gallons of water which cascaded through the set during the climactic sequence. Chute from these dump tanks can be seen at left.

George Kennedy, and James Stewart as a wealthy art patron, owner of the doomed 747.

Popular demand following the overwhelming success of "AIRPORT" and "AIRPORT '75" — two of the highest grossing films in Universal's history — led to the development of "AIRPORT '77". Derived (like the two previous films) from Arthur Hailey's best-selling novel, *Airport*, the new tale of airborne adventure is not a sequel; rather, it offers a totally original cast of characters facing new peril aboard a private 747 jumbo jet.

Principal photography on what was to be one of the most elaborate aviation films in movie history began on Monday, August 9, 1976 on Universal Studios' Stage 27. There, the main lounge of a 747 was re-created exactly to scale, and decorated with the extreme luxury appropriate to a private jet.

Constructed on gimbals, the entire lounge set could be moved up, down, forwards or backwards, and tilted to either side. Suspended just above the lounge were three huge containers, each holding 2,000 gallons of water which ultimately cascaded through the set during the filming of "AIRPORT '77" 's climactic sequence.

Exterior portions of the jet liner, plus

cargo areas, a private bedroom and the control room were constructed, also to scale, on nearby Stage 28.

During pre-production consultation with Boeing Aircraft, "AIRPORT '77" 's producer, William Frye, learned that an actual jet built to the specifications of the film's jet would cost in the neighborhood of 45 million dollars, 30 million for the basic craft, with an additional 15 million for private detailing.

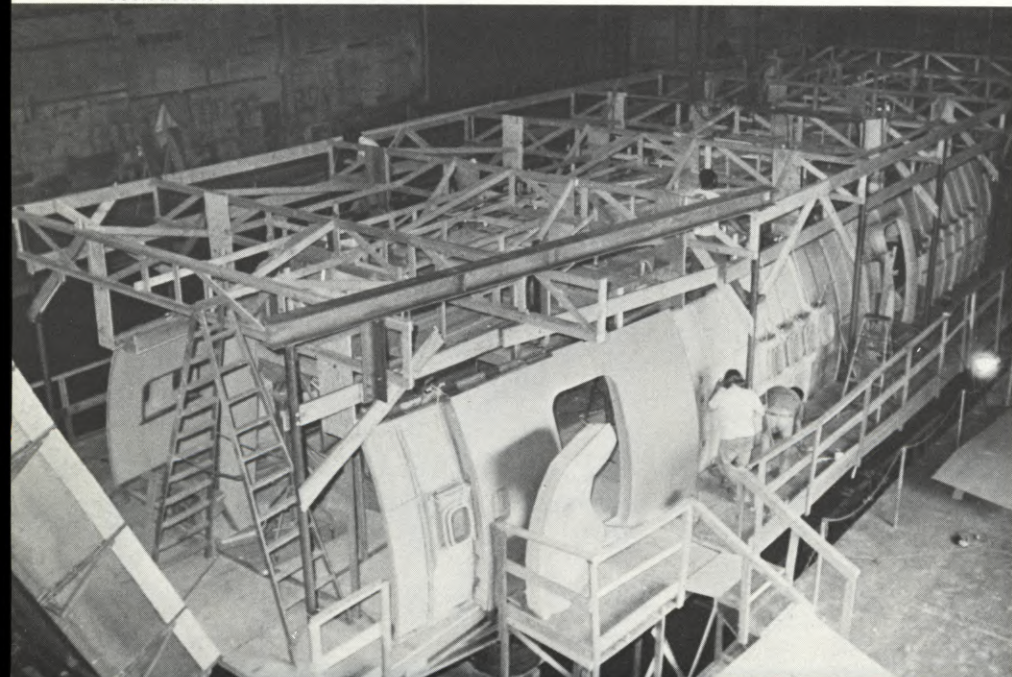
On September 11, the "AIRPORT '77" company moved to San Diego for approximately two weeks of filming. These sequences were shot with the cooperation and assistance of the United States Navy, and featured the use of the U.S.S. Cayuga, the Navy Coordination Center, Naval helicopters and frogmen, a Navy landing field and S-3 aircraft, the Coast Guard Admiral's office, a Coast Guard cutter and a U.S. Coast Guard station.

Additional sequences were filmed at the Burbank Airport, Los Angeles International Airport and Dulles Airport in Washington, D.C. The company also filmed for several days in Miami, Florida, at Vizcaya, the 100-million-dollar former John Deering estate, now a museum. Underwater sequences were filmed on Universal's back lot and at the largest fresh water springs in the world, Wakula Springs, near Tallahassee, Florida. Principal photography was completed in Miami on November 4, 1976.

The Director of Photography on "AIRPORT '77" was versatile veteran cinematographer Philip Lathrop, ASC, who had previously done double "disaster duty" at Universal in shooting "EARTHQUAKE" and "AIRPORT '75". In the following interview for *American Cinematographer* he discusses the unique problems, techniques and challenges involved in his photography of "AIRPORT '77":

QUESTION: Can you tell me about some of the special problems you encountered in photographing "AIRPORT '77"?

LATHROP: As you know, most of the action takes place aboard a 747 which has been remodeled as a plush private plane. It crashes and sinks under 50



feet of water. It was very difficult to shoot because of the shortage of water tanks in Hollywood today. They haven't shot any underwater pictures that make use of tanks for so long that there just isn't anyplace to shoot them anymore. What we had to do was build the segment of the 747 and then switch them around — shoot one, then take it out of the tank and put another one in. This made it very difficult for the director because he had to keep shooting out of continuity on a picture that should have been shot in continuity.

QUESTION: Doesn't most of the action of the picture take place in the main lounge of that 747?

LATHROP: Yes. The main lounge of the plane was about 80 feet long and 20 feet wide and was built to the exact dimensions of a real 747, except that it didn't have the usual rows of passenger seats in it. It was a luxurious lounge with plush seats and couches, a bar and a big TV screen on which we actually ran Discovision programs. The Discovision setup we used belonged to Lew Wasserman, head of MCA/Universal, and was the only one in existence at the time, so we had to take it out of his office to use on the set. The main lounge was placed in our largest tank on a gimbal and was set in about ten feet of water. The gimbal moved from side to side and end to end, and the set could be submerged about 50% under the water by tipping it down and over on its side. There were three enormous dump tanks that poured tons of water through that set for about 25 seconds at one point of the story when the plane was being lifted out of the water. They lift it at the wrong angle and something breaks loose, which sends the water pouring through there. Also, by lowering the plane into the tank and shaking it, we were able to get the effect of it hitting the water before it actually settles.

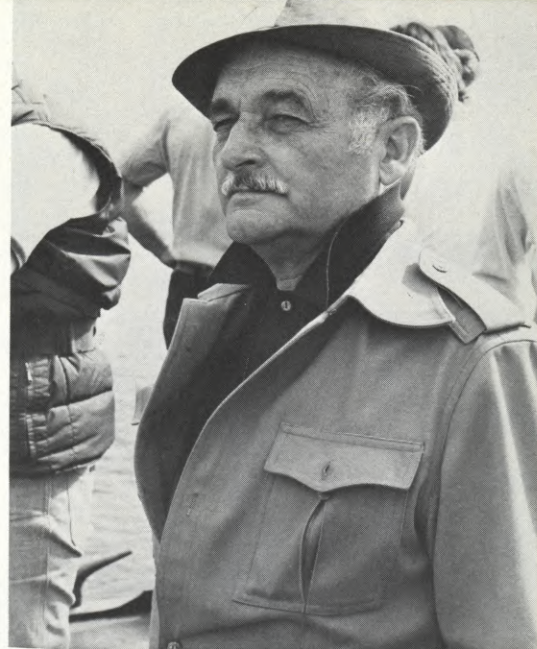
QUESTION: How many sets representing the interior of the plane were used?

Various aspects of the main lounge of the 747 designed by George Webb and constructed exactly to full-size scale, with all of the luxury appointments appropriate to a private jet belonging to an immensely wealthy man. Built on three levels, the plane included (besides the main lounge) such settings as fore and aft cargo areas, a galley, bedrooms and a complete flight deck. Not only did the sets have to look aesthetically correct, but they had to "work" in terms of the intricate special effects involved, including inundation by thousands of gallons of water.

LATHROP: In addition to the main lounge, there were the cargo holds, a library, bedrooms, a galley area and a complete flight deck — all built to exact full scale. The sets were constructed on three levels, the lounge being on the main level, with the flight deck above and the cargo holds below, just as on a real 747. They even went so far as to install a complete ceiling of the exact type used on the actual plane. This made it very difficult to light. Here you had an 80-foot set with 35 people in it and the ceiling showing most of the time. Since there was no place to put conventional lighting units, the illumination of that set took a lot of careful pre-planning. Fortunately, I was given sufficient preparation time, but mostly, at least for the longer shots, I was actually lighting with the practical light units that existed in the set. The ceiling was solid, but it had little four-foot sections covered with translucent material (opal glass) all throughout the interior. These gave the effect of fluorescent lighting, but we didn't use fluorescents. The light came from hidden bulbs bounced off a white ceiling to provide indirect illumination, and that was all I used to light the entire set for the long shots. Consequently, I had to work at a key of very few footcandles. A terrific spread of light was required in those long shots, but fortunately I was shooting with the newest 5247 color negative. I don't think I could have done it so successfully with any other emulsion.

QUESTION: That kind of soft overall lighting is fine for long shots, but what about the closer shots; were you able to model the light for those?

LATHROP: Yes. When we came in for a close shot I was able to clean it up by using keys and that sort of thing. But what made the lighting really difficult was the fact that the story called for six different light changes. We started out at night with normal lighting. Then, when the plane hits, the lights go out. Then there is absolute darkness until the emergency generator starts up.



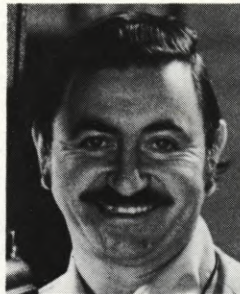
"AIRPORT '77" Director of Photography Philip Lathrop, ASC, has proved his versatility on a wide range of feature subjects, varying in photographic style from "MAME" to "EARTHQUAKE".

Emergency lights come on, providing perhaps 25% of the normal amount of light. A major portion of the action takes place in that kind of lighting. Then, when the plane sinks beneath the water, it goes into another different type of lighting. When it becomes daylight, with the plane 50 feet under the water, yet another different kind of lighting is called for. Finally, when the plane is raised and reaches the top of the water, there is another change of lighting. Fortunately, I had the time to pre-rig these various lighting schemes and we spent four weeks on just the pre-lighting. There was a tremendous amount of wiring required and a lot of work, but the end result was that we had each separate light change on its own master switch. All we had to do was hit a switch and I was 95% lit for whatever effect was required. That was really the only way you could do it efficiently; otherwise, it would have taken forever. An extra bonus of this method was that it enabled me to show the producer and director in advance

Continued on Page 508







Sol Negrin, A.S.C.

Beautiful Brooklyn, Bright and Blue...

"It's always a balancing act when you shoot the outside from the inside," says Sol Negrin, A.S.C. "On this scene from 'Kojak's Days,' I had a 2 to 2½ stop difference between the exterior and the interior, and a wide expanse of glass as a backdrop. I used neutral density RoscoSun N6 on the window to bring the level down. With the 58" width of the RoscoSun I had no problems with seams and it was clear enough to shoot the city in the background right through the gel. I then balanced out the daylight with the new HMI's which I bounced off foamcore for a soft natural look."

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*Interior scene from "Kojak's Days" shot with HMI bounce light and through RoscoSun N6 on the windows.
Director of Photography: Sol Negrin, A.S.C.*

PHOTOGRAPHING "AIRPORT '77"
Continued from Page 505

exactly how the set was going to look under the different conditions called for in the script. It worked out great in that respect.

QUESTION: Did you have the convenience of wild walls in those plane interiors?

LATHROP: Some of the walls were removable in the larger sections, but we actually didn't remove any of them during the shooting. The reasoning was that by not removing the walls you are forced to do more natural lighting. If you remove the walls, the first thing you know you've got light coming in from the sides and other directions that are just not authentic to the natural sources. So we worked with all the walls in. We never took any walls out anywhere — except once to do a crane shot. Maybe this is doing it the hard way, but I've found that you tend to get lazy when you have wild walls. There's the temptation to pull out a wall and throw in a 10K where it never should be, in terms of the authentic source. Working inside an airplane, as we were, you really have no appreciable light coming in through the windows, because they're too small. Your only authentic source is the light that comes from above. Consequently, the whole set had to be lit from the top. To model the light for the closer shots I bought 100 midget lights. They were a little bit larger than the Mini-Mole (which is like

The main lounge of the plane, lighted for night interior effect, one of six different lighting moods required by the story. Several weeks prior to the start of production were spent in pre-wiring and rigging for these various lighting schemes, so that when a change was called for, it was only necessary to throw a switch. Modelled light for closer shots could be achieved by placing small lamps in ports above. Note foreground port with covering removed to permit this.



For director Jerry Jameson (checked shirt), who was directing his first feature, "AIRPORT '77" represented a formidable challenge, mainly because of the shortage of tank space. Because of the need to constantly juggle sets in and out of the tank, he was forced to shoot out of continuity on a picture that almost required shooting in continuity. His extensive experience as a film editor helped in this respect.

the old "inky-dink") and during the pre-lighting period we strategically hid them around the set — and it was something to hide them.

QUESTION: Where did you hide them?

LATHROP: Well, fortunately, when I first saw the set the ceiling hadn't been installed yet, and I said to the Production Designer, George C. Webb, "We'd better do something to figure out how to light this." In a commercial 747

there are a lot of structures in the ceiling that would permit you to hide lights, but in our set all of that had been taken out and there was only smooth ceiling. I said, "We want this to look like the interior of a 747 that has been revamped, so there's no reason why we can't put a light in here and there that isn't in a regular 747 — because this isn't a regular 747." Webb was very cooperative and he agreed to build half-way down the lounge a little grillwork jutting out in which I could hide one of the tiny lights beamed toward the back of the set. Those little midget lights are fantastic. The basic unit is a Mole-Richardson light that is used instead of the inky-dinks, because the inkies have a very tiny fresnel lens. This unit has a three-inch fresnel with a 250-watt bulb behind it and it's terrific. The relatively large fresnel gives you a nice spread of light. Unlike the inky-dink, which, because of its small lens, holds back much of the light, this unit, using the same size bulb, lets all of the light come through. The luminaire is about half again as large as that of the inky-dink, but it gives you twice as much light. On occasion we did use some inky-dinks, however, because we could get them into places that were even too small for the midget lights. For shots where the ceiling didn't show and we had a crowd of people scattered around in different places, I was able to take out the indirect lighting units I mentioned — they slipped out easily — and use Baby Juniors up there mounted on rails. The rails worked fine, because we didn't have to nail a thing up there to hold the



lights, and if a light wasn't hitting in quite the right place, all we had to do was slide it along the rail. It was so much faster that way. Actually we didn't use the Baby Juniors very much, though; practically everything was lit with the midgets.

QUESTION: What about lighting the other areas on board the plane?

LATHROP: The bedroom, which was very small, and the cargo holds were lit with practicals, the actual lights installed in the ceiling. They were 300-watt underwater lights (because we used the same lights when we put the set underwater). I put opal glass under them and it spread the light beautifully. They gave me plenty of light and it looked real and natural when anyone walked under them. All I did was set a little single Broad just to provide a bit of

soft front light. I didn't actually have to do that, but I did it just to pick it up a bit. In any event, I was ready to go no matter what they wanted to shoot.

QUESTION: Did that apply also to your moving camera shots?

LATHROP: No, I'm speaking of the longer shots where the camera was more or less static. We had dolly shots all up and down the sets and, in such cases, we had to go into a little different kind of lighting. We had to set spots and keys and it took a bit of time to do that. I had to set keys to make people look good; otherwise, all the light would have been on top of their heads. But even so, having the removable compartments in the ceiling with rails already installed meant that those keys could be set very fast. Everything was up there already. I never had to use

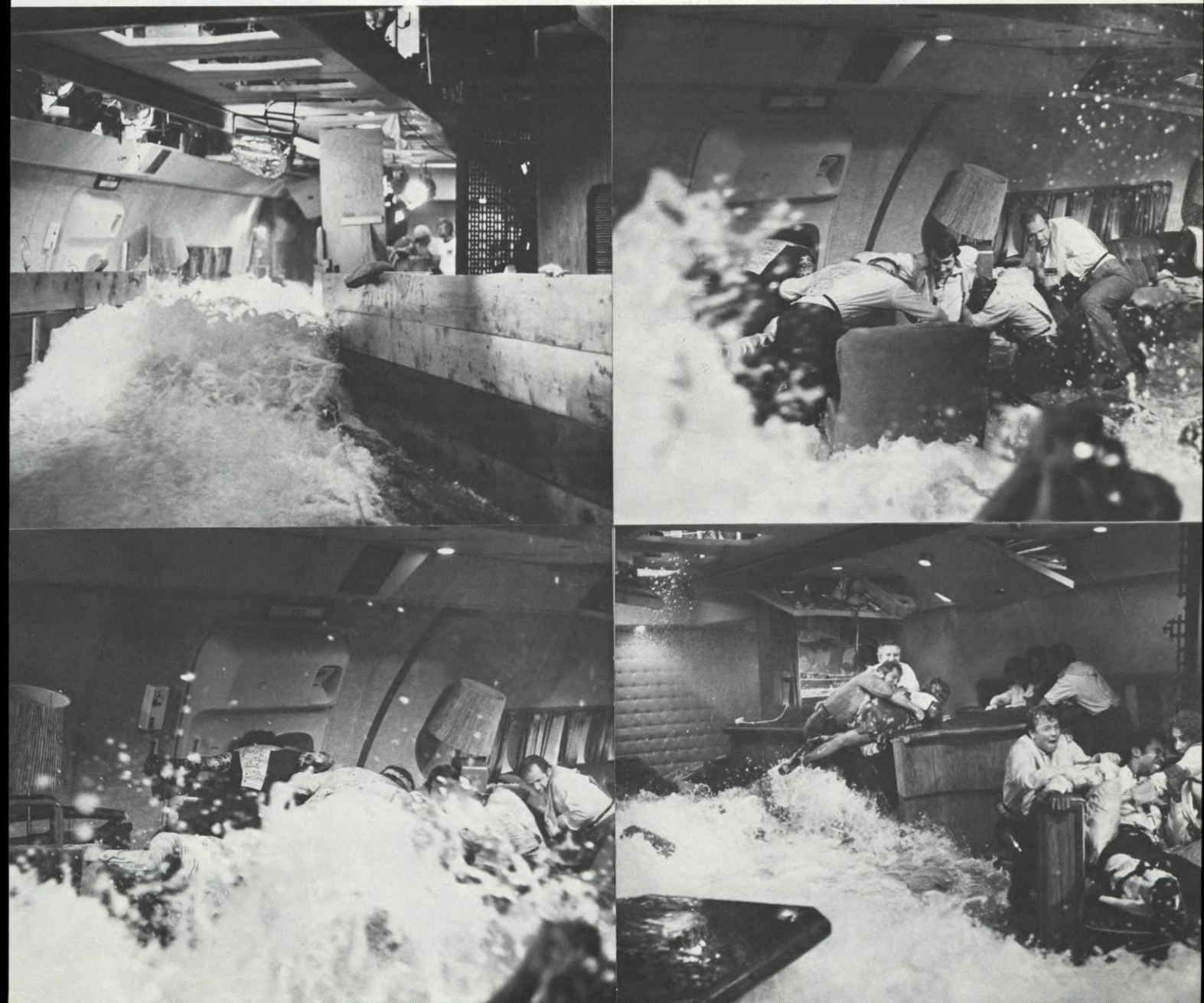
a light on the floor and never used anything larger than a Baby Junior. Most of our lights were the midgets I mentioned. The midgets have a slightly different color quality. They're a little more yellow, because the Kelvin rating isn't quite so high, but as long as you use them consistently and don't get any blue into the scene, you can get anything you want in the printing.


QUESTION: You spoke earlier of having to use a low footcandle level for lighting the plane interiors. Can you tell me approximately what the range was?

LATHROP: The highest level I ever used was 50 footcandles and the lowest was around 25, and I was able to work comfortably in that range. This new 5247 film has such great latitude that I

Continued on Page 512

In the climactic sequence near the end of the picture the plane, which has crashed into 50 feet of water and remained more or less watertight due to pressurization, is being lifted out of the water by means of Navy balloons. The operation is attempted at too rapid a speed and tons of water come crashing into the plane, deluging the passengers. The water, channeled through a chute (UPPER LEFT), was released from three overhead dump tanks, each holding 2,000 gallons.



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PHOTOGRAPHING "AIRPORT '77"
Continued from Page 509

was able to do something I'd never done before — namely, I was able to use the same stop with 25 footcandles as I would normally use with 75 footcandles. I couldn't believe it. The results were fantastic and the blacks were still there. Let's take, for example, the shot in which the lights flicker and dim down because the generator is going out. I lit the shot at 25 footcandles as my "normal" exposure (which actually put me about a stop-and-a-half underexposed); then all we did was bring the lights down on a dimmer. Of course, the light went warm, due to the loss of Kelvin, but that was alright, because that's exactly what would happen if lights dimmed down in such a situation. What was amazing was that, even though we must have gone down to 5 footcandles, there was still full density on the faces. You just can't underexpose that film. Using film of that ASA rating, I would normally use 150 footcandles to shoot at T/4 with normal development — or 75 footcandles, forcing one stop — but all our night stuff was shot with 50 footcandles at T/4 (forcing one stop), which made it half-a-stop under normal. It's my general practice to always knock off 50 footcandles for night shooting, because I figure that if you are one stop underexposed, you are in no trouble at all. Consequently, half-a-stop of underexposure is even less of a problem. Of course, every cameraman approaches night shooting differently.

QUESTION: How does your method work in terms of dailies?

LATHROP: Well, of course, with one-light dailies you're really shooting for the lab, instead of shooting for yourself

After a month of shooting in the studio, the company moved to San Diego for approximately two weeks of filming. These sequences were shot with the cooperation and assistance of the United States Navy, and featured the use of the U.S.S. Cayuga (shown here), the Navy Coordination Center, Naval helicopters and frogmen, a Navy landing field and S-3 aircraft, the Coast Guard Admiral's office, a Coast Guard cutter and a U.S. Coast Guard station.



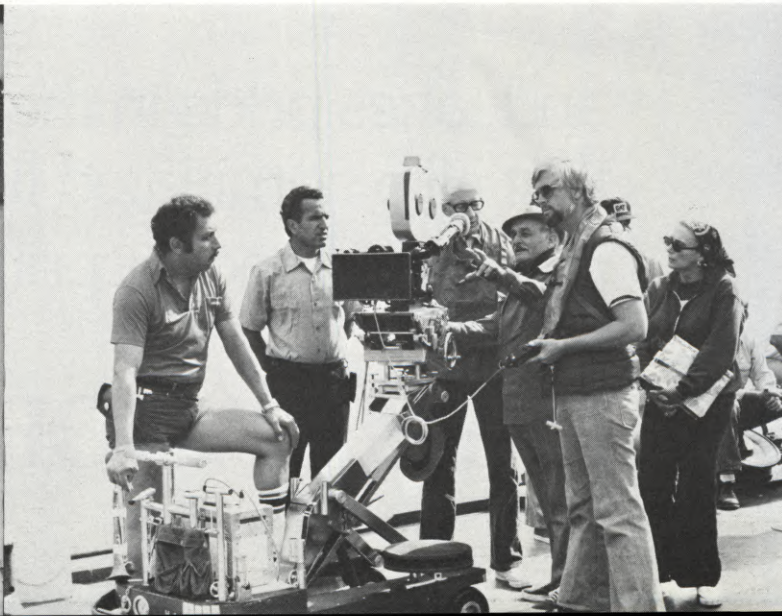
Philip Lathrop gives instructions for the placing of the Panaflex camera, of which he says: "I had made a big pitch for that camera, because I could foresee certain difficulties that would arise in relation to space . . . The compactness of the Panaflex made it possible to get around easily inside those cramped sets, whereas a bigger camera would have made it necessary to take walls out."

and letting the lab fix it. But that's fine, because then you know what you've really got. That's the reason I've arrived at set exposures for standard types of lighting. I know what the outside limits are on both ends. However, I always try to include in the scene, as a reference, something that has a bit of full exposure to it — whether it's a little spot on the wall or just a rim-light highlight. If you don't have this, all you've got is a flat nothing and there's nothing for the lab to print to.

QUESTION: You spoke of forcing the development one stop. How consistently did you do that?

LATHROP: I forced everything one stop and the reason was that it gave me the advantage of that extra stop without a bit of change in the quality. I couldn't tell the difference between scenes that had been forced and those that had not. There was absolutely no change in terms of grain. Of course, we were using Panavision anamorphic, but even in 1.85 you don't notice a difference. I believe they've rated the film too slow. They could rate it at ASA 250 — or ASA 200 at the very least. I'm speaking of the new, improved 5247.

QUESTION: Did you notice any build-up in contrast with one-stop forcing?



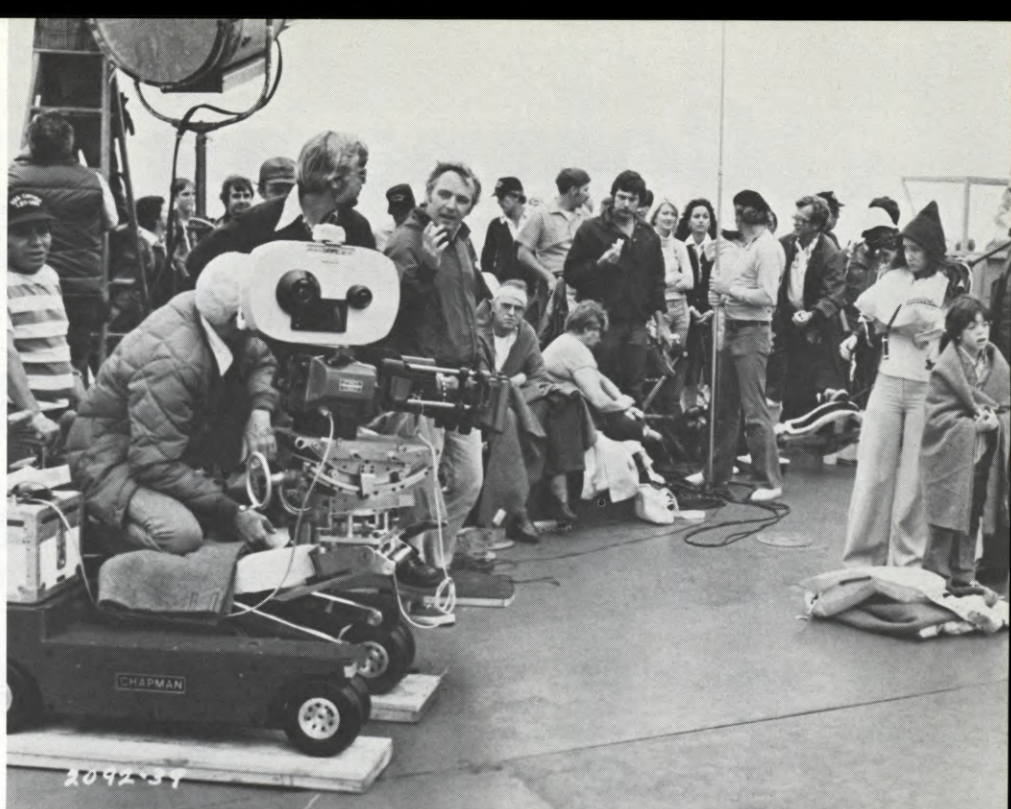
LATHROP: That was especially impressive. There's no added contrast, such as you used to get with the "old" 5247. They've taken all of it out. This new film eats into the shadows unbelievably. Actually, when we started the picture, the new film stock wasn't yet available in quantity. Universal had a small allotment of it (100,000 feet) and they were going to use it for shooting TV films. But I went to Bill Edwards, Head of the Camera Department, and said: "Look, you've got a 12-million-dollar production here. Why not put the film stock on this picture instead of on a TV show? At least give me enough film to shoot the interiors on that 80-foot set, because I have nowhere to set lights in the back and in the corners." I'd made some tests — shooting the same scene with the old 5247, the new 5247 and the 5254 negative. The new 5247 was so far superior in quality to the other two that you wouldn't believe the difference. I showed this test to Bill and, being a cooperative guy, he said: "I'll give you enough film to at least shoot the interiors on the big set." He did, and it was a big, big help to me. As it turned out, more of the new film started to come through and I was able to shoot the whole picture with it. I was tickled to death that it came out just when I needed it.

QUESTION: How did you get across, in visual terms, the idea that the plane was underwater in those sequences just after it supposedly crashed into the ocean and sank?

LATHROP: That was one of our main problems. Our main source of light was inside the plane, but when the lounge was underwater we had to create the suggestion of water outside the windows (which were about the size of portholes). What we did, in order to get the effect of water out there, was to put one-foot-deep tanks in back of the windows and then, in back of those, about eight feet away, a green backing for the night effect. We put a very faint flicker of light on the backing and some little bubbles coming up through the water in the window tanks, and it looked exactly as if you were underwater. It was really an amazing effect.

QUESTION: Were there individual little tanks on each window?

LATHROP: No, each tank covered about three windows, and we never shot through more than that at any one time. When it was supposed to be daylight I went to a daylight blue backing outside, very faintly lit, and got the same effect of shooting through water.



Filming proceeds on the deck of the U.S.S. Cayuga, with James Stewart (far right) in front of the camera. Like the other two similar films which preceded it ("AIRPORT" and "AIRPORT '75"), "AIRPORT '77" features a "star-studded" cast, but the real star of the show is the doomed 747 itself, which was put through some incredible paces, most of them on the sound stages in Universal City.

At first they thought of doing the night underwater scenes by simply shooting out into black, but once they saw the tests with the green background they decided that looked more realistic. In some scenes we were shooting right over people's shoulders toward the windows, so you had to have something out there that looked real.

QUESTION: From the photographic standpoint, how did you handle the sequence in which the water comes gushing into the plane?

LATHROP: A tremendous amount of water poured through the plane, knocking people down. Certain sections of the structure were completely engulfed by water, like the forward hold and baggage compartments. In those sections I had three cameras enclosed in watertight boxes and mounted onto the set so that they became part of it. When the set sank, the cameras sank with it.

QUESTION: I gather that up until the moment of this deluge, the cabin of the plane is supposed to be watertight. Isn't that so?

LATHROP: Well, it's pressurized, of course, and supposedly it could remain watertight up to a certain point, but there was always the threat of danger and the question as to whether it would hold or not. Theoretically, it would lose

its pressurization little by little over a period of time, but we had the tension building up of leaks starting here and leaks starting there. The water seeping through is part of the suspense that builds up until the rescue workers get there. They attach a big balloon to the plane — the same kind they use to raise submarines — and up it comes.

QUESTION: Where did you shoot the exteriors for the rescue sequence?

LATHROP: Near San Diego — actually about three miles out to sea where you couldn't see any land. The shooting was done with wonderful cooperation from the U.S. Navy Rescue Unit. They furnished us with all the boats, including an LST. You could run a full-sized tank up the back of it. Originally we were going to use their regular rescue ship, the one that actually does this kind of work, but it is loaded with all kinds of rescue and experimental equipment and there wouldn't have been any way we could shoot from the deck.

QUESTION: Were you able to tie the plane directly in with the rescue ship?

LATHROP: Not in the same shot, unfortunately. We had, of course, our exterior mock-up of the plane, which included the flight deck, the front section and about half of the fuselage. How-

Continued on Page 522

Comments on KEM by people in various kinds of film production:

The consensus: practical post-production tools for TV commercials, documentaries, industrials and feature films.

Hy Goldman:

Mr. Goldman is President of Forum III Films in New York. They've owned three KEM Universals for seven years-on which they've edited nearly 2,000 TV commercials.

Committee

"I'm usually editing by committee," says Mr. Goldman. "Very often, I'll have the agency copywriter, the producer, the art director and the account man in the room. With the KEM, they can all see the screens, *sitting down.*"

3 A.M.

"Sitting down suits *me*, too - especially at, say, 3 A.M. after working around the clock. I can scan 1,000 feet in less than a minute. And I can keep the interlock material in front of me and put up the out takes for comparison - all without standing up."

35mm and 16mm

"My KEMS have proved themselves over and over," says Mr. Goldman. "Recently, a client came in with 35mm original, 16mm stock footage, 16mm mag voice and 35mm music tracks. We cut it all on *one* KEM."



Compact, interchangeable, 6 plate RS Super

Frank Minerva:

Mr. Minerva is Vice-President of Editors' Hideaway in New York. They edit commercials and documentaries; and they own four RS Super six-plates.

Scratch Mixes

"The sound quality is superb on the RS," says Mr. Minerva. "We've made 1/4 inch to 16 and 35 mag transfers on our KEMS; and we make scratch mixes all the time."

"About half our business is 35mm, half 16mm. The KEMs let us change from one to the other fast. What else? The RS is compact... and the backup service is excellent."



Modular, interchangeable, 8 plate Universal

James Smyth:

Mr. Smyth is President of Optimus, Inc. in Chicago. They own five KEM Universals, all eight-plate. Their business: 90% TV commercials in 35mm, 10% documentaries, usually 16mm.

Better Take?

"You have 3,000 feet of sync, and the client asks: 'Isn't there a better take of Scene Six?'" On the upright, you know it'll take an hour..."

Dailies 100%

"But with the KEM," says Mr. Smyth, "You don't hesitate to go back and look. That's important creatively: You get 100% out of your dailies."

Maintenance 0.3%

"Last year, our accountant called to ask whether we'd made an error in our tax return. We'd claimed maintenance costs of 0.3% of gross sales."

Donn Cambern:

Mr. Cambern edited *Blume In Love*, *Cinderella Liberty*, *Hindenburg* and *Alex & The Gypsies*, on KEMs, in Hollywood.

First Cut

"Nowadays, the cast and crew tend to disperse as soon as shooting stops," says Mr. Cambern. "So the studio wants a first cut in two or three weeks, in case pickup shots are needed."

One Roll

"For this the KEM is *vital*, because I can explore the footage fast. With four or five takes on *one* 1,000 foot roll, I can compare them immediately. The high-speed forward/reverse gets me where I want to be in seconds."

"The image is big, the sound good and the machine quiet - so it's easy to imagine how the scene will work in the theater, and to pace my cuts accordingly. I can sit back eight feet from the KEM and watch a sequence play. Directors like that, too."

Smooth

"With the old upright," says Mr. Cambern, "I worked with the machine. With the KEM, I'm working with the *material* - the film."

Edna Paul:

Ms. Paul is President of Edna & Friends, Inc. in New York. They work on features, industrials, documentaries and TV specials.

Investment

"We used to rent uprights," says Ms. Paul, "But after trying the KEM, we bought one. It's an investment. The first time I used a KEM, I said: *Where has this been all my life?*"

Verna Fields:

Ms. Fields is a Vice-President of Universal Studios. A member of the editors' union since its founding in 1942, she won the Best Editing Academy Award for *Jaws*.

Black Uprights

"I grew up with the uprights - the *black* ones!" says Ms. Fields, "And I still use an upright as well as the KEM. But when something new comes along that offers a definite advantage... I wouldn't think of *not* using the KEM."

Why Resist?

"I recommend the KEM to everyone. To skeptical old-school editors, I say: 'Did you resist the butt-splicer when *that* was new?'"

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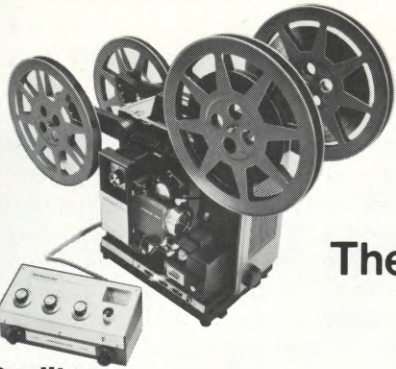
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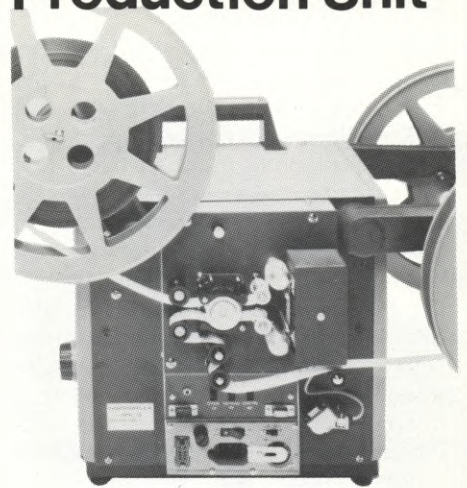
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**THE ACADEMY CELEBRATES
ITS 50th ANNIVERSARY**
Continued from Page 485

Record Bulletin — used primarily by people within, or connected with the movie and television industries.

The Players Directory is published every four months in two volumes plus reference supplements as a cooperative service to performing talent and production companies.

Containing more than 8,500 listings, the Players Directory features photographs of actors and actresses along with the names, addresses and telephone numbers of their agents. It is internationally recognized as "the casting director's Bible" for movie, television, radio, theater and advertising people.

The Screen Achievement Records Bulletin is published three times a year, including a cumulative annual volume. It forms a current guide to individuals, organizations and films in which they've participated.

In addition, the Academy participated with the Writers Guild of America in the publication of "Who Wrote The Movie . . .?" This lists some 3,500 writers and screenwriters and about 13,000 feature films on which they worked from 1936 through 1969. Included is information on non-film work produced by writers.

The Academy — and its affiliated Academy Foundation — also sponsors or is involved with a number of educational and cultural activities, including a scholarship program and the annual Student Film Awards — aimed at stimulating student interest in film-making and recognizing student achievement in the cinematic arts.

In cooperation with other organizations, the Academy funds an internship program, bringing students and professionals together in a working

relationship. A companion program, Visiting Artists, places film professionals on campuses from coast to coast.

Two other Academy projects are the National Film Information Service and the annual Marvin Borowsky Memorial Lectureship on screenwriting.

The NFIS is a mail service for colleges, universities, film students and others, helping them to obtain research data and locate hard-to-find motion picture and still prints.

The Borowsky Lectureship brings together screenwriters and those interested in screenwriting for an evening's discussion of screenwriting.

Through its many activities, the Academy has become a major force in the film industry, which, in turn, has had a great impact — culturally as well as economically — on Southern California. ■

**REMARKS BY WALTER MIRISCH
TOWN HALL OF CALIFORNIA
FEB. 8, 1977**

The story of the development of the motion picture industry and the history of the Motion Picture Academy are closely intertwined. In order to explain the latter, we must at least sketch in the broad outlines of the former. And so, as we look back over the last three-quarters of a century, we see that motion pictures have progressed from flickering images in storefront theaters in New York's immigrant section to an industry of international scope. In 1906, several thousands of people saw those moving images, usually projected on bedsheets. In 1976, nearly one billion admission tickets were sold by almost 16,000 theaters in the United States alone. The number throughout the world is inestimable.

Encompassed within that 70-year

period are stories of the rise and fall of multi-million dollar companies, the odysseys of John Does and Mary Roes into internationally renowned stardom, and scientific and technical achievements almost beyond belief.

Throughout that history the motion picture has been loved and feared, idolized and despised. Since their invention, motion pictures have provided entertainment and enjoyment beyond measure and have been a cause for admiration and concern, a target for control, and a devil to be dreaded.

In the early days of motion pictures churchmen inveighed against the license that motion pictures exercised. In 1915 the Supreme Court ruled that the free speech and free press guarantees of our Constitution did not apply to movies. As late as 1955, Sen. Kefauver's Juvenile Delinquency Subcommittee said that "The pre-dominance of brutality in both movies and television is making our nation's youth insensitive to human suffering," and called for self-censorship to avoid government intervention. But it has not been exclusively violence that has been controversial in film. The discussions — often quite heated — over some films' depictions of sex, racism, poverty, war and other controversial themes continues until today. It is no surprise when one contemplates the depth of emotion those moving images have elicited over such a long period of time.

The aim of my remarks today is to venture an explanation of the past 50 years of film-making in terms of its artistic, cultural and economic growth, and to examine picture-making's relationship to the Academy and to the rest of our community.

Hollywood, as someone once pointed out, is not a place, it is a state of mind. But the origins of that image of glitter and gold were quite humble — even mundane.

Film, we are told, was shot in Los Angeles before the turn of the century. The Los Angeles County Art Museum recently screened some footage shot on Spring St. in 1898. It showed a bustling thoroughfare with horse-drawn wagons whose passengers wore sporty outfits protected by sun parasols, and teeming with bicyclists and fearless jay-walkers.

Legend has it, however, that the first commercial films were shot in and around New York, New Jersey, and Chicago. There is some doubt as to whether the first professional picture-making in the Los Angeles area came about through a desire for a better

Most renowned of the Academy's many activities is the annual Academy Awards Presentation. Shown here are Oscar winners for "Best Picture" of 1976, "ROCKY". Left to right: Director John G. Avildsen, Co-producer Robert Chartoff, Presenter Jack Nicholson, star of the film and screenplay writer Sylvester Stallone and Co-producer Irwin Winkler. Though the Awards receive the most publicity, they constitute only one of the Academy's many functions.



year-'round climate, or because it was sufficiently removed from bothersome eastern process servers.

In either event, a Colonel William Selig is credited with producing the first commercial film in Los Angeles. Selig came to Los Angeles and purchased a site which had formerly housed a Chinese laundry. On it he erected a crude stage, and a sign which read "Selig's Polyscope West Coast Studio." The first production of "Selig's Studio" was "THE COUNT OF MONTE CRISTO", a 1000-foot-long film which was released in 1909.

The Blondeau Tavern at the corner of Sunset Boulevard and Gower Street was soon after bought and converted into a makeshift film studio by the Nestor Company in 1911.

From that point on — and for whatever the reasons — Los Angeles became the Mecca of the movies, and those who wanted to become filmmakers, actors, or almost anything else related to that most fascinating of industries, came to make their pilgrimages.

With thanks largely to movie-making, Hollywood grew from a population of about 500 people in 1900 to 50,000 just twenty years later. Real estate prices catapulted just about as quickly.

The Twenties — the era of the Jazz Babies, big money speculation, and Prohibition — provided an ideal atmosphere for the new form of entertainment and Hollywood became the spawning ground for the liveliest of the seven arts. It turned out films exhibiting artistry and hokum, cynicism and sentimentality, life as it was and life as it ought to be, to an insatiable audience.

The Mary Pickfords, Douglas Fairbanks, and Charlie Chaplins danced, swashbuckled, and cakewalked in front of the cameras while the Louis B. Mayers, Cecil B. De Mille, and Jesse Laskys worked behind the scenes to turn picture-making into a billion dollar industry.

It was in this environment, by now becoming increasingly clouded by calls for screen censorship and by labor-management troubles, that the Academy of Motion Picture Arts and Sciences was born.

It all started early in 1927, when 36 leaders of the industry decided there was a need for a motion picture academy. On May 4, 1927, a charter was granted for a non-profit corporation which united into one body most of the branches of motion picture production.

These men and women let all of Hollywood know their aims and hopes. The Academy of Motion Picture Arts



Academy of Motion Picture Arts and Sciences President Walter Mirisch — himself a multiple Oscar-winning producer — is typical of the dedicated top-echelon executives who make up the organization's roster of Officers and Board of Governors. These men and women, all extremely busy participants in the motion picture industry, give unstintingly and unselfishly of their time and effort to further the progress of the art form which they love.

and Sciences, they said, would be dedicated to "advancing the arts and sciences of motion pictures and fostering cooperation among the creative leadership of the film industry for cultural, educational and technological progress." It would also conduct cooperative technical research and stimulate the improvement of methods and equipment.

The organizers also believed that by recognizing outstanding achievements through conferring annual Awards of Merit, the Academy could serve as a "constant incentive within the industry and focus worldwide attention upon the best in motion pictures."

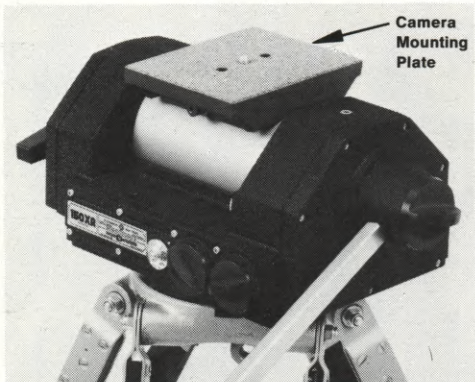
On May 11, barely a week after a charter was granted, an industry-wide banquet was held to organize the Academy. More than 300 people gathered at the Biltmore Hotel with Douglas Fairbanks presiding.

Tradition has it that it was Louis B. Mayer, one of the founders of Metro-Goldwyn-Mayer, who first suggested the awards. The screen was finding a voice, and Mayer predicted that sound would revolutionize the industry. "What we need to do is focus new attention on

movie achievement," he said. "Academies and Institutes reward excellence in other fields, why shouldn't we?"

It was decided that the award should be a symbol of continuing progress, something militant and dynamic. A well-known art director, Cedric Gibbons, began sketching a figure on a tablecloth as he listened to Mayer. It was a sturdy man standing on a reel of film, gripping a crusader's sword. Gibbons later put his idea on paper and a sculptor, George Stanley, molded the figure. Oscar has remained unchanged to this day . . . as you can see (*holds up Oscar*). The one I am holding was awarded to me by the Academy in 1968 for a film I produced called "IN THE HEAT OF THE NIGHT". It is my most prized professional honor and I believe that almost all the other recipients of Oscars would say the same thing.

The statuette got its name in 1931. The late Margaret Herrick was the Academy's first librarian and later its executive director. When she saw the statuette for the first time she is said to
Continued on Page 536



Camera Mounting Plate

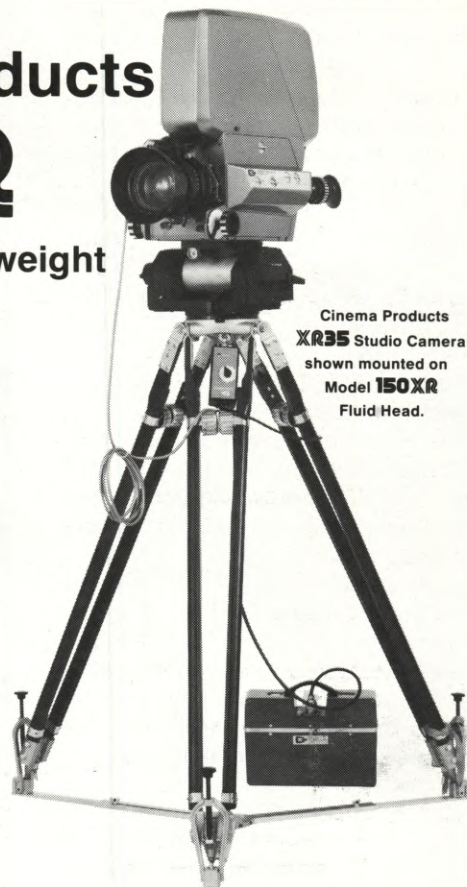
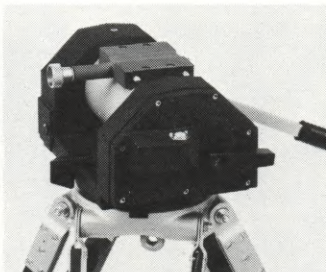
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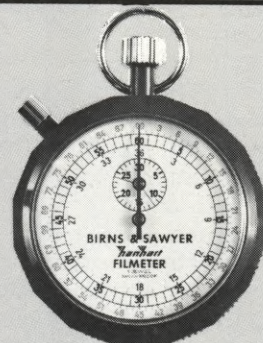
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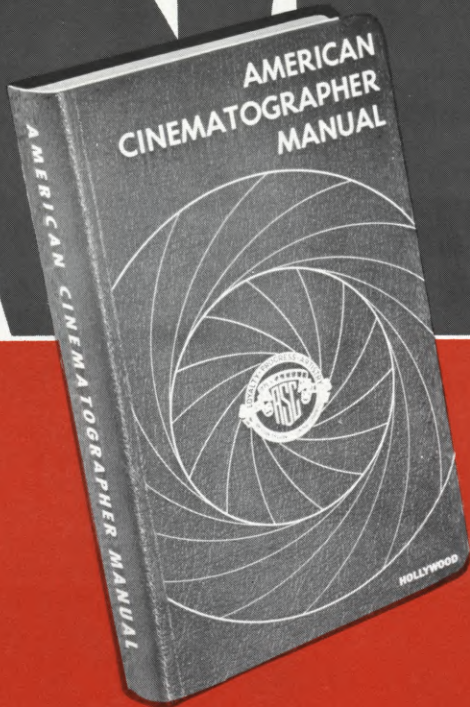


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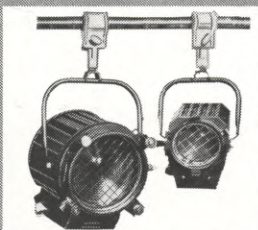
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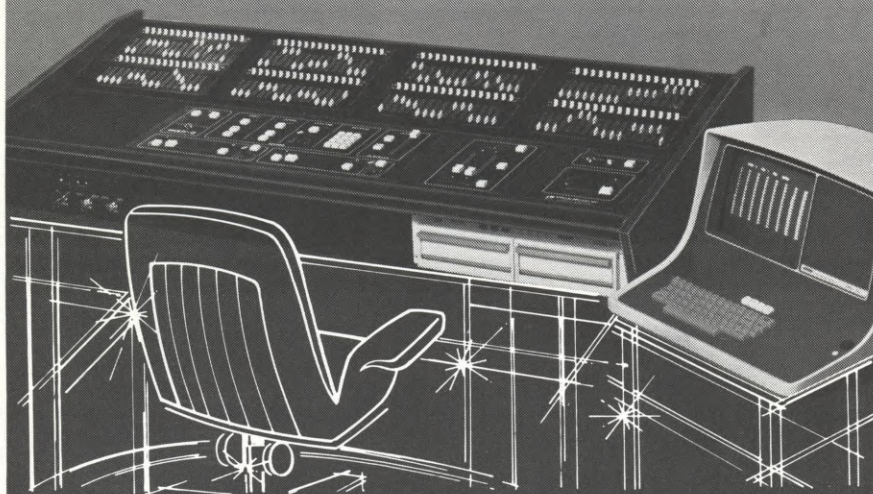
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THE FILMING OF "SPIRIT" Continued from Page 533

seen in a theatre. There is truth to the saying that a film is made or lost in the cutting room. With music transfer and dubbing capabilities, we are nearly totally self-contained.

THE LESSONS LEARNED

To shoot under adverse conditions, such as snow, wind, or rain, you must know several things; the most important is exposure. We use a spectra meter and take an incident reading from the sky. A lot of people have different ideas and opinions about this, but I have shot over 150,000 feet of film in the snow and I know that this method assures you that there will be no mistakes. Other problems involving cold will affect operation and batteries. It is important that equipment must be kept warm and batteries charged. In snow and cold you have to be careful of equipment and yourself. Even when it is warm out you must be careful. I have found myself sick from sunburn more than once.

Another important consideration when you have finished your film and are about to exhibit it is to be sure to have an attorney, and if you can afford it, a good attorney. I have had a print stolen in Canada and *shown* at the Jubilee Auditorium in Edmonton and there was little I could do to stop it. There really are pirates who want your work and will steal it from you. They don't care who you are. Be careful—.

"SPIRIT" CREDITS

Producer: Mike Marvin
Director: Mike Marvin and Roy Tremoureux
Editor: Mike Marvin

U.S.A.	Photography	EUROPE
Jeff Carr		Mike Marvin
Tom Ellis		Roy Tremoureux
Herb Lightman		Rich Wasden
Mike Marvin		Carolyn Wheeler
Roy Tremoureux		
Skip Wheeler		

Grips/Helpers

Jeff Cann
Lisa Little
Nancy Carr

Narration

Tony Bill

Music

Dan Hicks — John Stewart — The Kingston Trio

The Skiers

Troy Caldwell
Larry Lapkin
Jeff Cann
Rich Wasden

The Freestylers of P.F.A.
The Racers of World Pro Skiing

Jean-Pierre Hefti
Randy Hood
Garland Bradford
Keith Nelson

The Fire Jumpers

Troy Caldwell
Ralph Bertoli
Dave Burnham

Why

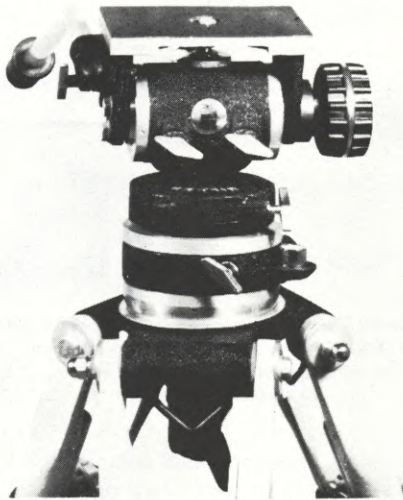
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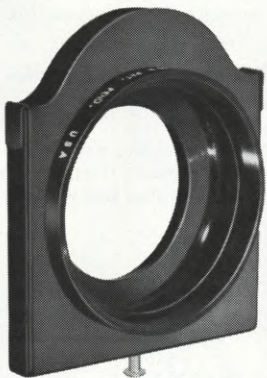
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After the plane has been lifted out of the water by means of huge balloons of the type used in submarine rescue work, the drenched passengers are helped to safety by highly trained U.S. Navy rescue personnel (playing themselves). An exterior mock-up of the fuselage was placed in a tank on the studio backlot (it being too fragile to risk in the open ocean) and Lathrop was forced to scrim the brilliant sunlight with hundreds of feet of silk and nylon in order to duplicate the at-sea footage shot in overcast.

THE PHOTOGRAPHY OF "AIRPORT '77"

Continued from Page 513

ever, we were afraid to put that into the open ocean for fear it would break up — unless it had been built enormously heavy, so we never were able to tie all the elements of the rescue together actually at sea. We shot part of the rescue there and then came back and put our plane mock-up into the tank on the Universal back lot.

QUESTION: And how did all that match up?

LATHROP: We had a few problems. First of all, the water in the ocean was 100 fathoms deep and looked very blue, whereas the water in the studio tank was only eight feet deep and looked more greenish. It was impos-

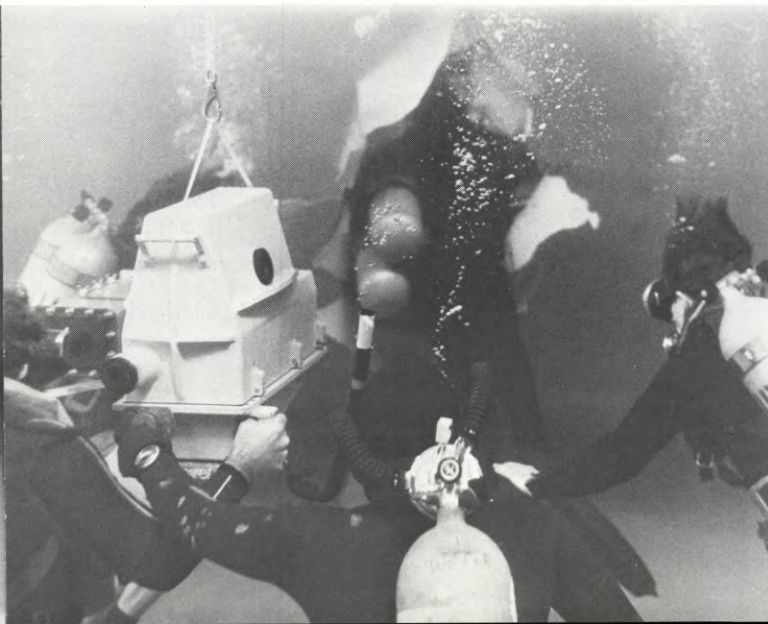
sible to get an exact color match for the water, but it didn't turn out too badly in the end. Matching the weather presented even more of a problem, though, because all the time we were shooting off San Diego it was overcast — which was fine, wonderful. However, when we got back to the studio to shoot scenes with the mock-up in the tank — scenes of the people coming out of the plane and getting into the boats — we had nothing but bright sunlight. Obviously, it would have been impossible to get a credible match between the overcast and the bright sunlight scenes that had to intercut directly — so the only thing I could do was silk in the entire set in order to duplicate the flat look. We had trouble getting the silks, which had to be about 200 feet long and 100 feet wide. We rented one from Warner Bros. (which was made of real silk — impossible to

get anymore) and then Universal came up with an enormous one made of nylon. Actually, nylon is even better than silk; it has even greater luminosity. The only problem then was that the wind kept roaring up the canyon and tearing down our silks. But we were able to get a very close match with the light.

QUESTION: What camera equipment did you use in photographing "AIRPORT '77"?"

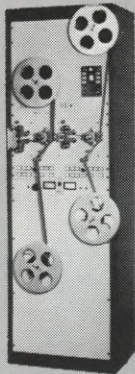
LATHROP: The picture was shot in the anamorphic format, using the Panaflex camera. I had made a big pitch for that camera because I could foresee certain difficulties that would arise in relation to space. We needed the anamorphic format because of all that ceiling in the main lounge set and also
Continued on Page 556

Underwater sequences — mostly those showing Navy frogmen attaching balloon straps and other gear to the submerged plane — were filmed at the largest fresh water springs in the world, Wakula Springs, near Tallahassee, Florida. However, torrential rains drowned the company out and some of these scenes had to be completed in miniature. Lathrop has the highest praise for Second Unit cinematographer Rex Metz and his crew, who did the underwater filming.

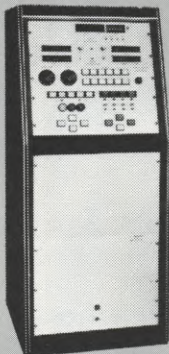




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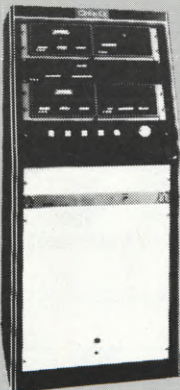
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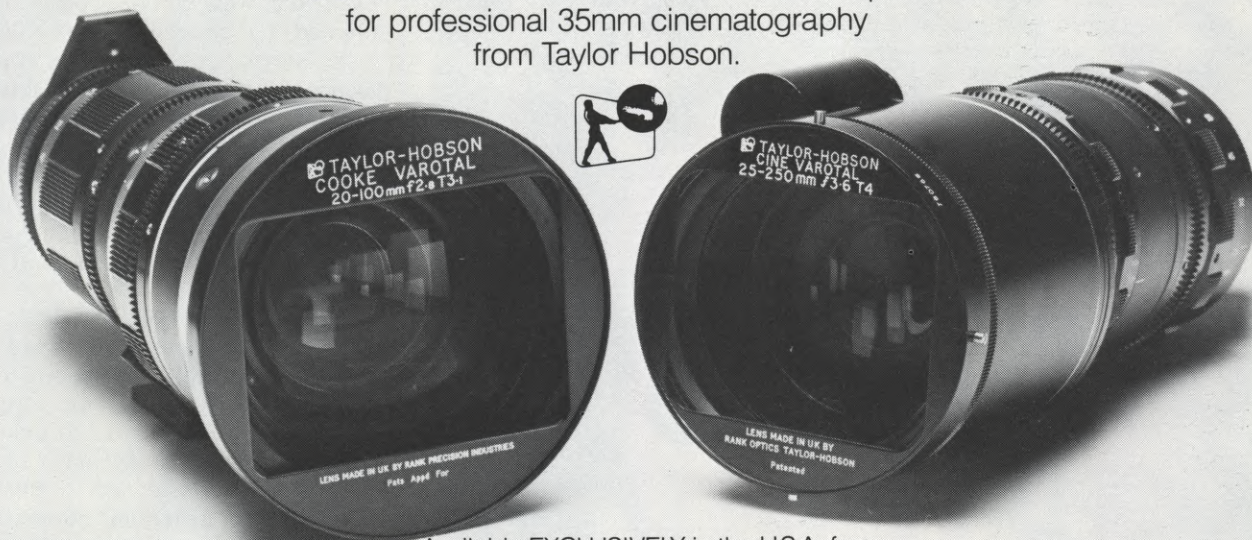
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"IN SEARCH OF ANTIMATTER" WITH FILM AND CAMERA

By PHILIP DAUBER
with CHARLES RUDNICK

The probe toward an invisible universe of sub-atomic particles leads into a mysterious realm of giant balloons, lasers and cosmic beauty

When Charles Rudnick and I began filming what was to become "THE SEARCH FOR ANTIWORLDS" in February 1973, we had little idea what a difficult task we had undertaken. Charles, the son of a physicist, had just begun working professionally as a documentary cameraman and I was a working research physicist. My total film experience consisted of two simple Super-8 documentaries. Even worse, I had little experience in communicating the abstract concepts of advanced physics to laymen. Yet that was exactly what we proposed to do.

My physics research team was in the

midst of an elaborate experiment to search for proof of "antimatter" in the universe. Specifically, the team was trying to detect sub-atomic nuclei of antimatter; high energy particles bombarding the earth from deep space. Our experiment involved a two-ton instrument carried by 600-foot high balloons to an altitude of over 20 miles. In my mind, antimatter was the most exciting idea in physics, maybe in all of science. It would be marvelous to chronicle the discovery that we live in a dual universe, half matter and half antimatter.

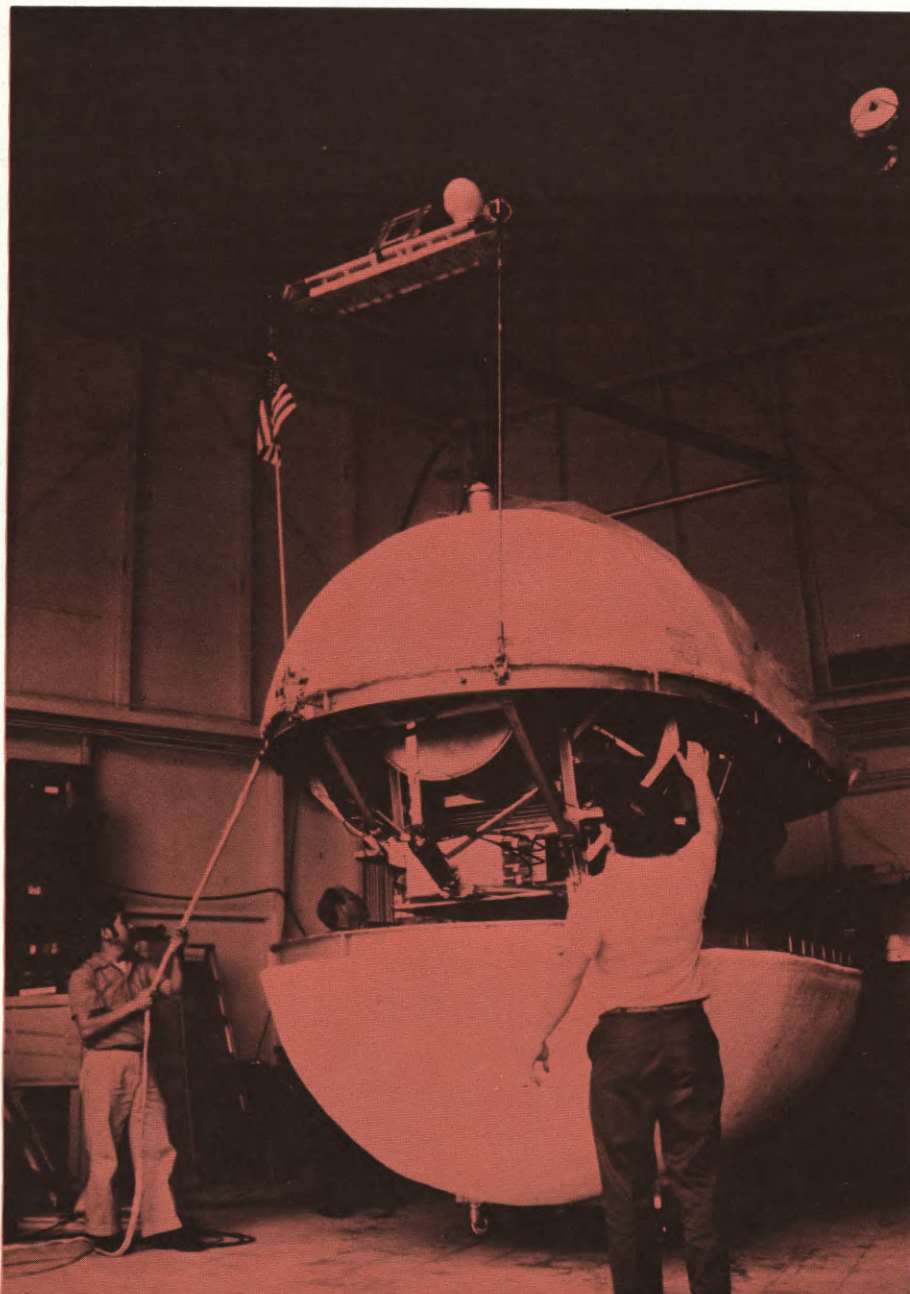
What we chose to ignore at first was the fact that you couldn't photograph

antimatter, since it doesn't exist naturally on earth. This little difficulty was to cause us grief for three years, since we were determined that our film should be visually exciting throughout, unlike most physics films we had seen, which seemed to rely on dull graphics and talking heads. The other serious problem we had was lack of money; our concept of the film was a rather complex blend of documentary shooting, special effects, animation, scientific explanation and dramatic storytelling. We wanted to make not only an interesting science documentary, but also a film which explored the subjective or emotional side of science. We tried unsuccessfully to raise funds from foundations, television and educational distributors; nobody would risk supporting inexperienced film-makers with such an ambitious concept. We were eventually able to realize our vision, but only after three man-years of uncompensated work and with \$20,000 which I was able to save out of my salary as a physicist.

Our conceptual problem in making a film about something that couldn't be photographed was solved by finding "abstract" images that suggest the invisible sub-atomic world and the universe at large in a non-literal, but still believable way. Our most interesting discovery was some special effects created by shooting directly into a laser, with various transparent or translucent objects placed between the laser and the camera. It is relatively easy to obtain images of "cosmic" beauty in this way. Perhaps because of the unity of nature, these images turned out to be appropriate representations of the ideas of particle physics and cosmology.

Throughout "THE SEARCH FOR ANTIWORLDS", laser images are used to portray antimatter in various forms. A bluish web-like pattern receding into black space suggests some unknown universe, possibly an *antiuniverse*. This pattern is a projection familiar to audiences at "Laserium" shows. Such projections were first widely seen in the laser film "DEATH OF THE RED PLANET", by Dale Pelton (see *American Cinematographer*, July, 1973). Following the description in that article, we pointed our laser, a 5 milliwatt red Helium-Neon gas discharge model, at some crumpled quarter-mil

The gondola carrying a heavy payload of scientific instruments is made ready for launch aboard a 600-foot-high balloon that will carry it 20 miles into the sky in search of sub-atomic particles. The purpose is to find evidence to prove out the theory that "antimatter" exists in the universe — a possible separate universe all its own.



aluminized mylar and placed a white card in the reflected beam. The mylar was held and turned slowly in a rotating mount. We filmed the projected, rotating web pattern on Plus-X film with a motor-driven 12-120 lens on our Arri-S camera. The blue color was added later in printing. We shot similar patterns on Ektachrome Commercial Film and used them for the credit sequence at the end of the film. The rotation of the mylar created a soft, slowly varying background ideal for the superimposition of titles.

With the exception of these projected web patterns, we shot all the other laser effects in the film with the camera lens pointed more or less directly into the laser. I had seen Stan Brakhage's beautiful film, "THE TEXT OF LIGHT", and heard him describe how he had simply filmed into the sun through a crystal ashtray using a macro lens. I wanted to try something similar using laser light, so I collected a variety of glass objects. At first I was afraid, naturally, to look into the laser. The warning emblazoned on the laser was quite explicit: "*Danger, do not look into laser beam, either directly or as reflected in a mirror.*" Instead of shooting into the laser, I aimed it through the glass objects, one vase in particular, and filmed the resulting projected image off a white card. The results were interesting, but hardly cosmic.

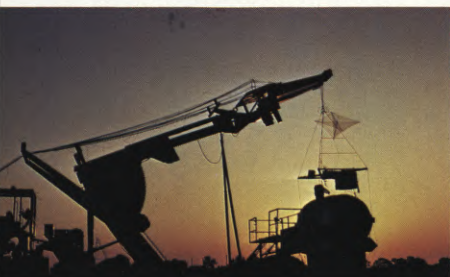
Then Charles, ever the fearless cameraman, lined up the laser beam with the Arri by placing a white card in the beam emerging from the view-

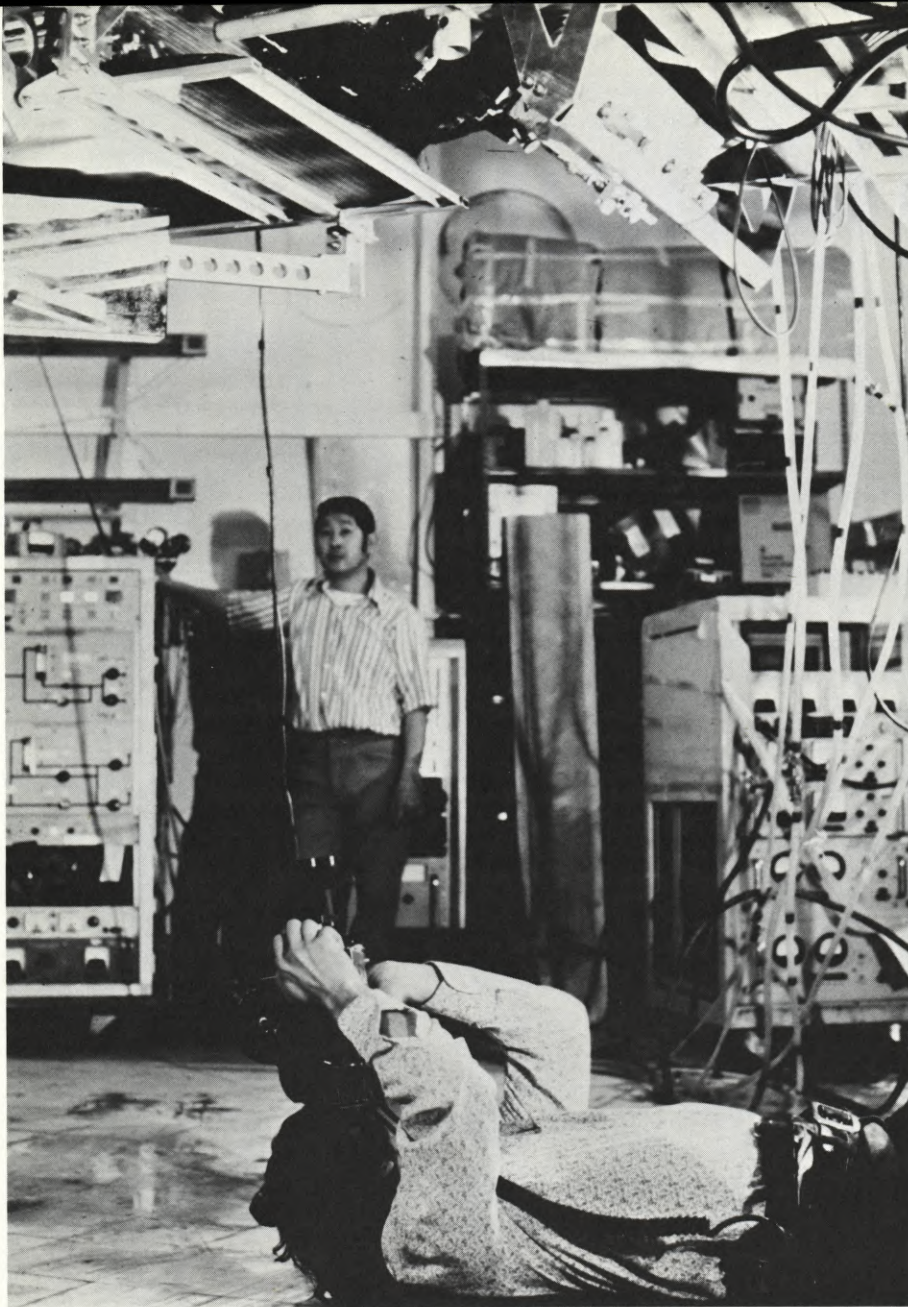


(ABOVE RIGHT) Like a giant jellyfish in the sky, the 600-foot-high research balloon soars aloft. (BELOW LEFT) The 52-ton launch vehicle, "Tiny Tim", carries the balloon gondola to the launch pad near Palestine, Texas. (CENTER) Cinematographer Rudnick and Director Dauber (doing a stint as soundman) wait for the balloon to be launched. (RIGHT) Like a dream image, the balloon floats just above the ground an hour before launch.



(LEFT) Just before the night balloon launch. The gondola is held by the jaws of "Tiny Tim", while the balloon stretches along the ground toward the vehicle. (CENTER) In filming the balloon launch, a Weaver-Steadman tripod was used because of its ability to point vertically upward. (RIGHT) A frame blow-up from 1973 NASA footage showing an astronaut on the Apollo telescope mount of the Skylab Space Station. It could also be a scene from "THE SEARCH FOR ANTIWORLDS, PART II" showing a 1980's search for antimatter in the universe carried out by beams of the Space Shuttle.





(ABOVE) Flat on his back, cinematographer Rudnick films the experimental instrument from below. (BELOW) Filling the magnet with liquid helium. At left, Dr. George Smoot; on the right, "super-technician" Doug Heine. During this delicate charge-up of the magnet, a near-disaster occurred, due to a spontaneous overheating and violent boil-off of the liquid helium being used. The intrepid film-makers were ready with three cameras running.



finder. He made some fast zoom shots, glancing briefly into the finder without focusing his eyes. Some of these snap zooms produced surprisingly complex and interesting effects, with nothing between our laser and the zoom lens (which is, of course, itself a very complex optical system). The shots show the intense direct beam of the laser as a small white spot; evidently all three layers of the color film are sensitized. A purplish glow surrounds the white spot. The reason for the other-than-red colors is that the gas discharge inside the He-Ne tube produces a whole spectrum of light. While only one narrow red spectral line is amplified by the laser effect and emerges as coherent light, a significant amount of other light also comes out.

The laser zooms suggests the movement of some cosmic body through space. In the film they are used to portray the creation of our universe and its antiuniverse. Next, Charles produced some very striking effects by putting a fine crystal bowl on a rapidly spinning mount and filming the laser through it. He combined the rapid rotation of the bowl with zooms of various speeds, again using Plus-X film so that we could add color later. The effect is one of discs and spheres advancing, receding, appearing and disappearing. By cutting several of these shots together I made sequences which suggest sub-atomic particles suddenly created or destroyed in tiny flashes of energy. It was uncannily close to my intuitive physicist's conception of the bizarre world of sub-atomic particles. I especially liked the apparent capriciousness of the "particle" behavior, in accord with the mathematical formulations of modern quantum physics.

Thus we found images which, in a totally unexpected way, capture the spirit of modern physics. I now decided to explore these laser effects more systematically. Still worried about safety, I talked to other physicists and read up on the hazards of working with lasers. My prime concern was the danger of the laser burning a hole in the retina of the eye, due to the focusing effect of the eye's cornea and lens. I found it would be possible to sustain such damage by staring at length into our 5 milliwatt laser. But placing objects in the laser beam generally causes the beam to diverge, reducing the intensity at the eyepiece to safe levels. Nevertheless, we did experience severe eye strain in shooting the laser over extended periods of time. I once even had a pronounced diminution of vision in the eye actually looking into the eyepiece. These symp-

toms I interpret as a signal that what we did was *not* really safe. Most of the time setting up shots with the laser we used a dense blue gel ahead of the lens, so that the laser light entering the eye was reduced by a factor of about 100.

In later shooting sessions, we got our most interesting laser images with small, strongly refracting objects between the laser and the camera. For example, we shot through various types of patterned glass, the kind used in shower stalls. Here the best results were obtained with a type of glass containing numerous small bubbles, the object being to aim the laser directly at a bubble. We also stacked several layers of plastic Fresnel lenses on our rotating mount and filmed the laser through them. This gave a lacy pattern of great complexity. Sometimes we also shot through colored gels or scrims to reduce the harshness of the red laser light.

We also obtained stunning effects shooting through some elongated teardrops of glass which I bought from a street merchant on Berkeley's Telegraph Avenue. These curious objects contained imperfections, such as bubbles and grains of sand. When the laser beam strikes these imperfections, it seems to burst into incredible patterns, which we shot while zooming, panning or smoothly closing the lens diaphragm.

Our laser images were fine for talking about atoms in a poetic way, but for precise description we needed more realistic shots. Because atoms are so small compared to the wavelength of light, it is impossible to photograph them directly. However, by field emission microscopy it is possible to see individual atoms in a crystal. Jim Halverson of the Lawrence Berkeley Laboratory had a beautiful time lapse sequence of tungsten atoms evaporating and was kind enough to let us use it in the film.

It is also possible to photograph the ionization trails left by high energy charged particles. We showed such particle tracks in the film using three different techniques. We filmed a cloud chamber filled with alcohol vapor; here the tracks made by cosmic ray particles are wiggly trails formed by condensation as a particle passes through the chamber. Although the lighting of these trails was very strong and contrasty, we had to film on fast emulsions such as Tri-X or EF 7242, undercrank the camera, and print through several extra generations to get results of acceptable contrast. Incidentally, the first observation of an antimatter particle was in a cloud chamber photograph of a positron (or anti-



Filming the near-disaster that occurred when too-rapid charging of the magnet caused overheating and uncontrolled boil-off of the liquid helium. The film-makers had decided to use *cinema verité* techniques over the period of many weeks during which the scientists were preparing their instruments for balloon flight. It meant being constantly ready to film whatever happened.

electron) taken in 1932 by Carl Anderson.

The balloon-borne instrument of the experiment used "spark chambers" to show the passage of charged particles by means of a high-voltage discharge. We were able to film the bright sparks on Kodachrome; this gave a very high contrast and a suitably spacy background. In the finished film the spark chamber shots become a *leitmotif*, a reminder of the mystery of the search.

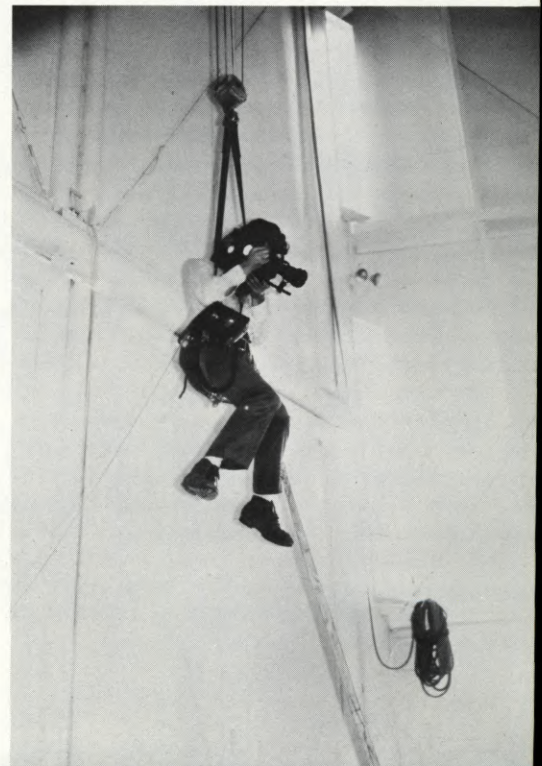
We also used Kodachrome to rephotograph and animate some stills of particle and antiparticle tracks in a bubble chamber (a chamber containing superheated liquid hydrogen, also sensitive to the passage of charged particles). These stills are the most direct proof of the symmetry of particle/antiparticle in the sub-atomic world. We wanted to show the creation of matter/antimatter particles graphically, so we animated the track stills by a simple scratch-off technique. Again the high contrast of Kodachrome gave a very satisfying result.

We wanted to give the audience the experience of a particle hurtling along a particle accelerator and smashing into a target; this is the way antiparticles are created in the laboratory. To get this effect we went to the two-mile-long Stanford Linear Accelerator. We couldn't shoot in the accelerator itself, but above it is a two-mile-long corridor called the klystron gallery, actually the radio frequency power supply for the accelerator. We put the Arriflex on a tripod on an electric car, with a 10mm lens. We ran the car down the corridor at a modest 10mph, but undercranked the camera as slow as it would go, to

about 5 fps. The result gives the point-of-view of a sub-atomic particle; an increase in the volume of the accompanying electronic tones effectively simulates the effect of acceleration.

Some of the most striking and mysterious shots in the film are the result of creative manipulation of NASA stock footage. Every low-budget filmmaker should know about this resource; over 10 million feet of 16mm film in the public domain. I had worked for NASA in Houston as a consultant on some science films, and had made long
Continued on Page 534

Dedication beyond the call of duty. Rudnick seems to be hanging by his neck. Actually, he is seated on canvas webbing, while filming the scientists preparing to refill the magnet.



THE SPIRITED FILMING OF

SPIRIT

An innocent abroad discovers the realities of foreign locations, while making a spectacular action film that includes flaming skiers

By MIKE MARVIN

We decided to call the project "SPIRIT", not only because John Stewart wrote a haunting title song by the same name, but because we knew that the picture would be a clear reflection of our attitudes toward making films in the snow around a skiing motif, and that the film would be a fantasy, by virtue of opening in the early morning and ending in the dark of night with a baptism by fire.

"SPIRIT" is my fourth major production centered around skiing. It is my fourth and perhaps my last ski movie. The previous films, "EARTH RIDER", "CHILDREN OF THE MORNING" and "WINGLESS ANGELS", were each 90 minutes long and were shot on absolute skeleton budgets. "EARTH RIDER" cost \$30,000, "CHILDREN OF THE MORNING" \$11,000, and "WINGLESS ANGELS" \$19,000.

Youthful enthusiasm and determination usually can push a low-financed production through. At least I have found this to be the case. Each one of the films I have done has made it to the exhibition level as a direct result of the effort invested by a lot of people who were willing to work for nothing in order to see the project to its completion. Unfortunately none of the films really made a lot of money. With the proliferation of ski film-makers, the audience has become rather saturated with its yearly barrage of ski movies.

When I started out it was just Warren Miller and myself doing the lecture film circuit. Today there are no less than seven producers doing the same thing. Miller told me that he has run into no less than six new lectures each year for the last ten years or so. Miller is much broader-based than I am and is able to see the overall picture better than I can. As a result of this proliferation, the business of making films in the ski world has become in-

creasingly difficult and competitive.

"SPIRIT" is 39 minutes long. It was totally financed by Fischer Skis and Salomon Bindings. How I came upon the project is a long story; however, I will say that I ended up doing the production as a direct result of my previous work. I am glad that I managed to finish those projects even though I did find myself in the depths of

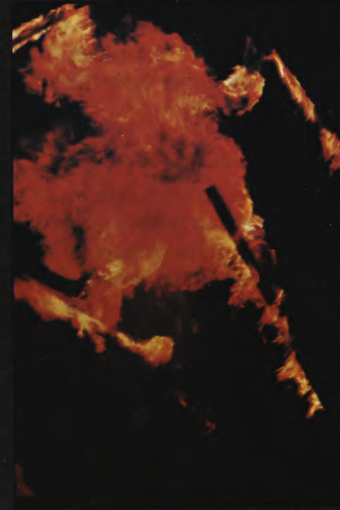
despair at some point or another during their production. I swore to myself that "this is the end." To those who wish to become involved in this business I have this advice: Stick it out and don't quit. You can and will survive (talent and stamina permitting), and in the long run you will probably make out okay.

Continued overleaf





(ABOVE LEFT) American Cinematographer Editor Herb Lightman and Mike Marvin preparing to film from bottom position at Lange Cup World Pro Ski Races. (CENTER) Lightman joined the film crew in Sun Valley, Idaho, and shot the bottom cover position. He did a repeat in Snowbird, Utah. (RIGHT) Henri Duvillard flashes off the jump at Sun Valley and goes on to win. (BELOW LEFT) Jeff Carr took Carolyn Wheeler's place in Steamboat Springs and Sun Valley. Though he had never operated a 16mm camera before, he filmed the top position very well. (CENTER) Jeff Cann and Roy Tremoureux set a camera position. (RIGHT) In Paris it rained every day.



(ABOVE LEFT) Ralph Bertoli drenched in gasoline and set afire for the final scenes of "SPIRIT". (CENTER) A call to Hollywood stuntmen for help brought forth no trade secrets — so the flaming skiers played it by ear. (RIGHT) Three skiers braved the flames: Ralph Bertoli, Dave Burnham and Troy Caldwell. Bertoli lost all facial hair (including eyebrows) and Caldwell suffered severe gasoline burns. (BELOW LEFT) At Sun Valley, Randy Hood, Keith Nelson and Richard Wasden "get it on" just before the Lange Cup Race. (CENTER) Jumping the moguls at Snowbird. (RIGHT) The only streaker of the year bares all and shows his stuff at Snowbird.





Producer-director-cameraman Mike Marvin lines up a shot in Dijon, France. He wanted to get a "different" visual style for "SPIRIT" and to show places that few skiers ever see. Marvin began filming ski action in Super-8 only seven years ago, but rapidly progressed to the top rank of those who specialize in this type of cinematography. He has since progressed to the point where he can handle a much wider range of subject matter.

We started shooting "SPIRIT" in January of 1976 at Heavenly Valley, California. We were working alongside ABC Wide World of Sports. It was the Jeep "Honcho" Freestyle Championships. In January there were two of us: Roy Tremoureux, my partner, and myself. We began shooting two cameras, not knowing for sure whether we would really be contracted by anyone to do anything. We did not know then that we would travel across the United States no less than four times and then half-way around the world.

THE PRE-PRODUCTION

I was in Alaska exhibiting one of my films when I spoke to Bud Raymer from Salomon Bindings. He indicated to me that Salomon was considering doing a different kind of ski film for their promotions for the Fall of 1976-77. Bud told me that Salomon had already signed Joe-Jay Jalbert to produce their racing performance film for the year. Salomon was now looking for somebody to do a non-performance film with a thin thread of a story that would still be able to hold the ski audience. I was informed that several other ski filmmakers were being considered for this project. Bud wanted to know if I could screen my films for a live audience in Seattle and meet with the World-Wide Marketing Director from Salomon. Bud told me that Evon Brouillet would fly to Seattle from Paris for the meeting.

After the screenings, Evon and Bud indicated to me that Salomon would

definitely make a film in 1976 with me as producer, provided that they were able to get a co-sponsor. It took nearly two-and-a-half months of daily telephone calls to firm the project up. We were already in production before I put together a complete shooting script and massive storyboard, complete with musical accompaniment. It was at the storyboard stage that Fischer Skis entered the production.

We all decided that the concept of the film was sound and we agreed that we could do it within the boundaries of the budget, (\$20,000, less interneg and prints) to the first answer print. "SPIRIT" would be released worldwide through Salomon's extensive retail and representative system. We would make it available in four languages: English, French, German, and Italian. I would produce, direct, write, and edit the film (which gave me virtually total creative control), and Salomon and Fischer would supply all the "hard goods", such as skis, boots, clothes, and bindings.

At this point, my partner, Roy, had already driven to Stowe, Vermont, in our Chevy "Hicube" pseudo-Cinemobile. This vehicle turned out to be one of our most important pieces of equipment while we were in the U.S. The vehicle sleeps six and can carry a ton of equipment. On several occasions it did just that when hotel reservations had not been made and rooms were not available. The truck was purchased new from Chevy and Roy built the interior just to suit our needs. He even made

one of the bunks double as a rewind bench. Since the truck carries only our crew and film equipment we did not paint any side "advertisement" and we installed a super powerful burglar alarm to protect ourselves. Since the first of the year we have heard that one camera crew and one ski-rep van had been broken into and completely sacked. Advice: Don't put any signs on your van or truck which will catch the eye of a thief or thieves — and install a good burglar alarm system.

I met Roy in Stowe. With him was Richard Wasden, our actor-skier-cameraman. Not only was Richard a good actor-skier, but his work in the production was invaluable. Richard was a pleasure to work with, it being unusual to have a man who really wanted to participate in the entire production. I also met a man named Tom. It turned out that Tom was a hitchhiker that Roy and Richard picked up en route to the East. It would turn out that Tom operated a camera for us in Stowe, even though he had never even touched a 16mm camera before in his life. I gave Tom a Beaulieu with a 200' magazine and he shot alongside the best of ABC Wide World of Sports cameramen — and his shots were excellent: About half his work was hand-held and it was nearly impossible to tell the hand-held from that shot from his tripod.

In Stowe, we all shot next to ABC. By now we knew nearly all the ABC crew and we found ourselves being helped by them, as well. Sno-cats and lunches usually reserved by ABC were now being offered to us simply because we were all familiar "comrades in arms." ABC was shooting a film called "SKIING FREE," a short on women's Freestyle.

The first day of competition was cancelled because the wind chill factor was 104° below zero. The next day was milder, about 40° below. The contest was held and was a real test for men and cameras. At -40°, batteries don't work well and even a spring-wound Bolex can't crank out more than 18 f.p.s. We had our share of problems — not with the cameras or batteries, interestingly enough — but with ourselves freezing. It was so cold (and we are used to cold) that I was afraid that I would get frostbite — and it is no laughing matter to possibly freeze an eyeball or stick your chin to the camera. ABC's men didn't seem to have too many problems with the cold (even though they all seem to come from Los Angeles), but their problems were with cameras and batteries. It all balances out in the end.



Roy Tremoureux, partner in the company and "SPIRIT" co-producer, sets up in a Redlake camera position for high-speed filming at Sun Valley.

THE PRODUCTION

To shoot skiing events we use four stationary cameras and one hand-held roving camera to use for pickup shots — what I call *texture*. As always, we shoot everything on ECO 7252 (we planned to switch to 7247 negative for all our production by midsummer). For "SPIRIT" we budgeted for 12,000 feet of exposed film and actually shot nearly 20,000 feet. Our cameras: Bolex EBM, Bolex Rex 5, Beaulieu automatic (two) and a Locam High-speed. For adverse weather the Bolex EBM and Rex 5 work perfectly, as does the Locam. The Beaulieus, however, are temperamental under adverse conditions. We

(ABOUT THE AUTHOR: MIKE MARVIN is a 31-year-old native of Tahoe City, California. He began skiing at age six and has been closely involved with the sport ever since. Mike started shooting film in 1966 with Super-8 and in 1970 graduated to 16mm. His first 16mm production was a 90-minute feature entitled *EARTH RIDER* which was filmed in 1972 and released later the same year. In 1973 he produced another 90-minute feature, *CHILDREN OF THE MORNING* and another feature in 1974, *WINGLESS ANGELS: A SKI ODYSSEY*. Besides these features, he has done several shorts for promotion for ski equipment manufacturers and ski areas. Recently Mike moved his production operation to Tony Bill's studios at 73 Market Street, Venice, California.)

had four major breakdowns with the Beaulieus in four months of shooting.

"SPIRIT" is a story of a man who decides to break away from his rut in the city and return to the world of skiing. In a word, "SPIRIT" is the visualization of this man living his fantasies. As a thin thread of a story, we follow Richard Wasden across America and through Europe and then back to the USA. Sun Valley, Stratton Mountain, Stowe, Lake Tahoe, Aspen, Steamboat Springs and Snowbird were our locations in the U.S. In Europe we filmed in Amsterdam, Paris, Munich, Innsbruck, St. Moritz, Bayrischzell, and many other places, giving the film a broader horizon and the feeling of an odyssey.

The logistical problems in making a film like this can be enormous and overwhelming. It is important that a great deal of respect be given "Murphy's law" — i.e., if something can go wrong, it will. We had our share of problems.

When filming in the U.S. you will never have legal problems carrying cameras and raw stock. But in Europe we learned plenty and I'll pass it on here: Always get a *Carnet* in the U.S. before you leave. A *Carnet* is like a passport for all your equipment and film; you use it going through customs in each country and they are not supposed to hassle you. I didn't even know *Carnets* existed until I was already on the plane with all my gear checked through, the next stop being Luxembourg; so, as a result, I was faced with the prospect of smuggling all our cameras and film through every customs entrance on the continent. It was hell, but we did it.

Another piece of useful information: Take along a person who is bilingual. It is important that somebody be able to speak French or German; broken Spanish won't do. They don't speak English everywhere like we all think. You are in *their* country and they expect you to speak *their* language. Fortunately, Carolyn Wheeler could speak French and operate a camera. Roy could speak some French, but Richard and I were lost. Every time I was frustrated by language problems I ended up using the old Spanish to little avail.

With a small crew, Carolyn, Roy, Richard and myself, I believe we saved ourselves a lot of trouble. In Europe a small crew is essential, both emotionally and economically. It can be very expensive in Europe (imagine my surprise to pay a dollar for a cup of coffee in Paris), so it seems logical to keep a crew in even numbers. We used "Europe on \$10 a Day" and it helped. It is better to figure on \$50 a day when

you are making a film and on a tight schedule. You would be surprised how you don't want to walk up a "quaint" stairway to save 50¢ on a room after a hard day of shooting. Between the four of us we had over 300 kilos of equipment — everything from personal baggage to skis to 150 pounds of film stock. Fifty dollars a day will cover a person in Europe for transportation, gasoline, food, room, and beer. Gas this year was going for \$2.00 a litre.

Another problem is excess baggage on international carriers. You must be careful, because excess can run as high as \$2.00 per kilo. My recommendation is this: try to arrange your shooting schedule through a well-established travel agency and have them see that all your cameras and stock are sent through free. We had 30 kilos and arranged with an agent and the carrier to have it sent through with a minimal amount of holdups and charges. We flew Air Icelandic. Round trip from New York to Luxembourg cost \$320.00 for each person. Minimum stay: 21 days.

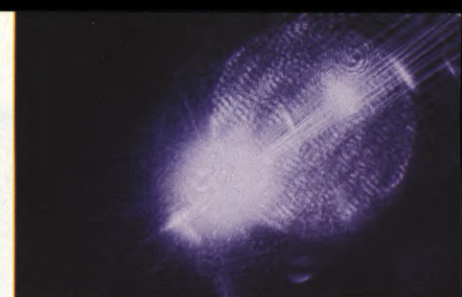
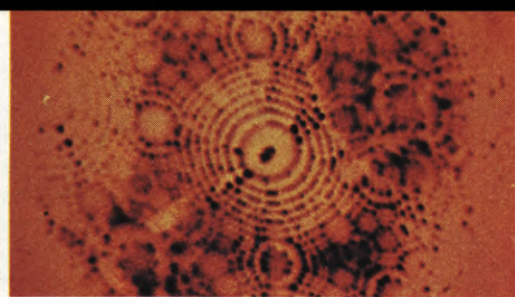
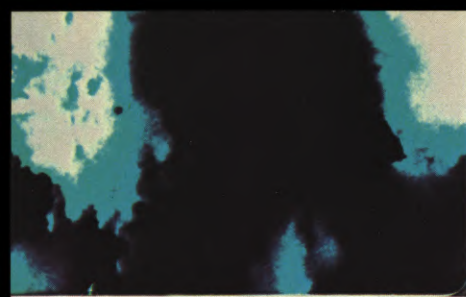
POST-PRODUCTION

Roy and I are now in the process of cutting four films. We split the time and cut on a Moviola M77 six-plate. Our editing facility is complete: we have a Kodak Pageant Arc projector interlocked with a Palmer full-coat film transport. This unit was specially built and will record as well as play back on interlock. It is perfect for screening synced dailies. Roy and I also cut our own negative, which helps keep our post-production costs down. With the six-plate and the arc interlock we have total perception of the whole film as closely as possible to that which will be

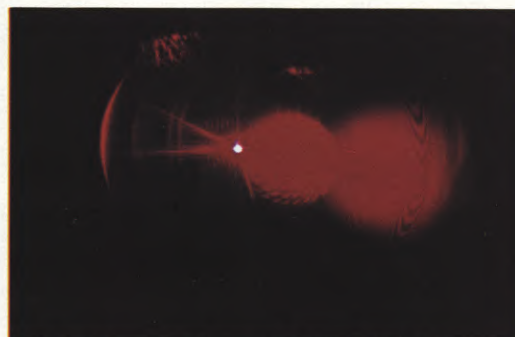
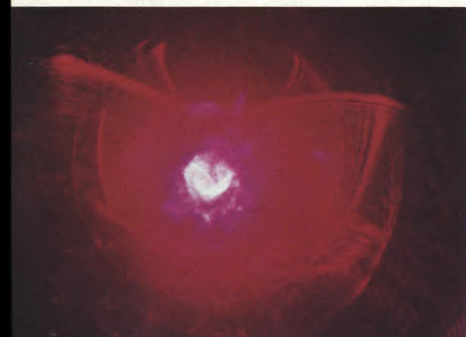
Continued on Page 520

Something of a clown even off-camera, Richard Wasden did multiple duty as actor, skier, grip, "gofer" and cameraman — and did all the jobs well.





(LEFT) Frame blow-up from the first scene of the film, representing the emergence of space from the pure energy of creation. The shot is actually the negative of a NASA slow-motion closeup of a Saturn rocket ignition. (CENTER) Frame blow-up from a time-lapse sequence of tungsten atoms evaporating. Filmed at the Lawrence Berkeley Laboratory using field emission microscopy, this sequence is believed to be the only motion picture film in existence showing real atoms. (RIGHT) Image obtained by filming into a laser through a spinning crystal bowl.



Patterns photographed by filming into a laser through various types of patterned and drawn glass. These images were photographed on Ektachrome Commercial film. Other laser images appearing in the film were shot on Plus-X film stock, with color added during the printing process. A 5-milliwatt red Helium-Neon gas discharge laser was used for the filming. It was pointed at crumpled quarter-mil aluminized mylar, with a white card placed in the reflected beam.



(LEFT) Rudnick filming into the laser. The vertical mount (center) was used for rotating various types of patterned glass and plastic. Viewing through the eyepiece was intermittent through a dense blue gel to cut down the laser intensity to a safe level. (CENTER) Director Dauber with set-up for filming into the laser, the beam of which can be seen in the center of the photo. (RIGHT) Another angle showing Dauber filming into the 5-milliwatt Helium-Neon laser. (BELOW LEFT) Lower segment of the balloon, with helium pipes leading into it, forms an interesting abstract pattern.



"SEARCH FOR ANTIWORLDS" Continued from Page 529

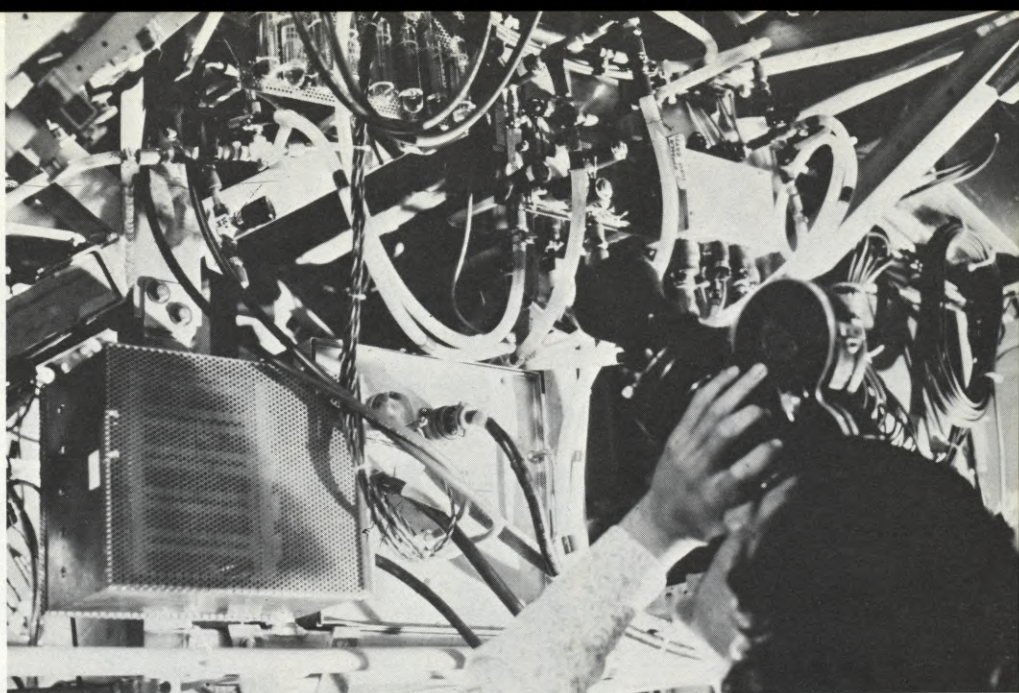
lists of the shots that interested me for special effects.

The opening shot of "THE SEARCH FOR ANTIWORLDS" is the negative of a NASA slow-motion closeup of a rocket engine ignition. The shot shows a white frame out of which a bluish black cloud billows until it fills the screen. In the film, this represents the emergence of space from the pure energy of creation. Later in the film there is a bizarre sequence representing the destruction of matter and its creation from pure energy. The actual shots show something more mundane: welding in the zero-gravity of the Skylab space station.

While the film uses laser images to show the astronomical universe in a figurative way, it was also necessary sometimes to show stars, galaxies and nebula. Since we couldn't afford cell animation, we did the usual zooms into astronomical transparencies from the Hale, Kitt Peak and Lick Observatories. For optimum resolution we used 5 x 7" or 8 x 10" transparencies in a specially built rotating mount. Since the mount was vertical, we were able to use the camera on an ordinary tripod and do real-time pans and zooms simultaneous with slow rotation.

We wanted our film to show the process of scientific research in a real and human way. In order to realize this intention, we had to show clearly the dramatic involvement of the scientists with their work. We had seen many science films and industrial films which attempted to do this, but whose set-up shots seemed devoid of human emotion. We decided to use *cinema verité* techniques over a period of many weeks, during which the scientists were preparing their instrument for balloon flight. Our patience paid off in that we were able to maintain a warm, humorous quality throughout our chronicle of the experiment. We were also able to film the one near-disaster of the preparations; a spontaneous overheating and violent boil-off of the liquid helium used to cool the superconducting magnet. This occurred during charge-up of the magnet and when it did, we were ready with three cameras running. We did, however, shoot an awful lot of film for our budget, about a 40:1 ratio. Also, after filming mostly with sync sound, we found in editing that this had been unwarranted. All the sync sequences played too slowly for the rather fast-paced style we found necessary to hold audience interest.

Photographing the balloon flights posed some interesting technical and logistical problems for a low-budget production. Our location was the National Scientific Balloon Launch Facility at Palestine, Texas. The people there were most cooperative in giving us access to the launch pad and the launch vehicles. The process of launching a heavy payload scientific balloon is a fascinating one. Initially there is a horizontal balloon "train" consisting of the inflated bubble or balloon top held down by a heavy winch, the rest of the balloon stretching some 400 feet along the ground, a parachute, and the gondola held by a huge launch vehicle weighing up to 50 tons. After the 30 seconds or so of the launching process, the balloon train is 600 feet vertical and rising fast.



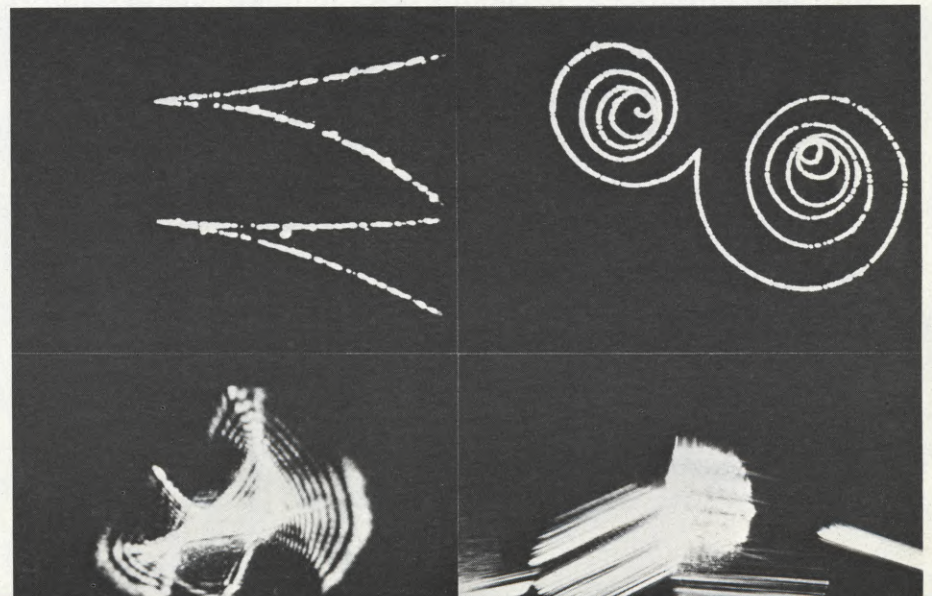
Rudnick filming the innards of the balloon gondola, packed with scientific instruments. The gondola was prepared for flight in the "Stratoport" at the National Scientific Balloon Launch Facility in Palestine, Texas. The balloon-borne instruments of the experiment used "spark chambers" to show the passage of charged particles by means of a high-voltage discharge.

Since there was no opportunity for rehearsal in filming the flight planned by my research team, we shot all the launches at the base in the month previous to our own flight, both for practice and to use in the film. We were fortunate that the film crew from the National Center for Atmospheric Research (which operates the Palestine facility) could join us prior to our own flight. Marsh Lovrien and Elmer Armstrong, both then from NCAR, had shot balloon launches before and knew what to expect. We agreed to exchange footage so that both units could get coverage from several different camera angles. Much to our dismay, when the time for the launch arrived, the ground winds were too high. We watched the

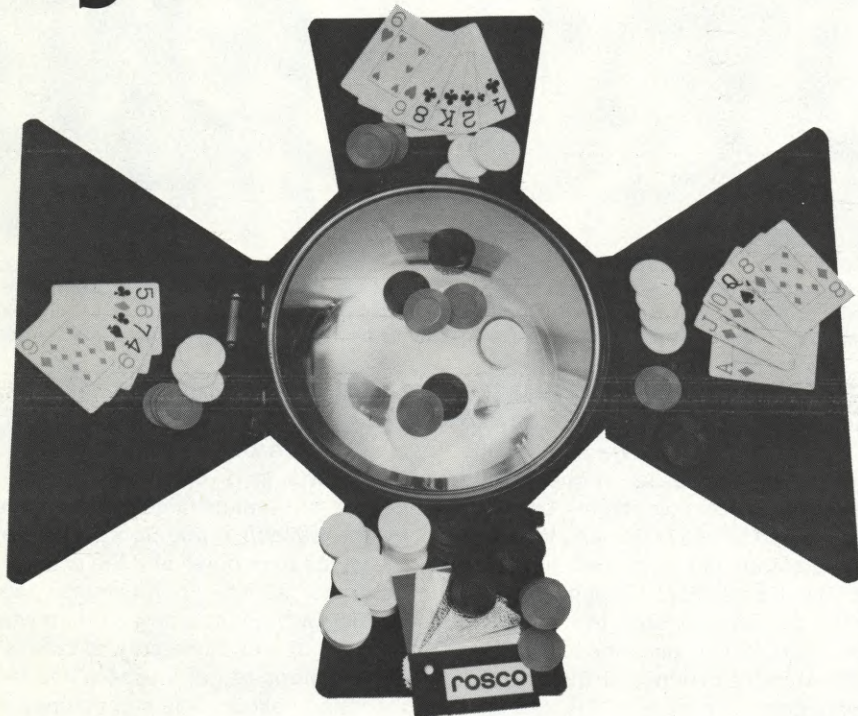
beautiful evening light give way to pitch black. We hadn't come prepared for a night launch but scrambled to rig up Sun-Guns and car headlights, to bolster the meager field lighting used by the balloon crew. Soon after dark the winds died down and the crew prepared to launch. Four cameras were running with Ektachrome EF film when they did. It was necessary to push the EF two stops to get a usable image of the rising balloon. The night launch sequence in "THE SEARCH FOR ANTI-WORLDS" is thus somewhat grainy, but it is nevertheless one of the most exciting in the film.

Another high point of the film is the balloon cut-down or remote termi-
Continued on Page 548

Frame blow-ups showing sub-atomic antimatter particles in laboratory bubble-chamber. (TOP LEFT) Two "electron pairs" formed by gamma rays materializing in a thin lead sheet. (TOP RIGHT) A gamma ray materializes in hydrogen to form an electron and a positron. Having opposite electric charges, these particles curve oppositely in the bubble chamber's magnetic field. (BOTTOM LEFT) Pattern produced by reflecting laser beam off crumpled aluminized mylar. (BOTTOM RIGHT) Image obtained by filming into laser through spinning crystal bowl.



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50th ANNIVERSARY
Continued from Page 517

have exclaimed, "Why, it looks just like my Uncle Oscar!" This account was told and retold until finally a newspaper correspondent overheard the remark and wrote, "Academy employees have affectionately dubbed their famous gold statuette Oscar." The nickname stuck and I have never been to any country in the world where the word Oscar has not entered the language. You will, of course, also find it in your own dictionary.

Oscar is thirteen and one-half inches tall and weighs eight and one-half pounds. He is made of Britannium and is gold-plated. Close to 1,400 have been given out during the past 48 years. Winners turn them back to the Academy after the show to be appropriately inscribed. Only one of them ever came back from the engravers with an error. Spencer Tracy's Oscar for "CAPTAINS COURAGEOUS" almost went to him reading "To Dick Tracy".

It took two years from the time Gibbons made his original sketch to develop the bronze statuettes which would eventually be put into the hands of the first 14 men and a girl, a tiny actress named Janet Gaynor who was then barely out of her teens.

Many innovations destined to last do not burst into perfected brilliance at their first appearance. So it was with the initial Academy Awards. By the time the first statuettes were presented, they were honoring achievements at least ten months old. And the winners had been known for three months.

Some 250 people attended that affair, which saw Janet Gaynor, for three films — "SEVENTH HEAVEN", "STREET ANGEL" and "SUNRISE" — and Emil Jannings, for two films — "THE WAY OF ALL FLESH" and "THE LAST COMMAND" — win the first Oscars.

Miss Gaynor nervously clutched the Oscar as she started to make her acceptance speech. "I am deeply honored..." she began. Her voice cracked. She tried to hold back the tears, lost the fight, and thereby set a standard of behavior for female winners which has endured through the years. Mr. Jannings was not on hand, and his Oscar was delivered to him in Germany.

A hint of things to come at future Awards Shows was the appearance of Al Jolson as an entertainer. Many great performers — a Who's Who of Hollywood — have followed him.

Landmarks are sprinkled liberally throughout the Academy's history. The

Oscar ceremonies have been conducted in public all the way back to the second event, when a Los Angeles radio station did a one hour broadcast beginning at 10:30 p.m. It then took another 15 years for the entire program to make its way to *network* radio with national coverage beginning on March 15, 1945.

However, the biggest date in the move to include the public in the ceremonies undoubtedly came on March 19, 1953, when, for the 25th Awards, the program was broadcast on television. Of course, Bob Hope was the master of ceremonies. And as for today, television coverage is world-wide. Last year's ceremonies were beamed live or on tape by ABC to 42 countries, to an audience estimated at a quarter of a billion people.

The first 15 affairs were held at banquets, but in 1944 they were moved to Grauman's Chinese Theater, and have been in a theater or auditorium ever since. This year's Oscars will be presented at the Dorothy Chandler Pavilion of the Los Angeles Music Center, the site of the past eight programs.

The list of individual film achievements honored each year now totals 21, but nobody knows exactly how many Oscar statuettes will be presented on March 28, since half of the achievements can be collaborations in which each individual involved will receive a statuette. And there could be ties — there have been two over the years — although the odds are heavily against them.

There may also be other recognitions, such as the Thalberg Memorial Award for producers, the Jean Hersholt Humanitarian Award, Scientific or Technical Awards, or special Honorary Awards. These are not mandatory and are given only when the Academy's Board of Governors feels there are especially deserving achievements to be recognized.

Oscar season in Hollywood lasts about five months, beginning in December and culminating in late March or early April. Nominations are made by each of the Academy's specialized branches, but the final voting is done by the Academy's entire membership. The balloting is done by mail under the supervision of Price Waterhouse & Company.

Votes are tabulated by a staff of no more than three at Price Waterhouse, locked in a counting room. The votes are counted in sections and are tallied on the day of the Awards. The sealed envelopes are then prepared in duplicate. One set is held by the Price Waterhouse official who hands them to the presenters on the telecast. The

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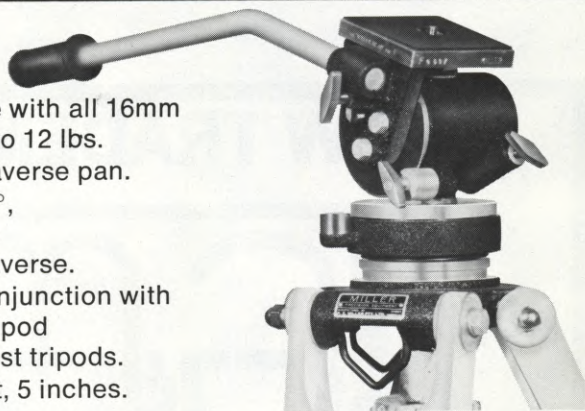
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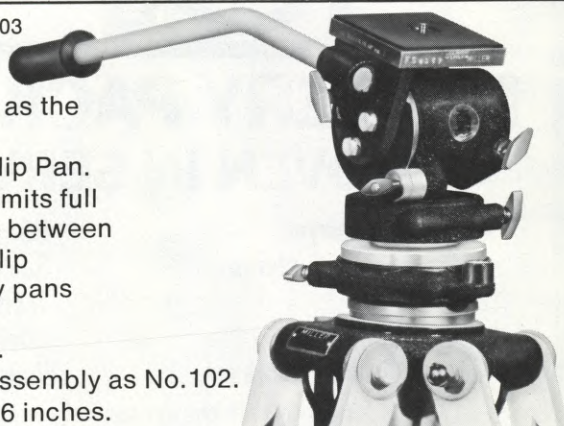
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other set is held by another Price Waterhouse official seated in the audience. He is a sort of backup man, in the event anything prevented the first man from arriving at the show. So far the reserve man has never been pressed into duty. No executive of the Academy sees the ballots, which are destroyed at the end of the year.

The sealed envelope, the Academy's special suspense factor, was initiated in 1941. Before that, the Academy gave the list of winners to the press with its pledge that the news was to be held back until 11 p.m. But that year a local paper had listed the awards in its early editions, revealing beforehand "GONE WITH THE WIND"'s winning sweep.

Oscar's career has certainly been a colorful one.

Take, for example, director Frank Capra's embarrassing experience in 1934. Nominated for the first time, he rose to his feet and strode toward the rostrum when host Will Rogers said, "Come and get it, Frank." Capra was ten yards from his seat when he realized that Rogers was beckoning to Frank Lloyd, who was being honored for "CAVALCADE".

At the 1942 awards, composer Irving Berlin opened the envelope and read the winner of the Best Song — his own "White Christmas". He is the only presenter ever to give himself an Oscar.

Oscar's career has always been associated with high emotion, yet probably no more poignant moment will ever occur than one at the 1947 awards, when Harold Russell won two Awards for his role in "THE BEST YEARS OF OUR LIVES".

He raised them proudly in his two artificial hands when he stepped from podium after being honored as best supporting actor and also as the recipient of a special honorary Oscar for bringing hope and courage to his fellow amputees.

Oscar is now made at the Dodge Trophy Company in Crystal Lake, Illinois, and he is fully protected by both copyright and registration. Recipients are required by the Academy by-laws to sign a release promising to refrain from using the statuette in any but the prescribed manner.

Some people contend Oscar can be bought, claiming that all nominees advertise themselves. In reality, only a few do, and there is no discernible correlation between ads and victories. Spencer Tracy and Katharine Hepburn, two- and three-time winners, respectively, and frequent nominees, never advertised their film achievements. Conversely, some non-winners spent a good deal of money and time vying for a nomination or award. And

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then there is the case of George C. Scott who has never taken out an ad and in fact insisted that he didn't want an Oscar. Many predicted he would offend the voters by turning his back on the Academy, but the voters gave him the Oscar anyway, for "PATTON".

Perhaps the best answer to the question of whether an Oscar can be bought was given a few years ago by songwriter Sammy Cahn, who had spent a great deal of money plugging his songs and who admitted unabashedly: "If an Oscar could be bought, I would never have lost."

Oscar is approaching his fiftieth birthday. Filmmaking, in which he represents the finest in creative achievement, is not much older. The list of films, filmmakers and artists he has honored constitutes most of the greatest achievements of the art. Oscar grew with the movies, and will continue to grow as long as men and women of talent and vision continue to make motion pictures.

But with all his world renown and television stardom, Oscar is merely the tip of the Academy iceberg.

Today the Academy is a professional honorary organization composed of almost 4,000 motion picture craftsmen and artists.

Its stature has grown to the point where it now provides unparalleled incentives for higher levels of technical and professional achievement among all branches of filmmaking throughout the world. And, in doing so, it has become motion pictures' most effective ambassador.

The Academy also has a marvelous program of student film awards, which have served as a great impetus to young filmmakers throughout the country. For a student working at a college or university in the field of film, to be recognized by the leaders of the field he is seeking to enter is a tremendous encouragement. This May 15th we will be holding our Fourth Annual Student Film Awards program at the Academy's new building, and you are all invited to attend.

Our Margaret Herrick Library contains the world's finest collection of books, periodicals, still photographs and other motion picture-related materials. Two complete floors in the new building are devoted to our library, which is open at no charge to anyone doing research in the film area.

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We have a National Film Information Service which assists universities, film schools and others in preparing film programming, and provides information to serious researchers around the world.

I am often asked how the Academy — and its many activities — are funded. The largest part of our income is derived from the sale of our Academy Awards telecast rights to one of the networks. In addition, we present a series of once-a-year non-Awards TV specials, the second of which will air next Sunday evening on ABC. It is called "Oscar's Best Movies", and it contains clips from every one of the 48 films which have won the Best Picture Academy Award.

We also derive income from membership dues, which are now \$100 per year. Although it is primarily intended as a service to our industry, we realize some income from the sale of the Players Directory, a monumental casting book published three times a year, and from our Screen Achievement Records Bulletin, which lists cast and credits for hundreds of films.

Perhaps these days we are proudest of our new seven-story building in Beverly Hills. The acoustic, projection and other technical facilities in our Samuel Goldwyn Theater make it the very finest in the world . . . allowing us to show pictures to our members and others as those pictures were made to be shown.

In considering the contribution of Los Angeles to the film-making community, we must remember that during the past half-century Hollywood's picture-makers have utilized much of the local area — from Santa Barbara to the Mexican Border — to represent almost every conceivable natural or man-made locale on earth. One producer summed it up by telling a staff member who recommended an exotic location, "A tree is a tree, a rock is a rock. Shoot it in Griffith Park."

The inventiveness of producers and their staffs in finding Los Angeles area locales allowed them to utilize the vast reservoir of picture-making talent that gravitated to Hollywood, as well as the great array of technical equipment available from the nearby studios.

But with the development of television in the late 40's and early 50's, movie theatre audiences became more discriminating. They could discern the

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difference between back-lot locations and real locations, and soon technical innovations allowed movie companies to operate self-contained units anywhere in the world.

And so about 15 years ago the phrase "runaway production" came into vogue. Hollywood picture-makers had always been willing to travel around the globe to capture on celluloid that which could not be reproduced at home. Now they had better equipment to do it with, more realistic results to be achieved, incentives in the form of foreign film subsidies, and most probably lower costs.

While making motion pictures is an art . . . it is also a business. And tax laws, union demands, and other escalating costs led studios and producers to realize that it really did make more sense — economically if not philosophically — to sometimes film a U.S. Western in Spain rather than in the Western United States.

In 1968, of Hollywood's 30,000 film union members, more than 12,000 — or more than 40 percent — were unemployed as a result of this trend.

The theatrical motion picture business has probably never really recovered in terms of total audience from the competition of television, but the one-eyed box in the living room has also been the saviour of film production. Many studios which damned TV in that medium's infancy now derive a considerable portion of their income from producing and selling films for television. Many of the same technicians, craftsmen, and others who brought international respect to Hollywood film-making now find a good deal of their work in Hollywood television production.

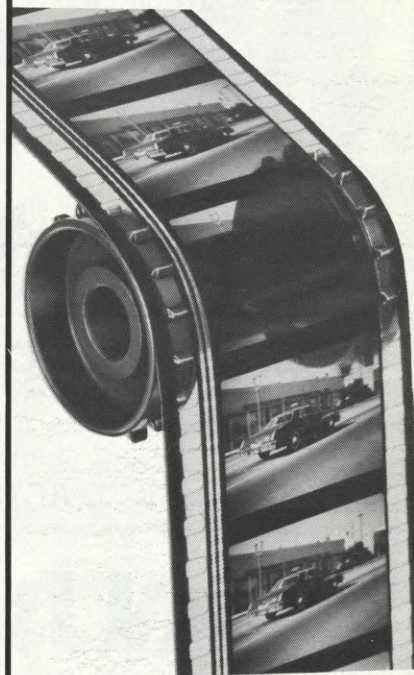
Let us look now at where we theatrical picture-makers find ourselves today, both artistically and economically.

There are fewer so-called "superstars" today than ever before in history. Families go to the theater more selectively than at any time in the past. Most of today's most successful films are those that just do not have the same massive impact on the smaller television screen. Try to imagine the scope and impact of "THE TOWERING INFERNO", "EARTHQUAKE", "JAWS", or even my own "MIDWAY", on TV. The scope, the action, the larger-than-life characters of the picture, and, on the other hand, the feeling of sharing emotions with hundreds seated nearby and the lack of distraction to the audience — these can never be duplicated at home.

But of course, there is still room for the special, intensely personal film. For

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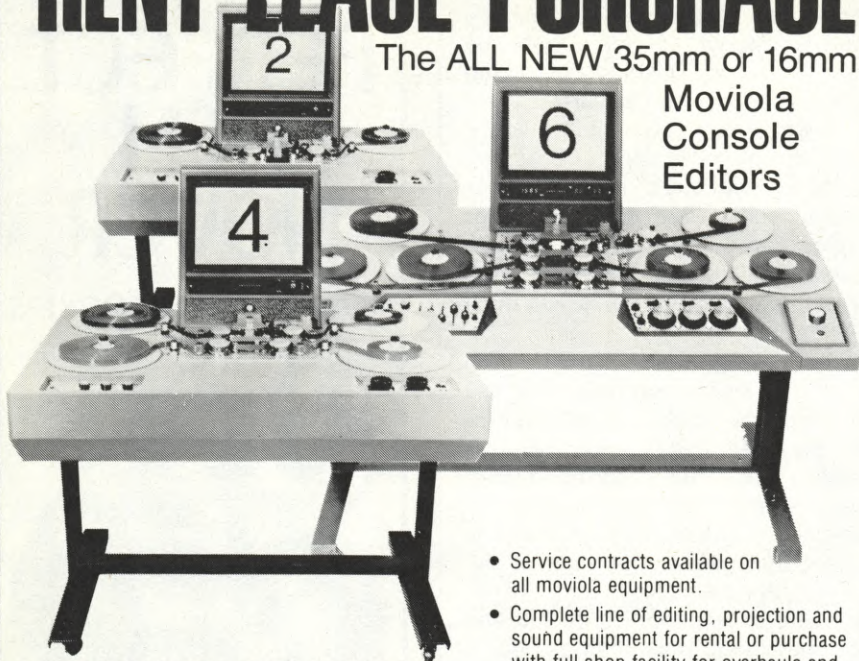
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AUSTRALIA

example, remember that "ONE FLEW OVER THE CUCKOO'S NEST" carried off all the top honors at last year's Academy Awards. And this year "ROCKY" is attracting huge audiences throughout the country.

Another aspect of today's film business is the re-emergence of the American-made production. Certainly, working picture people would rather finish the day in their own homes than in a hotel room in Mexico or Spain. Inflation throughout the western world has also brought foreign costs more closely on a par with Hollywood production costs.

To make a successful film requires the combined efforts of a great variety of creative talents: writers, photographers, composers, musicians, costume designers, actors, artists, and many more. It is with little fear of contradiction that we can boast that there is a greater concentration of artistic talent here than anyplace in the world. And that concentration enriches our whole community.

Economically, the industry has learned to be successful working from a different kind of base. A major studio would produce 60 pictures a year at one time. Today it may make 15 . . . but the sound stages are still crammed, thanks to television production.

American theatrical films, despite the competition of locally-made product and multitudes of other restrictions, still continue to be the most popular generally with audiences throughout the world. American motion pictures still derive approximately one half of their revenue, on the average, from abroad.

The highwater mark for films in the U.S., statistically, came in 1946, when 4,230,000,000 admission tickets were sold . . . at an average admission price of 40 cents. In 1975, the number of admission tickets sold was 1,035,000,000, at an average price of \$2.05. According to the United States Bureau of Census, the motion picture production, distribution and exhibition industry is now a five-billion-dollar-a-year business.

Opinion Research Corporation conducted a survey last year which confirms my personal optimism. Their survey results showed that the total of moviegoers, age 12 and above, reached 109 million people. Since 1969, these numbers of moviegoers increased by 15 percent, while the civilian population went up by only 10 percent.

Of the 109 million theater patrons, 89 percent came from those under 40 years of age. It bodes well for our industry's future that so many young

people go to the movies. Using the Census Bureau's figures, those total 109 million movie-goers should increase to 115 million by 1980 and to 120 million by 1985.

Large as these numbers are, keep in mind that they are for the United States alone. Today more than 50 countries produce some 3,500 feature films per year. The U.S. does not rank high in the numbers of films produced, but there is no doubt that the label "Made in Hollywood" is still the benchmark for technical excellence, artistic preeminence, and plain old audience appeal throughout the world.

So, for many reasons, we are optimistic about the artistic and economic future of the American motion picture. We hope to transmit that enthusiasm to others, particularly our business and financial communities. There is too big a gulf between the creative film-makers and the business community. We need a closer amalgam between the creative genius and the financial genius. One good example of how such a blending of talents can work to artistic and economic advantage in the film industry is the story of the Disney brothers. Walt, the younger of the two brothers, was an American original . . . creative, unafraid to try new ventures without knowing where the money would come from, dedicated to creating that which he thought was artistically right, whether it be a cartoon figure, a film, or an amusement park. His older brother, Roy, was just as much of a genius with a calculator and a very sharp pencil. Their spirit of teamwork contains a good lesson for all of us. There is a commonality of interests between the creative and financial community, and there must be an increasing interchange of skills, opinions and methodologies.

As the Motion Picture Academy begins its second 50 years, and the industry it represents nears the century mark, we renew our enthusiasm for the product we produce, and we rekindle our optimism and reaffirm our belief in the continued importance motion pictures will have for our society.

For those moving images which once were projected before immigrants coming from their sweat shops starved for a few moments' diversion, have become wide-screened, Technicolor, stereophonic, quadraphonic, quintaphonic, Sensurround, holographic, artistic and technical excellences. And we have learned, as never before, to look at our world critically if lovingly, and to bring to our audiences a range of ideas, emotions, and verities never before shared on such a scale. ■

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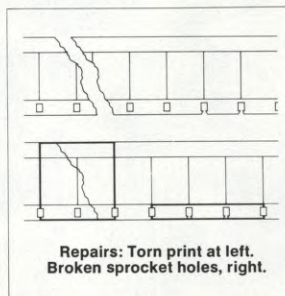
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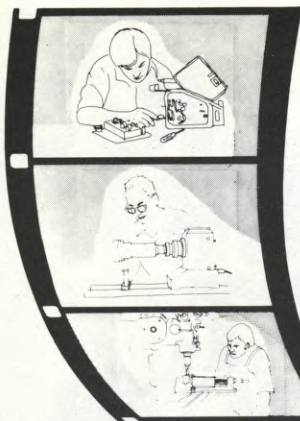
Because it's not perforated, high-quality CIRO tape costs about a third the price of pre-perforated tape. Not a big item — but it adds up. After about thirty rolls, your tape savings have paid for the splicer. (CIRO tape, incidentally, is guaranteed not to telescope.)

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49th ACADEMY AWARDS Continued from Page 483

the auditorium. More than 4,000 feet of cable were used to operate the equipment, which had to be placed so as to be totally unobtrusive.

"What makes our job even tougher is that we have only two days to rehearse the entire show," Furiga said. "But somehow, some way, it always gets done."

In all, Oscar night is an engineering feat.

It is also a night of joy for the winners, disappointment for the losers, and occasional surprises for all involved.

This year there were not too many of the latter. Although both "Rocky" and "Network" received 10 nominations each, neither film swept the field. "Rocky", the underdog sentimental favorite, surprised few when it was awarded the "Best Picture" Oscar. It also scored for "Best Direction" and "Best Editing". "Network", considered by many to be the best all-around example of 1976 film-making, collected three out of the four top acting awards, plus the "Best Original Screenplay" Oscar for Paddy Chayefsky's brilliant script.

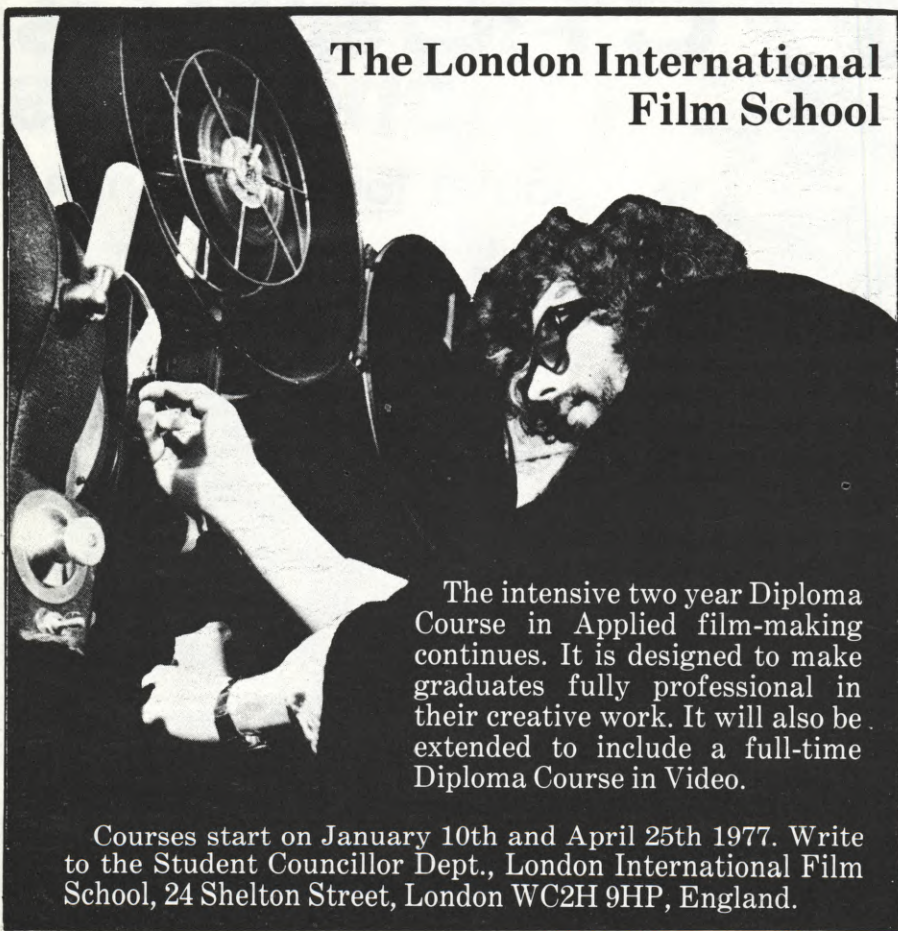
Perhaps the one real surprise of the evening, to the technically-minded, at least, was the award that went to "All the President's Men" for "Best Art Direction". The design of that fine film was distinguished mainly by the meticulous duplication of the City Room of the *Washington Post*, but there were many who felt that the mere reproduction of an existing facility, no matter how authentically executed, could not compete in terms of sheer originality or imagination with the spectacularly innovative sets designed by Dale Hennesy for "Logan's Run".

Far and away the most touching moment of the evening was that in which Paddy Chayefsky, called upon to accept the posthumously awarded "Best Actor" Oscar (first time in Academy history) for Peter Finch, deferred to the late, beloved star's widow. Her simple, sincere, heartfelt remarks brought a lump to many a throat.

For *American Cinematographer* readers, because of their highly specialized primary interest, the most important Oscar of all is the one awarded for "Best Achievement in Cinematography", and this year that coveted award, in a field of very stiff competition, went to Haskell Wexler, ASC, for his mood-filled photography of "Bound for Glory" (see *American Cinematographer*, July 1976).

Wexler, a previous Oscar winner for

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his black and white photography of "Who's Afraid of Virginia Woolf?" (1966), was also nominated last year, together with Bill Butler, ASC, for "One Flew Over the Cuckoo's Nest".

In its reportage of the Awards, *The Hollywood Reporter* wrote: "I'm shooting my last picture," Wexler said of his current assignment, 'Coming Home'. He next plans to direct 'Final Score' from a screenplay by Emmett Grogan."

Wexler is no stranger to direction, having directed (as well as photographed "Medium Cool" several years ago), but for those of us who are appreciative admirers of his incisive photography, it is hoped that he will not entirely abandon the camera.

Recognition for "Visual Effects" is not a mandatory honor of the Academy roster, but may be presented as a "Special Achievement Award" when it is voted by the Academy Board of Governors. This year two spectacular productions were so honored: "King Kong" (see *American Cinematographer*, January 1977) and "Logan's Run" (see *American Cinematographer*, June 1976).

For "King Kong", a Dino De Laurentiis Production, Paramount, awards were presented to Carlo Rambaldi, Glen Robinson and Frank Van Der Veer.

For "Logan's Run", a Saul David Production, Metro-Goldwyn-Mayer, awards were presented to L.B. Abbott, ASC, Glen Robinson and Matthew Yurich.

Neither Abbott nor Robinson are strangers to Oscar, both having won the golden statuette twice before.

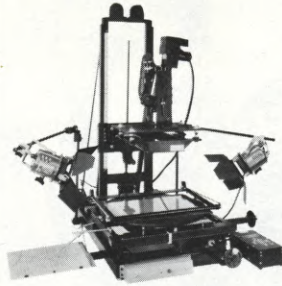
To all of the winners of this most coveted of awards, and especially to their colleagues in the "Best Cinematography" and "Visual Effects" categories, the members of the American Society of Cinematographers wish to extend their warmest congratulations.

PINEWOOD'S "007" STAGE Continued from Page 489

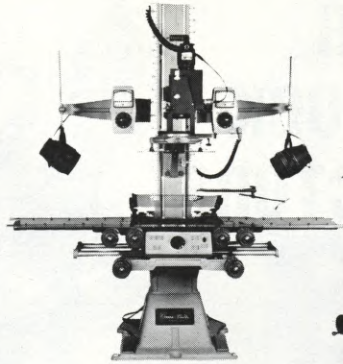
\$1,650,000, including a setting of the interior of a super-tanker which has kidnapped three nuclear submarines. This is the largest interior set ever built for a film.

The problems, one after the other, were overcome by THE SPY WHO LOVED ME. Cubby said, "We are happy the stage is up. We think that it's not only a boon to our picture, but a boon to the industry as a whole that there exists such a fine piece of equipment to work in. Pinewood is excited by the idea that it is there, because it enhances the studio facilities. It also

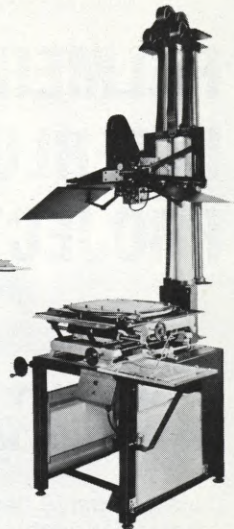
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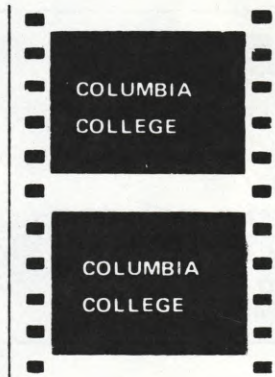


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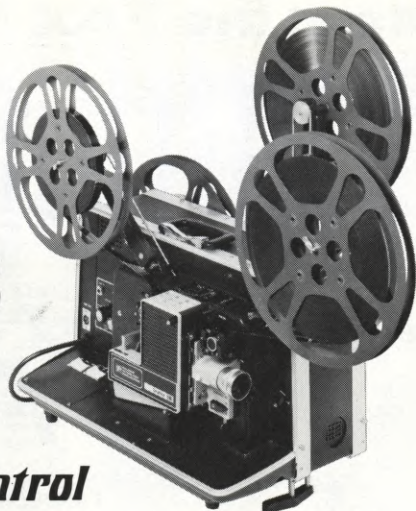
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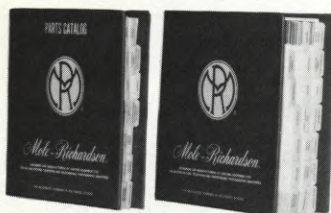
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provides the opportunity to bring people into the studio where they can work in the winter and create all kinds of things hitherto impossible. Pinewood is the epitome of production, and if we who work here and those who own interests in Rank don't help the industry to survive, then, hell, all's lost. I'm delighted to see that Rank is turning down offers for the sale of the studios."

Cubby Broccoli, who is quite a few avuncular strides ahead of most broad canvas producers, was very proud of his massive volcano set which changed the skyline of Pinewood for *YOU ONLY LIVE TWICE*. But he says that it is a greater stroke of design and engineering to build both the 007 stage and the set. "The interior is a terrific piece of work," he says with pride. The whole screen time for the set will be about 20 minutes out of two hours, ten minutes.

Ken Adam's design depicts a huge section of a 600,000-ton oil tanker, the *Liparus*, belonging to a perfidious multi-millionaire who has a frenetic belief in one-downmanship. His grand design is that the world's population — or a lot of it — should live beneath the oceans. The far-ranging *Liparus* doesn't take on oil. Instead, like a big fish swallowing little fish, it has a bow which opens to swallow submarines and store them in its cavernous inside . . . the British nuclear submarine HMS Ranger, the American nuclear submarine USS Wayne, and the Soviet nuclear submarine Potempkin. And from the script of Richard Maibaum and Christopher Wood comes this scene, and set, built on the massive 007 Stage at Pinewood:

The vast dim interior of the Liparus is suddenly brilliantly illuminated as giant floodlights are switched on. Almost the entire width of the vessel and a considerable proportion of its length is one huge sea-filled dock. The middle portion of the dock is now occupied by the Wayne.

On either side of her are berthed the British submarine Ranger and the USSR submarine Potempkin. Along the length of the dock on both sides are gangways with steel stairways and elevators running up to catwalks extending the length of the vessel, connected at intervals by cross walks. Between the dockside gangways and the hull runs a hovercar track, enclosed in a tube running the full length of the vessel on both sides of the dock. There are gaps in the tube at certain points to allow access to the hover cars.

The British and American submarines have been constructed at Pinewood under the supervision of

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naval experts, and, as Cubby says, "within the scope of state secrets we are operating under their guidance," But so far as the awesome interior of the tanker is concerned, Cubby agrees it's a figment of their imagination "to help us in our film." In fact he thinks the whole thing is "quite extraordinary".

Inauguration of the world's largest film stage took place at Pinewood Studios with former British Prime Minister Harold Wilson, James Bond star Roger Moore and Producer Albert R. Broccoli in attendance.

Participating in the launching was Mrs. Albert R. Broccoli, who broke the champagne bottle on the conning-tower of the American "hunter-killer" submarine and leading actors from the film, including Roger Moore's co-stars, Barbara Bach, Curt Jurgens and Caroline Munro.

Many British actors who made their reputations at Pinewood were present, including Jessie Matthews, John Mills, Kenneth More, Hayley Mills, Donald Sinden, Ann Todd and Richard Todd. Also in attendance were several dignitaries from the British Royal Navy, as well as a contingent of 24 marching men from the Band of H.M. Royal Marines Commander in Chief Fleet, led by Captain Christopher J. Taylor, Director of Music, and W/02 Bandmaster Anthony Ivor Kendrick. ■

ALL ABOUT "OSCAR"

Continued from Page 501

on Monday, March 28. It was televised live by ABC. This was the ninth year the Music Center has hosted the Awards.

Janet Gaynor and Emil Jannings were the first year's best actress and best actor winners. Jack Nicholson and Louise Fletcher, both for "One Flew Over the Cuckoo's Nest", were last year's.

The writing field has had some illustrious winners: George Bernard Shaw for "Pygmalion", Robert E. Sherwood for "The Best Years of Our Lives", William Saroyan for "The Human Comedy" and William Inge for "Splendor in the Grass".

Irving Berlin is the only presenter ever to give himself an Oscar — when he opened the envelope in 1942 and read the winner of the best song, his own "White Christmas".

A total of more than 1,400 Oscars have been given out over the past 48 years. Only one ever came back from the engravers (winners turn them in after the show to have name and achievement inscribed) with an error. Spencer Tracy's for "Captains Courageous" almost went to him reading "Dick Tracy". ■



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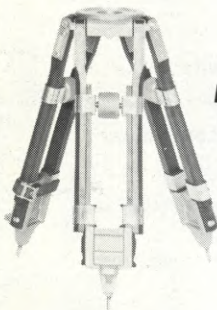
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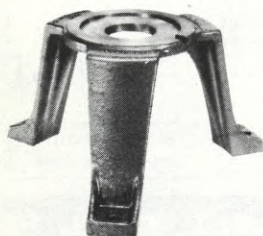
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"SEARCH FOR ANTIWORLDS"

Continued from Page 535

nation of the flight. Usually this is impossible to film from the ground, since the high-altitude winds are normally over 100 miles-per-hour and the cutdown point is decided in an airplane 1,000 miles or more from the launch site. In this case, Charles and I were awakened at 3 a.m., after one hour of sleep. We were told that the flight was to be terminated in the morning, only a few hours' drive away. We were lucky that the winds aloft had been light and variable. The balloon was being brought down slowly from 120,000 to 60,000 feet by valving out helium; this gave us time to drive to within 20 miles of the cutdown.

We stopped by the roadside and, at the last moment, Charles was given control of the termination via a radio link to the command airplane circling overhead. He managed to rig up two wires connecting the Arriflex to our Eclair battery belt (the Arri belt had gone dead) and gave the signal while turning on the camera. The cut-down was a normal one. The parachute opened within two seconds and the two-ton gondola came down while swinging wildly back and forth. We used a 300mm telephoto and later did an optical blowup to increase the size of the balloon and the parachute in the frame. We had originally intended to use a Questar telescope mounted on the Arri for this purpose but had found it too slow and unwieldy. Ideally, we should have used a 600mm or 1000mm lens with a low-power finder scope.

After the cutdown we threw our gear into the car and went careening down country roads, trying to reach and film the landing site of the gondola. It got there about two minutes before we did and crashed into a tree. In true *verité* style, we were able to film the scientist's reaction to finding their precious and sophisticated instruments smashed up in the woods. (Actually the damage was slight and the flight data was successfully recovered from the gondola in the form of 35mm film.)

After we completed the documentary shooting, it took more than two years to design the whole film. Meanwhile the scientists were measuring their film and analyzing it over a one-year period. The results were negative; they obtained no evidence of antimatter in our part of the universe. Thus our picture had to be a scientific failure story.

Since I had essentially no previous experience in film-making, I had to learn dramatics, narration writing, special effect techniques, editing and

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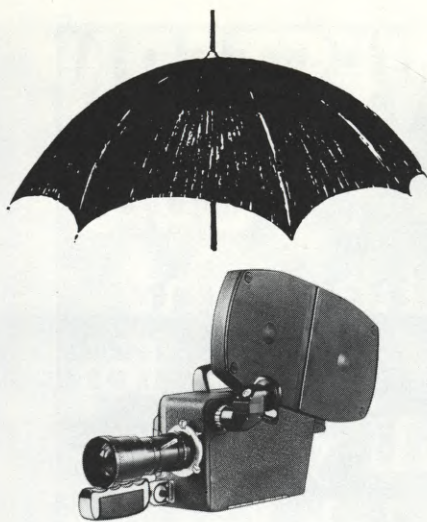
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also how to work with a storyboard. It was very difficult to fit the various elements of the film into a coherent structure. I rewrote the script 20 times (with help from literally dozens of friends), did three storyboards, many weeks more of shooting with Charles, and six re-edits before arriving at a rough-cut that actually worked for an audience. At that point I was totally exhausted and had to turn the film over to a professional editor, Tom Valens, who had been looking over our shoulders. Tom is as much of a perfectionist as I am and proceeded to make many suggestions that took us right back to the script stage.

He reshot some of the laser effects and astronomicals, did the animation and titles and cut the film to its final length of 25 minutes. Meanwhile, Stephen DeWitt had been working on an original score, his first, which very elegantly combines elements of classical and electronic music. The final stages of the film came together quickly. Robin King did a splendid final narration track for us and after Tom spent two weeks sound cutting, Mark Berger did a superb job of mixing down our nine tracks at Fantasy Films in Berkeley. At all stages we had very personalized attention at Sound Service and Monaco Labs in San Francisco.

For me the whole experience was akin to going to film school, an alternative which I heartily recommend to beginning film-makers. Many times during the three-year process I had despaired of ever completing the film. The difficulties in trying to translate abstract concepts of physics into a visually exciting film seemed insurmountable. Only dogged persistence and the constant encouragement of friends kept me going. I consider myself lucky that the finished "THE SEARCH FOR ANTIWORLDS" was accepted for distribution by Pyramid Films. Despite the huge amount of effort put into the film it was really a great privilege to make a statement about my past career as a physicist while starting a new one as a filmmaker. ■

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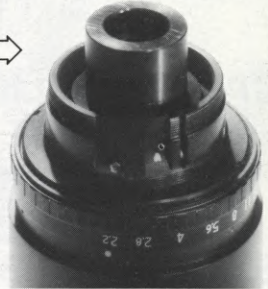


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"THE SPY WHO LOVED ME"
Continued from Page 487

and the ruins of Karnak, as well as a cruise down the Nile River aboard a 'felucca'.

The Italian island of Sardinia in the Tyrennean Sea was featured as the location of the film's most spectacular chase sequence, taking place on hair-raising cliffside roads along the sea-coast. Commander James Bond drives a new model Lotus "Espirit", capable of tricks unknown to his previously renowned Aston Martin, and is pursued by a Kawasaki "900" equipped with special sidecar. Just off-shore is "Atlantis", a spider-shaped marine biology laboratory, headquarters of a mysterious Nordic shipping magnate.

Two additional film units were at work simultaneously for two-month periods. One shot in Plymouth harbor, and then tracked the first unit to Sardinia and Egypt, specializing in action scenes.

Another crew, based out of Nassau in the Bahamas, was under the supervision of Michael Wilson, Special Assistant to the Producer. Another Bond regular, Lamar Boren, who worked on underwater sequences of "THUNDERBALL" and "YOU ONLY LIVE TWICE", was once again behind the cameras during a sixteen-week shooting schedule.

On the back-lot at Pinewood, there is a wooden hut with peeling paint dating from the Second World War, which bears the discreet designation: SPECIAL EFFECTS. It is here that the mad ideas of the scriptwriter, director and production designer are transformed into reality by Derek Meddings and his boys.

The armourer, Q, when time comes to equip James Bond for his latest mission, would be lost without Derek. A whole series of weapons and gimmicks were in the course of preparation for months, awaiting their unveiling at the release of the film.

The WETBIKE is being introduced by James Bond in "THE SPY WHO LOVED ME". This is Nelson Tyler's latest invention, straight off the beaches of Southern California — a motorcycle on waterskis.

During the phase of filming that took place at Pinewood Studios, *American Cinematographer* Contributing Editor David Samuelson conducted the following joint interview with Production Designer Ken Adam and Director of Photography Claude Renoir:

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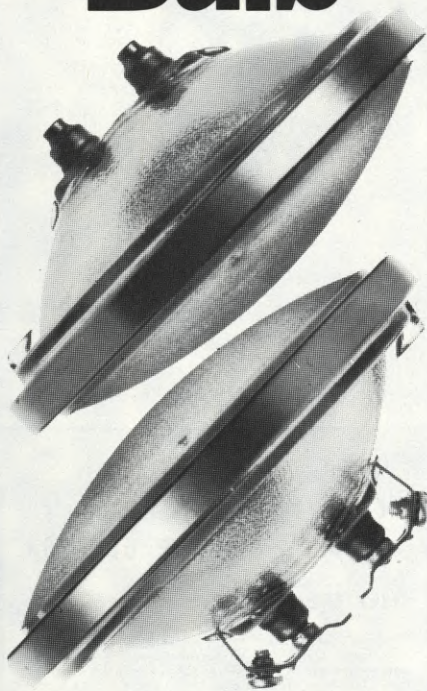


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unique to the industry — to say the least — and a facility the size of the new 007 Stage at Pinewood is obviously a major investment in the future of film-making in the grand manner. I can understand why it was necessary for the current Bond picture, but do you anticipate other such large-scale productions developing in the future?

KEN ADAM: Yes. I can't specifically name them at the moment, but obviously, certain other producers would like to use the stage. I feel that there is a tendency for certain creative directors to go back to the studio type of picture because, with television and new camera lenses and commercials, real life has been so much exploited. You see seascapes, landscapes, mountainscapes — all beautifully portrayed on television and in documentary films — whereas, a studio can provide a form of magic, of artificiality. You have only to look at the "BUGSY MALONE" musical, which re-created the 30's, or a Fritz Lang picture of the 20's to realize that the studio-made film provides a special kind of entertainment — a form of escapism, I think. A lot of directors feel the time has come to go back to the studio-type of picture. Fellini never shoots anywhere else now but in the studio, and even Kubrick is getting to think that way.

CLAUDE RENOIR: You know, I have done pictures in France with directors who, up to now, have never made a picture in a studio. One of them told me: "I'm not sure I can shoot in a studio. I have never done so and I don't know what to do with a set." They are very young people, all of them, and they are doing well, but they do not want to go into a studio. Of course, in France we have no more studios. We shoot in houses or flats or anyplace — but we manage quite well.

SAMUELSON: In the same way that a director may have certain qualms when he considers going into a studio, do you feel, when you look at something the size of the 007 Stage, "How on earth am I going to light it?"

RENOIR: That set is completely closed on top and we show the ceiling in most of the shots, so the problem is the same as it is in some real-life locations — no place to put lights, without showing them in the picture. There is no room for big lamps, so I am using a lot of very small lamps and the practicals in the scene. For example, we are using between 9,000 and 10,000 amps of light, and for a long shot we

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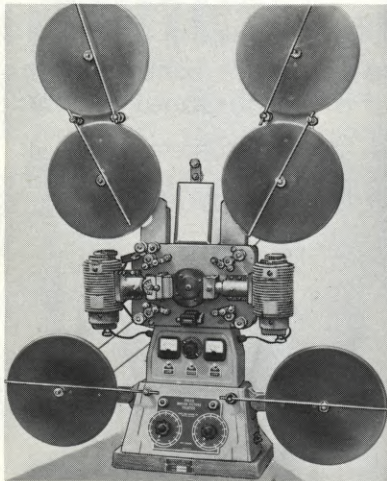
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are surrounded with lights, but I don't use more than 12 to 15 10K's. The rest are only 2K's or 1,000-watt Redhead quartz lights or nine-lights.

SAMUELSON: Not a single Brute?

RENOIR: No.

ADAM: The more natural a set can look, the better it is. The theory that you have to see every angle of the set is old-fashioned. To create an atmosphere and to have it look as natural as possible, it is necessary to have natural lighting. Unnatural lighting makes the result look unnatural. I felt that, on this set, I should give Claude as much practical lighting as possible because, otherwise, it wouldn't look effective. I also gave him a lot of reflective surfaces. I started him off with other sets which had reflective surfaces so that he could play about and experiment, because I think it's exciting to see flares and reflections.

RENOIR: Where you cannot put light, it is much better not to put light than to put too much.

ADAM: On this big set we have a major light change. When the submarine enters the set it is in relative darkness, and then the lights go on and expose the whole set. To my way of thinking, when Claude kept the set dark it looked more dramatic than when all the lights went on. In my earlier days as a designer, I tried to make it possible to see every detail of the set, and the first person who really said I was wrong was Stanley Kubrick. He knows a lot about photography and I had to agree with him and ever since then I haven't cared about beautiful long shots, etc. I am much more interested in the composition of the shot. Hopefully, I give cameramen the elements to compose on and to create dramatic lighting. I think that's much more important than seeing every little detail.

SAMUELSON: More economical, too!

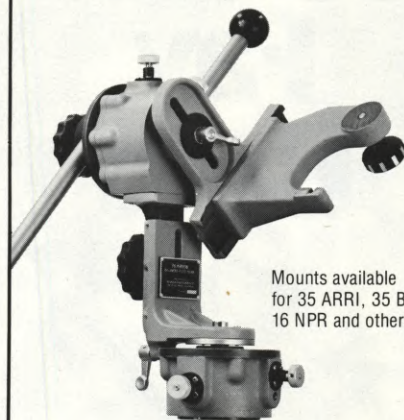
ADAM: Well, I don't know about that — because you still have to have all the elements there.

SAMUELSON: But isn't it part of the Production Designers art to consider "value-for-money" on the screen?

ADAM: It depends on the sort of picture you're making. If you are going to do a James Bond film nowadays, you've got to go in for big spectacle and big sets, but you've got to think a bit and find out which is the best way of

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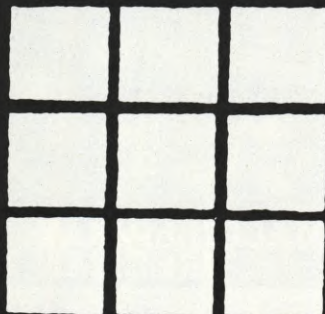


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achieving this, as you can easily go overboard. On pictures like this you do gain a certain amount of experience, and you try to ensure that if you make the production spend a lot of money, all that money will end up on the screen. Nothing is more disastrous than spending a lot of money and then finding that the production value is not on the screen. Nothing is worse than spending money in the wrong direction.

SAMUELSON: Is it up to you as to whether a picture is shot principally on location or in the studio?

ADAM: Well, that's one of the mysteries of filming. My theory is that very often it is more economical to build a set and shoot in the studio than to use a location where a lot of additional charges are involved. I don't think one can generalize, but my feeling is that, in the case of a picture like "BARRY LYNDON", we probably could have filmed that one more economically by using a series of great locations and some fabulous interiors of stately homes, but done the rest in the studio. To my mind, it would have been more economical than doing the whole picture on location, as we did, and I think that Stanley Kubrick now feels the same way. People are coming back to the studio to get escapism, but I think it is for economic reasons, as well. When I did "THE OWL AND THE PUSSY-CAT" in New York, it was affirmed that the picture should be done basically on location, but the interiors were built in a New York studio. Now, that picture was, hopefully, a successful combination of studio and location. There are no hard and fast rules, but I think that if you want to create escapism, then very often you can achieve that better in a studio.

SAMUELSON: (to Renoir) Claude, how do you feel about shooting on location as compared to shooting in the studio?

RENOIR: Well, for a lighting cameraman it is much more wonderful to work on a studio stage, because you can do with the lights exactly what you want. It's sometimes nice to work on location, especially in a beautiful country, but you have to accept the weather as it is. You cannot always control it, so what ends up on the film is not absolutely under your control. Really, I much prefer to work indoors, in the studio, because you can work precisely as you want to.

SAMUELSON: Can you describe, in general, the style of photography you

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RENOIR: It is very difficult to answer that kind of question, because I use a different style on every picture I do. But I never think about it before starting the picture. It comes by itself, according to how well I understand the script — and how much I like or dislike the director. In this case the director is Lewis Gilbert, with whom I have done many pictures. I know him very well and I know what he wants. That's a big help for a cameraman. As for style — when starting a picture I always think that I will not do anything very different, but it always comes out different. It's not a matter of lighting; it's a matter of understanding the story. On this one I'm not doing especially tricky things. I'm just trying to understand what's needed and doing my best. That's all.

SAMUELSON: Have you been influenced at all by the previous James Bond films that have been made?

RENOIR: No. I like very much what I have seen in some of the Bond films, but I prefer not to think about them, and do it my way. Even if they are very good, you must never try to do the same. It is better to do it your own way. Sometimes it may be worse — but at least it's different.

SAMUELSON: Do you find it very different to work here in England, as compared to working in France?

RENOIR: I worked here quite a long time ago on "CLEOPATRA" and I have no problem at all here. In fact, for me it is even a little bit easier. In France, for example, when I need something I have to think about it for a week in advance so that it will be ready. Here, you just ask and you've got it. But as for working in different countries — I've worked in Spain; I've worked in California, and in Miami once. For the cameraman it is all the same. Film is an international dialect.

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SCIENTIFIC/TECHNICAL AWARDS**
Continued from Page 492

recommendations made by the Scientific or Technical Awards Committee, of which Donald C. Rogers is Chairman.

The following awards were presented:

CLASS I [Academy Statuette]
NONE

CLASS II [Academy Plaque]

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the Barnebey-Cheney Company for the development of a system for the recovery of film-cleaning solvent vapors in a motion-picture laboratory.

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To William L. Graham, Manfred G. Michelson, Geoffrey F. Norman and Siegfried Seiber of Technicolor for the development and engineering of a Continuous, High-Speed, Color Motion-Picture Printing System.

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CLASS III [Academy Citation]

To Fred Bartscher of the Kollmorgen Corporation and to Glenn Berggren of the Schneider Corporation for the design and development of a single-lens magnifier for motion-picture projection lenses.

The magnifier is a supplementary lens which may be attached to a projector lens, and which provides variable adjustment to accommodate various motion-picture formats.

To Panavision Incorporated for the design and development of super-speed lenses for motion-picture photography.

This series of super-speed lenses provides superior image resolution by reduction of lens aberrations to improve motion-picture photography under low-light conditions.

To Hiroshi Suzukawa of Canon and Wilton R. Holm of the AMPTP Motion Picture and Television Research Center for the design and development of super-speed lenses for motion-picture photography.

This series of super-speed lenses provides superior image resolution by reduction of lens aberrations to improve motion-picture photography under low-light conditions.

To Carl Zeiss Company for the design and development of super-speed lenses for motion-picture photography.

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PHOTOGRAPHING "AIRPORT '77"
Continued from Page 522

because the very nature of the plane sets demanded width all the time. The compactness of the Panaflex made it possible to get around easily inside those cramped sets, whereas a bigger camera would have made it necessary to take walls out.

QUESTION: Do you have any further comments on the filming of the picture?

LATHROP: Only that we had an expert team to put it all together. Jennings Lang was our Executive Producer and he really knows how to handle this kind of subject. Bill Frye, our Producer, always seems to mount a picture well. He has good taste in everything from sets to the casting of actors and he takes a big load off the shoulders of the director. Jerry Jameson directed and did a wonderful job. This was his first theatrical feature and a very complicated one to shoot. He had to shoot for a few days here, then go over and finish a set there and get that set out of the tank and come back and shoot this while they were putting the new set in — enormously complicated. He's a very talented man, very innovative and pleasant to work with. George Webb, the Production Designer, did a magnificent job in coordinating all the sets and getting them to work with the effects. Al Whitlock created some unbelievable composites for this picture. He did some things that I've never seen done before. He put together things that I didn't think were possible — like the airplane coming up out of the water. I think he really went far beyond the things he did in "THE HINDENBURG", for example. He's gotten so good at it that he just hides everything. His theory is to keep an effects scene on the screen the shortest time possible — and I agree with that — but his work can stand a long look. He saved the company a lot of money with what he did on this picture. ■



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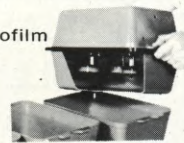
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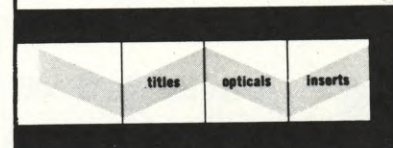
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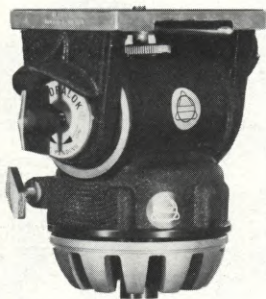
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