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If you want a piece of the future, you'll have to get in line. There is a certain responsibility that comes with creating a product that will change the course of filmmaking. Particularly when it is available in limited numbers to a vast market that will be stunned by the product's appearance and capabilities. That product is the TGX-16, a 16mm single system/double system film camera that advances filmmaking into the 21st century. **The Camera.** We could fill four pages of this magazine with the uniqueness of its features. But we'll let our free brochure, which you'll be sending for today, tell the whole story. However, to whet your appetite, imagine a package of scarcely 8 lbs. on your shoulder (less than 15 lbs., loaded and lensed to the gills). A Hi Rez body that ignores extremes in temperature, outside sound, scuffs, scrapes and scratches. A body that's virtually indestructable. It has a half-heart cam movement for fast pulldown and high-speed capability. It offers quiet and efficient straight engagement. It forms loop automatically. A 400' coaxial cassette mag is encased in the TGX-16 as part of the configuration of the camera. But you can top-load a 1200' Mitchell mag. A heavy-duty flange mount accepts all 16mm format lenses. There's a constant and variable speed crystal motor. Positive locking of speed. And an illuminated frame line. The TGX-16 has a multi-informational viewfinder with a VU meter for sound level, an out-of-sync warning light, digital footage counter (with a memory, no less) and low battery warning light. The battery is an integral part of the camera, runs a minimum of six cassettes and can be charged in as little as 15 minutes. The self-contained detachable one-pound amplifier is a marvel in itself with enough incredible features to warrant a separate ad. The magnetic head, which features linear flow systems, eliminates film flectures and assures purity of sound. The electronics of the TGX-16 are all on printed circuits, so 24-hour service becomes commonplace instead of wishful thinking. You must be on our Option List. Now that we've whet your appetite, we would hate to see you disappointed. The TGX-16 is in full production by our manufacturing arm, Texas General Cine Corp. We expect orders over the next two years to be triple that of our production capability. By filling out the coupon at the bottom of this page, you will reserve an option for yourself and at the same time request a more comprehensive brochure. You will, in the near future, have the opportunity to exercise your option or be dropped from the list. The future is now. Gentlemen: Please place me on your option list for the TGX-16 camera, and forward a brochure immediately. I understand that I am under no obligation to buy. NAME. COMPANY PHONE **ADDRESS General Camera** (212) 594-8700 corporation 471 Eleventh Avenue, New York, N.Y. 10018

Will Rogers never met Sy Cane.

What's to like?

Sy Cane is cheap. In fact, his prices on every conceivable piece of motion picture equipment are as cheap as anybody's.

Sy Cane is boring. He knows more about cameras and equipment than Euell Gibbons knows about wild hickory nuts. And he's surrounded by a staff of camera fanatics with a single-minded expertise that borders on tedium. The only other thing Sy knows is the time of day. But he won't give it to anyone.

Sy Cane is argumentative. He won't sell you equipment just because you *think* you need it. He thinks it's wrong to sell someone more camera than

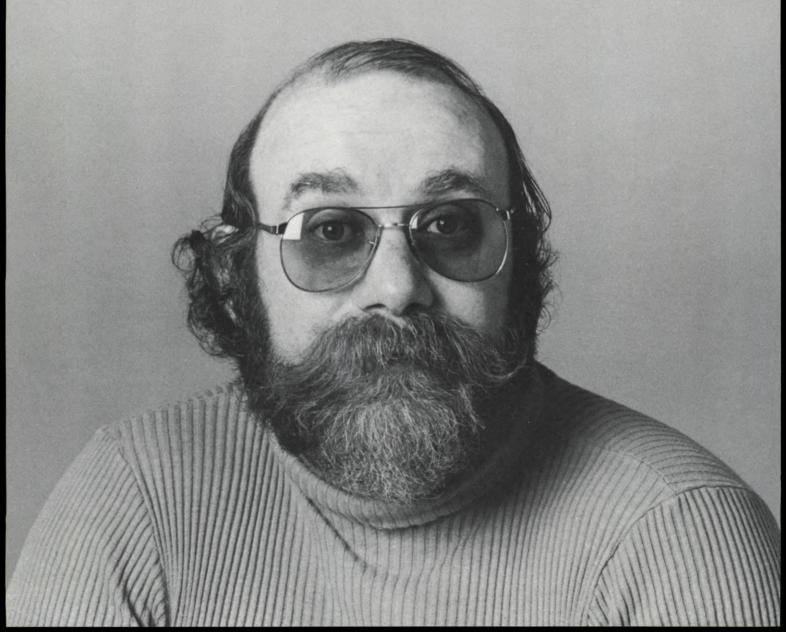
the job calls for (a character flaw, we suppose).

Sy Cane is fussy. Fussy enough to hire Eclair's Bernie O'Doherty to head up the Mobius service department. And heartless enough to guarantee 24 hour service in many cases, by threatening Bernie's life.

Sy Cane is impossible. Yet, through nobody's fault, a reality. He is, quite frankly, a man that only a customer could love.

MOBIUS

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American Cinematographer Cinemational Journal of Motion Picture Photography and Production Techniques

The American Society of Cinematographers is not a labor union nor a guild, but is an educational, cultural and professional organization. Membership is by invitation to those who are actively engaged as Directors of Photography and have demonstrated outstanding ability. Not all cinematographers can place the 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, 1975

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ON THE COVER: An ethereal representation of the "Oscar", as the golden statuette is affectionately called, which is awarded by the Academy of Motion Picture Arts and Sciences during its annual awards presentation ceremony in Hollywood, in recognition of excellence in 21 arts and crafts of motion picture production. Cover design and photograph by DAN PERRI.

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These are but several of hundreds; and of the hundreds of reasons why Cinema Research optical/special effects services are preferred, we'd like to mention a few of the more important ones:

- Color and density corrections of unsurpassed quality utilizing the B&H additive color head and Hazeltine color analyzer
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35mm titles and optical work by Cinema Research are also a proven success over the years; the shows like *Mannix—Star Trek—Mission Impossible—Longstreet—Happy Days—Korg*, 70,000 B.C.—Run, Joe, Run—Magician—Me and the Chimp—Escape—The Immortal—Funny Face—Across 110th Street—Visions of Eight—Women in Chains—Heist—Egan—Sounder—and many more.

In case there are any skeptics left.

We think there is convincing evidence that the French Eclair ACL is the finest 16mm camera of its kind in the world.

From the beginning, the ACL was designed to incorporate the most successful features of the world-famous Eclair NPR. But the ACL was designed to be even smaller and lighter. The simplicity with which it was engineered assures a compact, flexible, mechanically reliable camera.

Just in case we still haven't convinced you of its superiority, here are three impressive new developments.



The French ACL now boasts an all-new, heavy-duty, variable speed, crystal control motor that lets you film at speeds of 8, 12, 24/25, 50 or 75 fps. It is so incredibly accurate that within 400 ft. of continuous running, the maximum discrepancy between picture and sound is 1/12th of a frame.

In all, it is the finest motor ever developed for this camera.



The French ACL also has a new instant snap-on, 400 ft. coaxial magazine. It features a

proven drive and takeup system to insure silent operation and unquestioned reliability. It also borrows its double counter system from the NPR so it indicates the amount of unexposed footage remaining in both feet and meters.

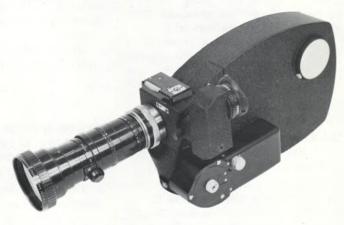


The French ACL features an exclusive new through-the-lens light exposure monitoring device called LED 7.

The LED 7 system incorporates seven light emitting diodes in the viewfinder which light up to alert you instantly to any deviation in exposure level from a given setting.

LED 7 allows you to readjust the aperture setting to compensate for changes in light without your eyes leaving the viewfinder.

Other manufacturers are continually forced to develop new models. The French Eclair ACL has been engineered so well that all we have to do to stay ahead is to add to our basic model.



The French Eclair ACL E-Cam Company

P.O. Box 3955, North Hollywood, Calif. 91609 (213) 466-3700

For the complete line of French Eclair cameras including the NPR, the ACL, the Cameflex CM-3, the GV-16 and the GV-35, contact your local dealer or the E-Cam Company.

WHAT'S NEW

IN PRODUCTS, SERVICES AND LITERATURE

KODAK ANNOUNCES NEW EASTMAN VIDEO NEWS FILM

A new color film for television news coverage that offers finer grain and more rapid and economical processing has been announced by Eastman Kodak Company.

Eastman Ektachrome video news film 7240 (tungsten) offers television news departments the flexibility of using one film that can be exposed at various exposure index ratings. With 10-footcandles' illumination, normal density ranges can be obtained using typical film equipment. The new film maintains the excellent quality of Kodak Ektachrome EF film 7242 (tungsten) and, when shot at higher ratings and force-processed, it exhibits significantly improved grain compared to that film.

Because Ektachrome video news film 7240 is prehardened during manufacture, the new process VNF-1 eliminates the prehardener and neutralizer solutions of process ME-4. The remaining steps in process VNF-1 are the same as the corresponding steps of process ME-4.

Process VNF-1 is compatible with current machinery and, because two steps have been eliminated, offers operating-economies over the current process. These include a 15-to-35-percent reduction in chemical costs and 18 percent shorter wet-time.

The film will receive a trade trial as SO-333 and will enter general distribution as Eastman Ektachrome video news film 7240 (tungsten) at mid-year.

UNIQUE EXPOSURE MONITORING SYSTEM NOW AVAILABLE FOR ECLAIR ACL

The LED 7, a unique exposure monitoring system, is now available for the Eclair ACL, according to Sam Getzoff, general manager of E-Cam Company, exclusive U.S. distributors of French Eclair cameras and accessories.

The LED 7 system incorporates seven light-emitting diodes in the view-finder which light up to alert the cameraman instantly to any deviation in exposure level from a given setting. The system allows the cameraman to readjust the aperture setting to compensate for changes in light while filming without taking his eye from the viewfinder.

The system is not a replacement for the conventional light meter and, in fact, is not a light meter at all, Getzoff reports. It also is not an "automatic exposure control," a term which, for the most part, has been synonymous with amateur cameras, according to Getzoff.

The LED 7 is a professional tool for professional filmmakers, Getzoff says, and he feels it is an invaluable accessory for the ACL.

For additional information and price, write Getzoff at E-Cam Company, P.O. Box 3955, N. Hollywood, Calif. 91609 or phone (213) 466-3700.

GENERAL CAMERA ZOOMS TO 150MM.

The TGX Division of General Camera Corporation has announced the addition of the Astrosonic 12mm-150mm lens to its line of lenses for the TGX-16mm Cine Sound System.

Created specifically for the TGX, the Astrosonic has a focal range of 12mm to 150mm and an aperture of T/2.3. The extra focal length provides a new range heretofore unattainable with 10X lenses. Its size and weight, which are equivalent to that of the 12-120's currently in use, permit easy hand-held shooting.

The lens will be available for delivery April 15th at a list price of \$2290.00.

BYRON MOTION PICTURES IS FIRST IN U.S. TO GET CBS LASER BEAM TAPE-TO-FILM TRANSFER

Byron Motion Pictures, video tape and film laboratory, has installed a CBS laser-beam color tape-to-film transfer recorder, making Byron the first and only such company in the nation to obtain the device developed by the CBS Laboratories.

The recorder, through three laser beams, transfers video tape of any standard format to film for 16mm, Super-8 or 35mm release.

According to Byron Roudabush, Byron president, the capabilities of the laser transfer system are limited only by the quality of the picture originally recorded on the tape.

"This is another step in the expan-

sion of both our tape and our film services to producers and distributors," Roudabush said.

"Our experience with tape transfer and duplication over recent years has convinced us that the two methods of duplicating sound and picture, tape and film, will continue to expand — that both tape and film will be required in volume for our country's growing informational services and increased demands for television and screen entertainment," Roudabush added.

The laser is the most recent technological breakthrough in transferring pictures recorded on tape to motion picture film.

Roudabush said the CBS development "provides a new standard of quality for video tape-to-film transfer, without incurring the high production costs associated with systems using color separation processes.

"Unique features of the laser colorfilm recorder are high resolution, low noise, no phosphor-decay effect, excellent scan linearity and precise color registration. The double-system method of transfer is used and includes separate picture and sound negatives for release printing."

Pointing up his confidence in the new recorder, Roudabush said he has invested more money in this single piece of equipment than in any other piece of laboratory equipment in the past.

NEW BELL & HOWELL MODEL C CONVERSION KIT

Today, PSC Technology Inc. announced an important new product for the motion picture industry, their "C/Kit".

The "C/Kit" allows current owners of Bell & Howell's Model C to upgrade this unit to a high-speed, bi-directional printer with automatic light changes.

The "C/Kit" is completely field-installable and PSC provides an easy-to-use tool kit for assistance in installation which takes 4 to 8 hours.

With the "C/Kit" the Model C user has a panel printer at his disposal for a price four-to-eight less expensive than the purchase of commercially-available panel printers.

The "C/Kit" was designed by Dr. Hans Chr. Wohlrab, a noted physicist in the motion picture industry, and is being manufactured and marketed by PSC

Additional information and prices are available upon request. Contact: PSC Technology Inc., 1200 Grand Central Avenue, Glendale, California 91201. (213) 245-8424.

AGE LENS SALE SALE ENDS JULY 31, 1975









CAMERA LENS	ES
"C" MOUNT SAL	E PRICE
"C" MOUNT SAL	
(New)	\$310.00
25mm Switar f1.4	99.50
15mm Nominar f1.4	49.50
25mm Cine Ektar f2.8	125.00
50mm Cine Ektar f2.8	185.00
63mm Cine Ektar f1.6	185.00
10mm Angenieux f1.8	
(New)	385.00
18.5mm Angenieux f2.5	
(New)	505.00
(New)	
(New)	310.00
13mm Elgeet f1.5	
3inch Elgeet f1.9	150.00
4inch Elgeet f2.7	150.00
17.5mm Baltar f2.3	165.00
25mm Baltar f2.3	145.00
29mm Baltar f2.3	145.00
35mm Baltar f2.3	155.00
50mm Baltar f2.3	150.00
"S" MOUNT	
15mm Cine Ektar f2.5	
(New)	135.00
ARRI MOUNT	100.05
15-inch Wollensak f5.6.	199.95
150mm Kilfitt f3.5	175.00
300mm Kilfitt f5.6	
25mm Schneider f2.2	
50mm Schneider f2.2	250.00
50mm Cook Kinatel f1.8.	750.00
75mm Kinoptik f.2 EYEMO MOUNT SAL	
	\$255.00
35mm Miltar f2.0	285.00

	75mm Miltar f2.0 360.00 100mm Miltar f2.0 460.00 152mm Miltar f3.4 350.00 25mm Eymax f4.5 28.00 50mm Eymax f2.8 70.00 50mm Eymax f4.5 35.00 75mm Eymax f4.0 55.00 162mm Eymax f4.5 45.00
	ZOOM LENSES
	"C" MOUNT
	9.5-95mm Angenieux with
	1" viewfinder f2.2
	(New)\$3,650.00
	12-120mm Angenieux
	f2.2 with 1" viewfinder
	(New) 2,550.00
	20-70mm Pan Cinor
	f2.4 150.00 25-100mm Canon TV16
,	
	f1.8
	f3.5
	12-120mm Angenieux f2.2 895.00
	12-120mm Angenieux
	f2.2 (New) 1,925.00 17-85mm Pan Cinor with
	power zoom f2.2 350.00 CA 1 MOUNT
	12-120mm Angenieux
	f2.2 (New) 1,925.00 "B" MOUNT
	10-100mm Zeiss F Arri
	f2.8 (New) 1,525.00
	ALL EQUIPMENT USED UNLESS OTHER- WISE SPECIFIED. ALL USED EQUIPMENT

PROJECTION	LENSES
SANKOR 16mm and	

SANKOR 16mm and
35mm LIST PRICE
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Sankor 16mm Regular
RCA, B&H, Ampro, etc.,
4 element From \$39.50
Sankor 16mm Super
Series, 6 element From \$49.50
Sankor Anamorphic
Model C\$129.50
Sankor Anamorphic
Model D\$149.50
Adapter for
Anamorphic From \$13.95
35mm Sankor 2"
to 3.25" \$149.50
35mm Sankor 3.50"
to 5" \$120.00
Sankor Anamorphic \$350.00
35mm Mini Pro
Anamorphic Lens \$295.00
Adapter \$ 22.50 SOMCO 16MM
½" f2.4, 6 element \$135.00
5%" f2, 6 element \$ 66.00 1", f1.9, 4 element From \$48.00
1, 11.9, 4 element \$56.00
1½", f1.6, 4 element
with field flatener \$58.00
2", f1.6 \$52.00
2, 11.0

All above lenses are NEW and available at 20% off list price through July 31, 1975. Many Used 16mm and 35mm projection lenses available from \$15.00 and up.

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MAKINGHTANFELLM

John Hancock

"I was a theater director before films.

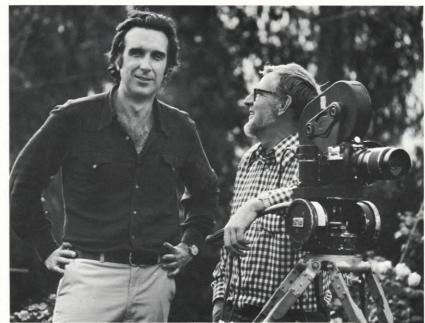
"I ran a theater in San Francisco, in Pittsburgh; I won an 'Obie' in New York for 'Midsummer Night's Dream.' The things I'm proudest of I've done in theater, but one thing began to bother me.

"I had the feeling that, whatever I did, I was, as they say, sculpting in ice. There was something fleeting, something transitory about live theater. It didn't last. And I guess that's why film is more fun. Because it does last.

"I'd always wanted to make films, so I applied to the American Film Institute for a grant. I got one, for



\$10,000, to make a short called 'Sticky My Fingers, Fleet My Feet.' It's about a touch-football game in Central Park. We shot it there on Eastman film. It was shown on CBS-TV in prime time just before the annual Thanksgiving Day football game, and we were nominated for an Academy Award. The producer of 'Bang The Drum Slowly' saw



it, called me up, and said he wanted to make a film from a book about baseball that was already one of my favorite books. He put up the money himself, and that was it. When we were through making the picture, we showed it to the Yankees. It was like showing 'The Godfather' to the Mafia.

"But before that, my first feature was 'Let's Scare Jessica to Death', which also came about because the producer saw that short. It was a horror movie, a vampire movie. I liked that film, though, and it made a lot of money. I can't say I'm happy with the ending. But there's a lot in that film I liked.

"Technically, the stage and film are very different. But the core of what you do is the same. You face the same problems-how to make something clear, how to get a laugh, how to work with a group, how to keep your perspective.

"The important things about directing stay the same. You still control the rhythms. It's just like music; and whether you play it on the violin or the piano, the melody is still the same.

"How do you become a director today? I don't know. It's very difficult, very competitive. I never studied directing for theater or movies. It was strictly learn as you go. You just have to want to; you just have to try.'



Encouragement. That's what's 11-6 behind every Eastman Kodak Company development. For a copy of this and other interviews with people in the moving visuals industry, free of charge, write:

Eastman Kodak Company Dept. 640 YF, Rochester, N.Y. 14650

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HIGH FIDELITY IN SUPER-8 THE BEAULIEU "5008S"

Sound. The newest dimension in Super-8 movie making. With Kodak's new sound movie cartridges, you are now able to film perfect lip synchronized sound movies using only a sound-on-film Super-8 camera and a microphone.

Beaulieu was first to take this concept of sound-on-film Super-8 and give it a professional touch with the introduction of the "5008S".

Professional "High Fidelity" Sound

Insert a new Super-8 sound-on-film cartridge. Plug in the mike. Then, focus. That's all the preparation you need. With the Beaulieu "5008S", you're now ready to start filming professional quality, high fidelity sound Super-8 movies.

An amplifier is built into the camera which records perfect lip synchronized sound directly onto the magnetic stripe of your sound film. The camera records high fidelity sound, both in treble as well as bass (frequency response: 50-12,000 Hz ± 1.5 dB; distortion: less than 0.75%; signal-to-noise ratio: 57 dB; wow and flutter, attenuated peak: less than 0.4%).

The "5008S" modulates the single system sound recording automatically. Or, you can modulate the sound "manually" as you are filming (by using the VU meter).

From the "Widest" Wide Angle . . . To An Extremely Long Telephoto

Imagine what you could do in 35mm still photography with a 35-400mm zoom lens!

You can achieve this comparable effect with the Beaulieu-Optivaron 6-66mm (11 to 1 zoom ratio) lens on your "5008S".

Continuously Variable Power Zoom

The power zoom of the Beaulieu "5008S" is continuously variable. You can travel the full focal length range in

2 seconds, or 12 seconds (or any speed in between).

Macrocinematography (Special Effects)

Film macrocinematography (insects, coins, stamps, and other small objects) —without the use of attachments or additional accessories—at any distance ranging from the front lens element to five feet.

A unique, additional feature of the Beaulieu macro system is the ability to create special effects such as soft-focus fade-ins and fade-outs.

Fully Automatic Exposure Control

The diaphragm of the "5008S" operates automatically and stops in-

stantly at the right aperture. Exposure accuracy is governed by a new Reflexmatic Motor (Beaulieu-patented). (This feature has "Manual Override".)

Lens Interchangeability

Although the "5008S" comes equipped with a 6-66mm zoom lens...you can interchange an unlimited number of other lenses in order to create a certain feeling or effect in your films. The camera accepts all "C" mount lenses, as well as 35mm still camera lenses (when using the proper adapter).

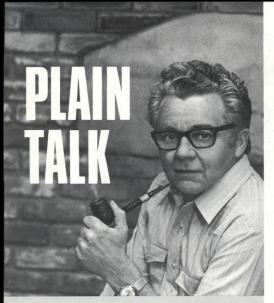
For full information on the new Beaulieu "5008S" HIGH FIDELITY SOUND Super-8 Camera, please write to:

HERVIC CORPORATION

14225 Ventura Boulevard Sherman Oaks, California 91423



(equipped with a Beaulieu-Optivaron 6-66mm zoom lens)



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!



1941 FIRST ST. ● SAN FERNANDO, CALIF. 91340 PHONE: (213) 365-3124

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.)

What is the scope and function of the Special Effects department of a motion picture studio?

To outline the exact operation of the Special Effects departments in the Hollywood studios would be very nearly impossible, as each studio operates its effects departments in a different manner.

The term "special effects," as used in Hollywood, covers such things as lighting a fire in a fireplace, the laying of artificial fog, and creating a rainstorm or an earthquake, etc. The term also applies, in many studios, to all of the miniature work, the optical printing, and the matte painting work. However, the more exact term for the latter is Special Photographic Effects.

In some studios, there is a Special Effects Department (devoted to the effects outlined above) and a Special Photographic Effects department. Also, in some studios, the Prop Shop produces all full-scale and miniature effects.

My future work in cinematography will, for the most part, be with color film and involve subjects where good color quality will be vitally important. I have no experience, as yet, with color temperature meters. Please explain their function and importance in color photography.

A color temperature meter measures the color temperature of light sources used in motion picture photography. Its function is based on the principle that the spectral energy distribution of light sources at different temperatures can be defined reasonably accurately by stating the relative proportions of red and blue radiation which they emit.

This is what the color temperature meter does. Most meters of this sort operate by rotating a circular half-red, half-blue filter before a photocell. Where the blue content of the light is greater or less than the red, the meter will so indicate on its scale. Such readings are generally indicated in terms of Kelvin degrees (or "degrees Kelvin", as some prefer to term it), al-

though some meters indicate what filters to use to obtain normal photographic results with a given color film.

Popular color temperature meters presently in use are Gossen Sixti-color, Minolta, and the Spectra 3-Color.

In photographing a Chinese junk coming in towards a rocky promontory, I wish to achieve the effect of the craft coming through a fog, and becoming more clearly defined as it approaches. I have Harrison fog filters Nos. 2 and 4. Are there any special directions, filter factors, etc., to be observed in order to get the effect described? Camera to be used is an Arriflex 16; the film, daylight-type Kodachrome.

A Fog filters alone may not give the desired effect of increasing clarity as the subject approaches, because fog filters affect both background and foreground to about the same degree.

Used with real (or artificial) fog, such filters are useful to enhance the effect of the fog — especially in the foreground where real fog usually thins out.

Smoke, which is light in tone, may sometimes be used where artificial fogmaking facilities are not available; here fog filters can be useful in blending background with the foreground.

When fog filters are used, the resultant effect is best determined through actual tests where the photographer is not already familiar with the method. Usually, the end result is much less "foggy" than appears to the eye through the camera, depending, of course, on the aperture used and the subject contrast.

By combining fog filters, additional effect is obtainable. In color photography, bright hues often pick up in the background, and even a fairly pale blue sky will come through on film where it was unnoticeable through the camera.

Interesting fog effects can be improvised where time permits, by shooting through parallel glass cells into which small amounts of cigarette smoke are introduced or exhausted.

No factors need be considered for fog filters; they lighten the scene enough to make up for any transmission loss; in fact, it is sometimes necessary to stop down the lens.

Hand-holding the Arriflex 16BL: Balanced.

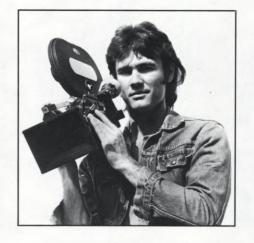
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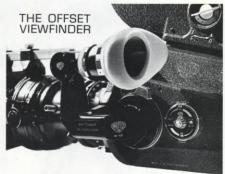
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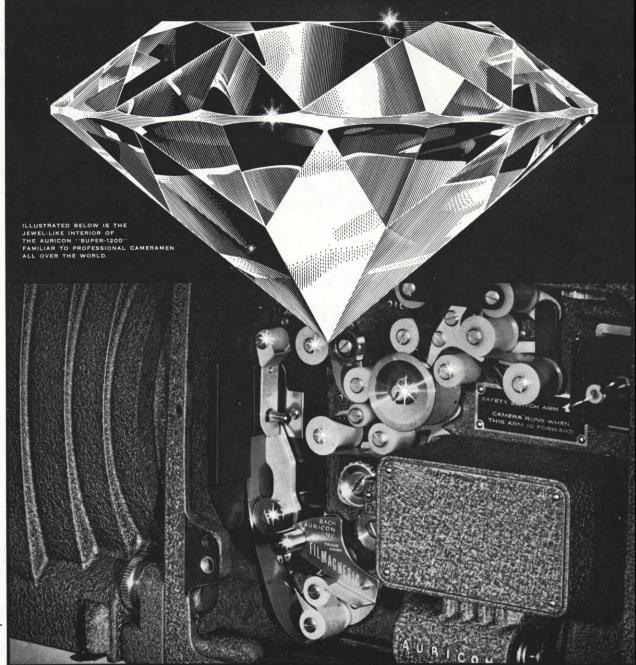


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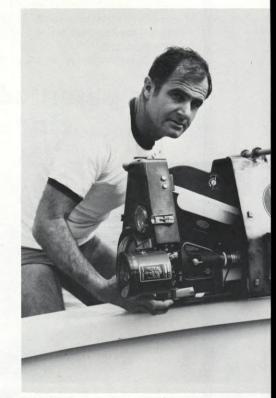
CINEMA WORKSHOP By ANTON WILSON

UNDERWATER CINEMATOGRAPHY

Location filming is definitely these days the thing. Elaborate sets and intricate process photography have been forsaken in favor of the more credible realism of the location, not to mention the significant savings of both time and money in most instances. Of course the word "location" can mean anywhere, and often does. Among the more exotic locations, underwater sites seem to be gaining in popularity. Industrials, documentaries, as well as theatricals and television, are employing more and more underwater footage. In light of this, it is not unlikely that a cinematographer will eventually find himself with an underwater sequence to shoot. Being basically a land mammal, the average cameraman may find working underwater somewhat alien. Some pertinent pointers on filming underwater may thus prove useful.

I have filmed in many diverse and unusual locations, but all above sea level. We once had an assignment to film in the Hudson River, but we wound up simulating the sequence in a tank filled with muddy water and two bags of garbage. This experience hardly qualifies me as an underwater expert.

The expert on underwater cinematography is without a doubt Jordan Klein. Jordan has logged almost a year of his life underwater. His screen credits include "THUNDERBALL". "20,000 LEAGUES UNDER THE SEA". "CREATURE FROM THE BLACK LA-GOON", the TV series "FLIPPER", and more than a hundred other films of all types. I visited Jordan recently at his Miami factory where he designs and builds underwater equipment, including camera housings. My visit was most enlightening.



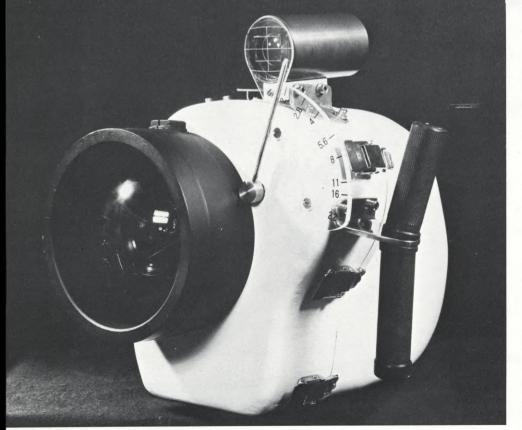
expert Jordan Klein, shown with one of his own underwater housings for an Arriflex 35mm camera. This is the camera most favored in the large format.

FIGURE 2 — Underwater cinematography

Certain cameras are better suited to underwater applications than others. For 16mm, the Arriflex 16M seems to be the first choice of professionals. Its small size, quick-change magazine and reflex system make it ideal for this work. The 16S Arriflex is not as well suited, due to its bulkier and more complicated magazine system, and the excessive current drain of its two motors (drive and mag torque). There are, of course, other cameras that can be used underwater. Bolex makes an underwater housing for the H-16 cameras that is ideal for certain semipro applications. More recently, Image Devices has introduced an underwater housing for the Eclair ACL 400', thus allowing this topside sound camera to double as an underwater rig. (Fig 1)

The Arriflex 35 is almost always the choice in the larger format. It is usually employed with the flat offset motor base. FIGURE 2 shows Jordan Klein Continued on Page 593

FIGURE 1 — The underwater housing recently introduced by Image Devices for use with the Eclair ACL camera, with 400-foot magazine — thus allowing this basically topside camera to double as an underwater rig.



"Chuck" Sorensen talks about angenieux engineering.



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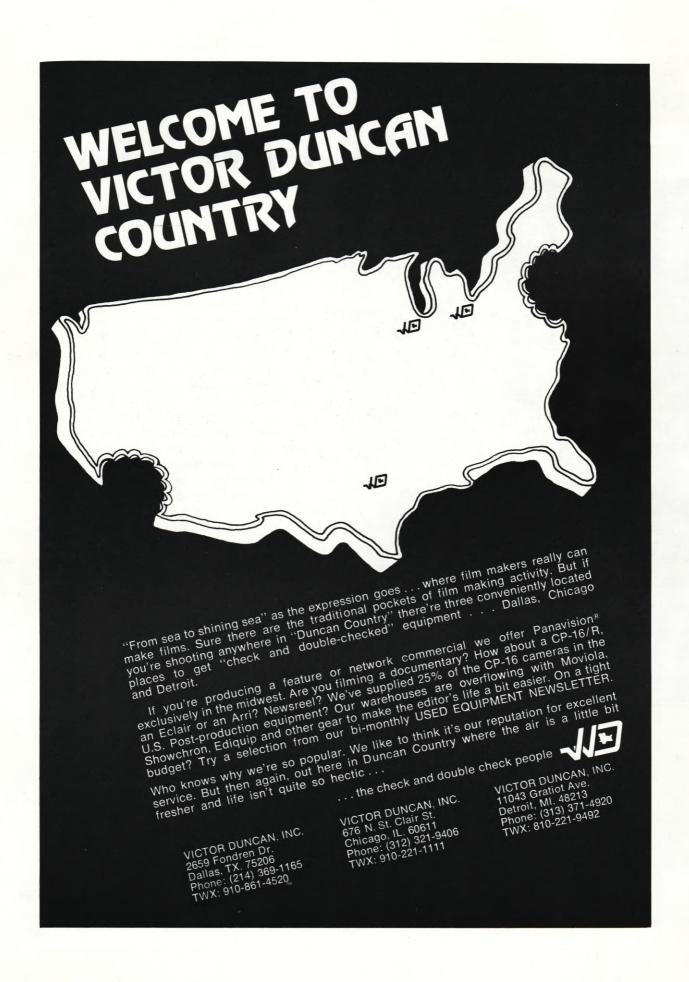
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CINEMATIC STYLES

In AMERICAN FILM GENRÉS, Stuart M. Kaminsky outlines a critical theory of popular film with a searching analysis of such categories as violence, (Mervyn LeRoy's *Little Caesar*), musicals (Bob Fosse's *Cabaret*), adventure (Norman Jewison's *The Thomas Crown Affair*). (Pflaum \$12.95/7.95)

A comprehensive reference work, THE GREAT SPY PICTURES by James Robert Parish and Michael R. Pitts covers 463 outstanding all-time samples of the genré. Cast-&-credits, plot summaries, reviews and comments, and a bibliography are provided. (Scarecrow \$17.50)

In the 30's Golden Era movies, the hero always got the girl, but not without some competition from those Alex Barris calls HOLLYWOOD'S OTHER MEN. This appealing and documented study of "successful losers" reflects the morality and illusions of another era. (Barnes \$15.)

In HOLLYWOOD'S GREAT LOVE TEAMS, James Robert Parish observes entertainingly 28 celebrated screen couples, from John Gilbert-Greta Garbo to Richard Burton-Elizabeth Taylor. (Arlington \$14.95)

D. W. Griffith's 1910 classic, A CORNER IN WHEAT is carefully transcribed in Vlada Petric's shot-by-shot breakdown, with an apt analysis of its cinematic structure and filmic devices. (University Film Study Center, Box 275, Cambridge, MA 02138, \$2.)

In PUPPET ANIMATION IN THE CINEMA, L. Bruce Holman offers a lively and informative study of the genré's history and technique. From Frenchman Emile Cohl's use of single-frame cinematography in 1910 to Ray Harryhausen's contemporary Hollywood work, artists like Jiri Trnka, Ladislas Starevitch, Hermina Tyrlova and the author himself have contributed an imaginative variety of filmed puppetry. (Barnes \$8.95)

Murray Schumach's THE FACE ON THE CUTTING ROOM FLOOR is a timely re-issue of his reliable 1964 study of film censorship. How far we have come since those repressive days is a measure of how far we still have to go to achieve true freedom of expression. (DaCapo \$15./3.95)

THE WIDE WORLD OF FILM

The British film industry of the 60's, a decade marked by recurrent crises despite a wealth of talent and successful movies, is summed up in HOLLY-

THE BOOKSHELF

By GEORGE L. GEORGE

WOOD U. K., Alexander Walker's highly readable and detailed account. (Stein & Day \$15.)

The prime role played by the arts — and specifically the movies — in post-World War I, pre-Hitler Germany is brilliantly evoked by Walter Laqueur in WEIMAR: A CULTURAL HISTORY, spotlighting such emerging celebrities as Fritz Lang, Sternberg, Lubitsch, Jannings and Marlene Dietrich. (Putnam \$8.95)

While love has always been the main ingredient of successful films, mainly its physical aspect concerns Parker Tyler in his fully documented and abundantly illustrated A PICTORIAL HISTORY OF SEX IN FILMS. His lengthy and erudite text shows considerable research, an understanding of the psychodynamics of sexual behavior, and an appropriate sense of humor. (Citadel \$12.)

USC Professor Arthur Knight surveys in SEX IN CINEMA No.5 the current perimeters of screen permissiveness. Legal hassles, themes, and styles are expertly discussed, with choice stills shedding further light on the subject. (Playboy Press \$1.95)

Prof. Paul Weiss adopts a philosophical stance in his penetrating exploration of film, CINEMATICS. By studying its various practitioners and genrés, comparing film to other art forms, and assessing the emotional response it provokes, the book reaches deeply into human consciousness and creative conditioning. (So. Illinois U. Press \$8.95)

PROS AND CONS

Birgitta Steene's INGMAR BERG-MAN is a sensitive interpretation of the director's visual world in terms of its literary qualities. The lengthy spoken passages in many of his films, the descriptive paragraphs he interpolates in his published screenplays, the narrative nature of many dialogues make it possible to adopt Bergman's urging that "no distinction (be made) between writer and director . . ." (St. Martin's \$3.95)

A broad survey of Canada's burgeoning film industry, INNER VIEWS by John Hofsess considers ten Canadian filmmakers. Among them are Claude

Jutra, Alan King, Paul Almond and Don Shebib, as is Graeme Ferguson whose IMAX large-screen, stereo singleprojector process is the sensation of Toronto's Ontario Place. (McGraw-Hill Ryerson \$8.95)

Gordon Hendrick's EADWEARD MUYBRIDGE unfolds the saga of the "father of the motion picture's" photographic experiments, amid the vicissitudes of his tumultuous private life. Extensive reproductions of his original photographs convey the full scope of his pioneering work. (Grossmasn \$25.)

Shirley MacLaine's adventurous explorations of the real world that took her through politics, woman's lib, China and back to the entertainment world are distilled in YOU CAN GET THERE FROM HERE, an impressive and honest account of a gifted woman still in search of herself. (Norton \$7.95)

A compassionate and well-researched biography, JUDY GARLAND by Anne Edwards tells the harrowing story of a performer's private life, the demonstrative adulation of a demanding public, and the inhuman practices of a talent's commercial exploitation. (Simon & Schuster \$9.95)

Revealing, in VINCENT PRICE UN-MASKED, the Renaissance man under the "King of Horror" screen personality, James Robert Parish and Steven Whitney have painted an appealing portrait of an art connoisseur, a discriminating gourmet, and an accomplished actor. (Drake \$9.95)

An ambitious biographical study of the late actress, JAYNE MANSFIELD AND THE AMERICAN FIFTIES by Martha Saxton attempts to assess the star's complex persona in terms of the period's swiftly changing morality. (Houghton Mifflin \$8.95)

The zany and often savage sense of humor that the late Ernie Kovacks displayed on television in the 50's and later in films is expertly captured in David G. Walley's fascinating biography, NOTHING IN MODERATION. The comedian's spontaneous gift for visual and verbal gags, his inspired onscreen mugging are faithfully reflected in this appealing memoir. (Drake \$9.95)

A zestful biography of Wilson Mizner, ROGUE'S PROGRESS by John Burke, evokes the palmy days of Hollywood when con artist Mizner, an all-around scoundrel born into a respectable California family, successfully used his uncommon wits to promote screenwriting jobs and to found the original Brown Derby restaurant. (Putnam \$8.95)

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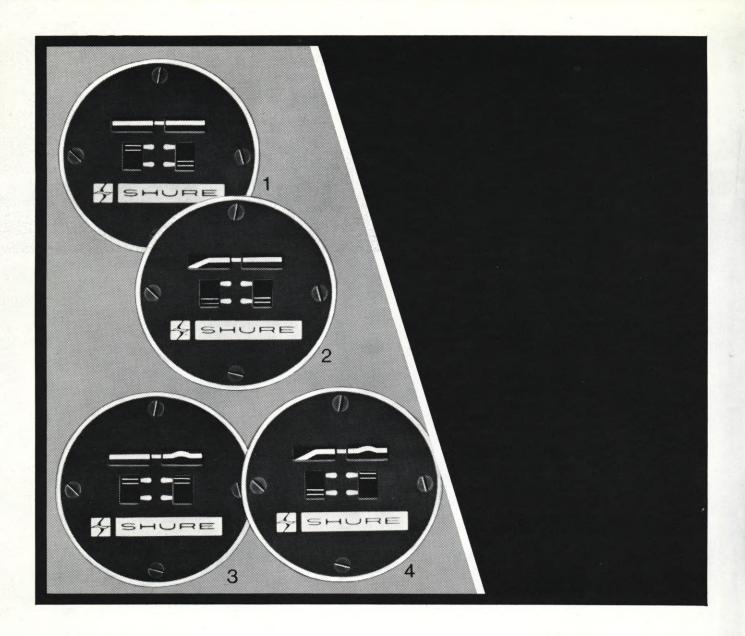
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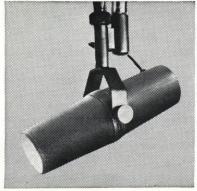
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PROFILE: A.S.C.

By JOHN ORMOND

FREDERICK GATELY, A.S.C.

Fred Gately claims that he was "born with a camera in my hands." That may be stretching matters a trifle, but the fact remains, Fred Gately has been active in the world of cinematography since 1929 and has compiled an enviable record of achievement in television as one of Hollywood's foremost directors of photography.

Commencing in mid-May, Gately will return to MGM studios for another eight-month stint as director of Photography for the highly-rated TV series, "Medical Center." His second season on the show continues a career which has been virtually uninterrupted since he arrived in Hollywood back in 1946.

That was when he photographed a feature film titled "Harpoon", starring John Bromfield. Subsequently, he was cinematographer on the Keenan Wynn movie, "Four Seasons".

His debut in television, then a new medium, came in 1951 when he shot the pilot film for the "Dragnet" series. Jack Webb retained him as the regular director of photography for the show during its initial season. The following year, he photographed the pilot — and then the weekly shows — for "Ozzie and Harriet".

"I'd have to say that the 'Dragnet' show was the key," he reminisces. "It led to a flock of TV assignments, one right after another."

Gately has worked at almost every studio in Hollywood, although he has never been under long-term contract. He prefers free-lancing. His list of TV credits is formidable. Beginning with "Dragnet" and "Ozzie and Harriet", it includes Lux Video Theatre, "Father Knows Best" (for three years) and "Hazel" (five years). He's also done the initial shows of such series as "Bewitched," "Jeannie" and "Farmer's Daughter".

He worked at 20th Century-Fox for five years, too, on "The Lancer" and "Nanny and the Professor" series. He also lensed The Rosemary Clooney Show, Cavalcade of America and did a late-50s stint at Walt Disney Studios on the "Annette" segment of the hugely-successful Mickey Mouse Club.

The Gately story, though, actually begins back in Chicago, where he took his first fulltime job for \$30 a week at the now-defunct Vitaglo Studios.

"That was in 1929, and I had given up a summertime job at \$100 a week doing portrait photography to take the assignment at Vitaglo," says Fred. "My parents thought I was nuts, but I just wanted to get into film camera work."

Gately recalls how he had frequent squabbles with Vitaglo's owner, a Mrs. Dunlap. She would fire him one day, hire him back the next. The squabbles notwithstanding, they actually respected each other highly. At Vitaglo, Gately produced and photographed his first film, titled "Man In The Making", for the University of Chicago.

"At Vitaglo, I was camera operator and assistant as well as cameraman, and I learned much of my craft there during four years."

Later, he worked at the Chicago Film Laboratories. "That was very important, too," he notes. "I received a very good backgrounding in lab work, and it has stood me in good stead ever since."

The man who played the greatest influence in Gately's early career, though, was a Major Spoor of the old Essenay Film Company.

"I always remember how I stood in awe of the first Bell and Howell film camera I'd seen," says Fred. "It had a hand crank, a 120-degree shutter and a small postage stamp-sized viewfinder that was upside down."

Major Spoor taught him how to use the Bell and Howell, and took a strong personal interest in Gately's work. It was Spoor who sponsored Gately's admission as a charter member of the cameramen's union local 666 in Chicago, when Fred was but 21.

Gately gives much credit for his advancement as a cinematographer, too, to his wife of 38 years, Rivia. During the anxious period when he was making the career adjustment from Chicago to Hollywood, Rivia went to work while he went the rounds, seeking that first West Coast job. Fred and Rivia had been married in Chicago in 1937, and she always has had great faith in his ability as a cinematographer.

Fred gained another milestone in his career when he was admitted to the elite American Society of Cinematographers in 1951.

"I was the very first director of photography from television to be accepted into the A.S.C. and for that, I'm very proud."

The Gatelys have lived for 21 years in a two-bedroom single-level home in the Beverly Glen area of West Los Angeles. Their grown-up daughter, Laurel, lives at home with them.

But the story of Fred Gately would not be complete without strong mention of his lifelong hobby: ham radio. He has been a ham radio operator for 45 years, and now operates station W6LNH. He also is a member of the Military Affiliate Radio System, a branch of the U.S. Army—and therein lies another important chapter of the Gately chronicle.

For years now, Fred Gately has worked with the Army, setting up telephone calls from U.S. servicemen in Vietnam, Cambodia, Japan, Korea and Okinawa, to their families at home.

With recent developments in Cambodia and Vietnam, these calls have ceased, but he continues to handle phone contacts for U.S. soldiers, sailors and airmen in Thailand and in Japan and Korea.

"I know I'm contributing something worthwhile to my country by doing this," he says. "It's a great feeling, being able to help our boys overseas get in contact with their wives or parents or girl friends, and to share in the happiness of these experiences."

Sometimes, the telephone operators working with Ered on the overseas calls eventually wind up meeting the servicemen in person when they return to the U.S.

"I've set up a lot of dates for these guys," says Fred with a grin. "It's almost like being a match-maker!"

On one occasion, the telephone company superintendent invited Gately to join the operators at a Halloween party at their exchange.

"Many of these girls had worked with me on the calls, but I'd never actually met them. We were all on a first name basis, and there was a warmth and cameraderie about the whole thing that made our job seem very worthwhile."

Gately maintains a two-way transmitter in his car and frequently talks to other ham radio operators around Southern California. They keep each other posted on current events and also relay calls for emergency help where and when needed.

All of which certainly indicates that Fred Gately has led a full and eventful life. He has never stopped working since that first job as a portrait photographer while still at high school. And he has maintained a lively interest in people, and in the world around him.

Fred Gately is a credit to the world of cinematography — and to the A.S.C.



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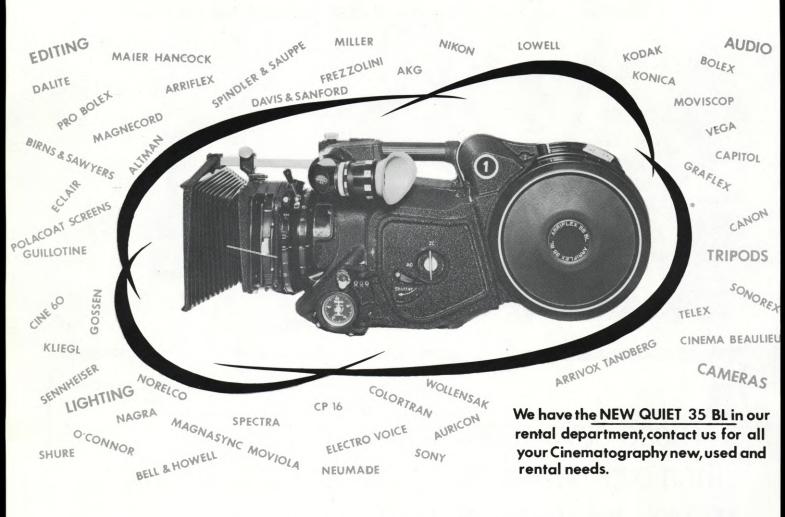
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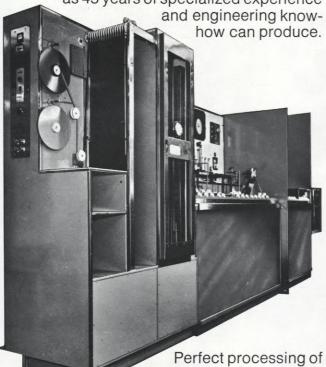
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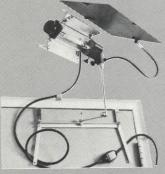




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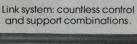
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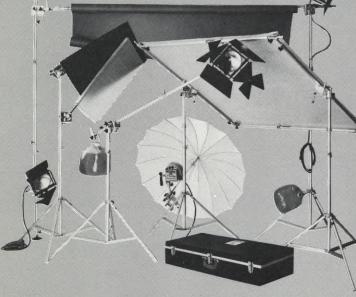
tions in motion pictures, still photography and video. And, in the process, changed location lighting from a compromise to a creative tool.

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THE 47th ANNUAL ACADEMY AWARDS PRESENTATION

By HERB A. LIGHTMAN

On the night of April 8, as an estimated audience of 65 million people throughout the United States watched the colorcast on the NBC Television Network, Hollywood staged its Big Show, the 47th Annual Academy Awards Presentation program.

In addition, live television coverage carried the show to Australia, Brazil, Canada, Mexico, the Philippines and Puerto Rico. This was the first live telecast of an Oscar Awards show in the Philippines, where the event has been seen on a delayed basis in past years.

Delayed telecasts were beamed to Venezuela, Taiwan, Hong Kong, Romania, Bermuda, Chile, Colombia, Costa Rica, El Salvador, West Germany, Iceland, Israel, Korea, Nicaragua, Portugal, Spain and Yugoslavia.

many, Iceland, Israel, Korea, Nicaragua, Portugal, Spain and Yugoslavia.

Also, the show was transmitted to United States servicemen in foreign lands, via Armed Forces Television

Produced by Howard W. Koch and directed by Marty Pasetta, both of whom were determined to limit the program to a maximum length of two hours

Even after almost a half-century, the Oscar Presentation is still Hollywood's biggest show and most shining moment

and twenty minutes (as compared to last year's show, which ran 43 minutes longer than that), the presentation was trimmed of all fat. Presenters dispensed with the usual inane chitchat and got right down to opening envelopes and reading the names of winners. The usual lavish production numbers were eliminated, except for a four-minute song and dance tribute to Fred Astaire by Sammy Davis, Jr. The five melodies nominated for "Best Song" were mercifully condensed into a single medley — a special blessing in this case, since rarely has such a collection of mediocre tunes been nominated.

The result was a streamlined, nononsense show which managed to stay within the pre-set time limit, but which, however, ended up as curiously lacking in excitement. The glamour of the situation was saved by the absolutely magnificent sets designed by Art Director John De Cuir for the stage of the Dorothy Chandler Pavilion at the Los Angeles Music Center.

Features of the Oscar Awards show included special tributes and awards to



























Even the unseasonal drizzling rain that must have embarrassed the Los Angeles Chamber of Commerce did not dampen the spirits of the thousands of eager fans who had gathered from early morning in grandstands outside the Dorothy Chandler Pavilion of the Los Angeles Music Center to watch their favorite film stars arrive for the 47th Academy Awards presentation.

Jean Renoir (Honorary Award), Howard Hawks (Honorary Award), and Arthur B. Krim (Jean Hersholt Humanitarian Award).

Bob Hope, Shirley MacLaine, Sammy Davis, Jr., and Frank Sinatra served as emcees for various segments of the program.

Presenters included (alphabetically): Lauren Bacall, Ingrid Bergman, Susan Blakely, Joe Bottoms, Diahann Carroll, Peter Falk, Susan George, Johnny Green, Goldie Hawn, Bob Hope, Lauren Hutton, Glenda Jackson, Gene Kelly, Jack Lemmon, Rody McDowall, James Michener, Ryan O'Neal, Tatum O'Neal, Jennifer O'Neill, Deborah Raffin, Katharine Ross, O.J. Simpson, Frank Sinatra, Danny Thomas, Brenda Vaccaro, Jack Valenti, John Wayne, Raguel Welch and Robert Wise.

A touch of class was lent to the

Flanked by film stars Jon Voight and Raquel Welch, who were presenters of the "Best Achievement in Cinematography" award, a jubilant Fred Koenekamp, ASC holds the Oscars presented to him and Joseph Biroc, ASC, for their remarkable achievement as Directors of Photography on "THE TOWERING INFERNO".



proceedings by having America's foremost living author, James Michener, present the screenwriting Oscars.

Additional highlights of the show included an opening poster sequence of best film winners over the past 46 years, and a costume design production number featuring the Anita Mann Dancers with Lauren Bacall narrating.

Interspersed throughout the show were specialty film clips, including one on voting procedure, plus film clips of the top-nominated actors, actresses, and films.

Golden statuettes were presented for outstanding motion picture achievement in a total of 21 categories.

As far as the Oscars were concerned, it was something of a night of upsets. Whereas "THE GOD-FATHER II" and "CHINATOWN" had each garnered eleven nominations, the former ended up with six awards (including the three biggies: Best Picture, Best Direction and Best Screenplay Adaptation), while the latter captured only one (Best Original Screenplay).

For readers of American Cinematographer, the really significant Academy Awards are always those which are of least interest to the general public — namely, the "behind-the-scenes" technical awards. Whereas in past years, the Scientific or Technical Awards were always hurriedly bestowed during commercial breaks in the Oscars telecast, this year they were accorded the honor and dignity of a separate Awards ceremony (see Page 536).

One very special technical award was, however, included in the telecast. "EARTHQUAKE" (a Universal-Mark Robson-Filmakers Group Production) was voted a Special Achievement Award for Visual Effects, for its realistic depiction of the devastation of Los Angeles by an earthquake. Once a regular category in the awards structure, the Visual Effects Award is no longer mandatory and is voted only "at such times as in the judgment of the Board of Governors there is an achievement which makes an exceptional contribution to the motion picture for which it was created, but for which there is no annual award category." Recipients of the award were Frank Brendel, Albert Whitlock and Glen Robinson.

That we completely concur on this award and are delighted to see it bestowed is attested by the fact that the entire November 1974 issue of American Cinematographer was devoted to the technical wizardry manifested in the production of "EARTHQUAKE".

But, as often happens in the presen-

tation of awards, we feel that an injustice has been done in this case through what we are sure was an inadvertent oversight.

In "EARTHQUAKE", the live-action special mechanical effects of Frank Brendel, the matte paintings of Albert Whitlock and the miniatures constructed by Glen Robinson were all superbly executed — but without detracting one whit from the achievements of these gentlemen, it must be noted, in all fairness, that another superb technician whose work was on a par with theirs in the special effects category, was not included in the award presented.

We refer to Clifford Stine, ASC, whose credit on "EARTHQUAKE"



Famed "Method" drama coach Lee Strasberg, nominated his first time on the screen for supporting role in "GODFATHER II", arrives with actress daughter Susan Strasberg.

reads simply: "Special Photography". Very special photography, indeed. Because Mr. Stine is one of the very few remaining technicians who know how to photograph miniatures realistically, he was coaxed out of retirement by Producer/Director Mark Robson to perform this exacting task on "EARTH-QUAKE". But his work did not stop at the straightforward photography of miniatures. He lent his considerable expertise to the execution of bluescreen, rear-projection and frontprojection - all of which are techniques clearly recognized as falling into the category of "special visual effects".

We, therefore, feel that Mr. Stine was grievously short-changed in not being included as a recipient of this award together with the completely-deserving Continued on Page 549

ACADEMY AWARD WINNERS FOR CINEMATOGRAPHY—1928 to 1974

	Class.	Cameraman	Picture Title	Studio
1974		Fred Koenekamp, A.S.C. Joseph Biroc, A.S.C.	"The Towering Inferno"	20th-Fox
1072			"Crice and White"	and WB
1973		Sven Nykvist, A.S.C.	"Cries and Whispers"	New World Prod.
972		Geoffrey Unsworth, B.S.C.	"Cabaret"	ABC-Allied Artist
971		Oswald Morris, B.S.C.	"Fiddler on the Roof"	U.A.
970		Freddie Young, B.S.C.	"Ryan's Daughter"	MGM
969		Conrad Hall, A.S.C.	"Butch Cassidy and the Sundance Kid"	20th-Fox
968		Pasqualino De Santis	"Romeo and Juliet"	Para.
967		Burnett Guffey, A.S.C.	"Bonnie and Clyde"	WB-7 Arts
966	B&W	Haskell Wexler, A.S.C.	"Who's Afraid of	WB
			Virginia Woolf?"	
966	Color	Ted Moore, B.S.C.	"A Man For All Seasons"	Col.
965	B&W	Ernest Laszlo, A.S.C.	"Ship of Fools"	Col.
965	Color	Freddie Young, B.S.C.	"Doctor Zhivago"	MGM
964	B&W	Walter Lassally, B.S.C.	"Zorba the Greek"	Fox
964	Color	Harry Stradling, A.S.C.	"My Fair Lady"	WB
963	B&W	James Wong Howe, A.S.C.	"Hud"	Para.
963	Color	Leon Shamroy, A.S.C.	"Cleopatra"	Fox
962	B&W {	Jean Bourgoin,	"The Longest Day"	Fox
062	Color	Walter Wottitz	"I surrange of Archie"	Col.
962	Color	Freddie Young, B.S.C.	"Lawrence of Arabia"	Fox
961	B&W	Eugene Shuftan	"The Hustler" .	
961	Color	Daniel Fapp, A.S.C.	"West Side Story"	U.A.
960	B&W	Freddie Francis, B.S.C.	"Sons and Lovers"	Fox
960	Color	Russell Metty, A.S.C.	"Spartacus"	Univ.
959	B&W	William Mellor, A.S.C.	"Diary of Anne Frank"	Fox
959	Color	Robert Surtees, A.S.C.	"Ben-Hur"	MGM
958	B&W	Sam Leavitt, A.S.C.	"The Defiant Ones"	U.A.
958	Color	Joseph Ruttenberg, A.S.C.	"Gigi"	MGM
957	One award	Jack Hildyard, B.S.C.	"Bridge on the River Kwai"	Col.
956	B&W	Joseph Ruttenberg, A.S.C.	"Somebody Up There Likes Me"	MGM
956	Color	Lionel Lindon, A.S.C.	"Around the World in 80 Days"	Todd-U.A.
	Effects		"The Ten Commandments"	Para.
956 955	B&W	John Fulton, A.S.C. James Wong Howe, A.S.C.	"The Rose Tattoo"	Para.
955	Color	Robert Burks, A.S.C.	"To Catch a Thief"	Para.
955	Effects	John Fulton, A.S.C.	"Bridge at Toko-Ri"	Para.
OE4	B&W	Boris Kaufman, A.S.C.	"On the Waterfront"	Col.
954			"Three Coins in the Fountain"	Fox
954	Color	Milton Krasner, A.S.C.	"From Here to Eternity"	Col.
953	B&W	Burnett Guffey, A.S.C.	"Shane"	Para.
953	Color	Loyal Griggs, A.S.C.		
952	B&W	Robert Surtees, A.S.C.	"The Bad and the Beautiful"	MGM
	Color	Winton Hoch, A.S.C. Archie Stout, A.S.C.	"The Quiet Man"	Argosy
951	B&W	William Mellor, A.S.C.	"A Place in the Sun"	Para.
901		Alfred Gilks, A.S.C.) "American in Paris"	MGM
	Color	John Alton	}	
050	D.S.IAI	Robert Krasker, B.S.C.	"The Third Man"	British
1950	B&W Color	Robert Krasker, B.S.C. Robert Surtees, A.S.C.	"King Solomon's Mines"	MGM
1949	B&W	Paul Vogel, A.S.C.	"Battleground"	MGM
343	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
340	Color (Joseph Valentine, A.S.C.) "Joan of Arc"	R.K.O.
	Color	William V. Skall, A.S.C.	}	4.00
)	Winton Hoch, A.S.C.)	
1947	B&W	Guy Green, B.S.C.	"Great Expectations"	Rank-U-I
341	Color	Jack Cardiff, B.S.C.	"Black Narcissus"	Rank-U-I
946	B&W		"Anna and King of Siam"	Fox
946	Color (Arthur Miller, A.S.C. Charles Rosher, A.S.C.	"The Yearling"	MGM
	Color	Leonard Smith, A.S.C.	(
)	Arthur Arling, A.S.C.	1	
1945	B&W	Harry Stradling, A.S.C.	"Picture of Dorian Gray"	MGM
345	Color	Leon Shamroy, A.S.C.	"Leave Her to Heaven"	Fox
	Effects	John Fulton, A.S.C.	"Wonder Man"	Para.
1944	B&W	Joseph LaShelle, A.S.C.	"Laura"	Fox
344	Color	Leon Shamroy, A.S.C.	"Wilson"	Fox
1943	B&W	Arthur Miller, A.S.C.	"Song of Bernadette"	Fox
943		Hal Mohr, A.S.C.) "Phantom of the Opera"	Univ.
	Color	W. Howard Greene, A.S.C.	} . Halltoni Si the Opera	
	B&W		"Mrs. Miniver"	MGM
1040	Color	Joseph Ruttenberg, A.S.C.	"The Black Swan"	Fox
1942	LOIDE	Leon Shamroy, A.S.C.	"Reap the Wild Wind"	Para.
1942		Farciot Edouart, A.S.C.	"How Green Was My Valley"	Fox
	·Effects	Arthur Miller ACC	LICHA CIECLI AND INIA AGUEA	Fox
1942	·Effects B&W	Arthur Miller, A.S.C.		
	·Effects	Ernest Palmer, A.S.C.	Blood and Sand"	
	·Effects B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C.	"Blood and Sand"	
1941	·Effects B&W Color Effects	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C.	"Blood and Sand" "I Wanted Wings"	Para.
1941	Effects B&W Color Effects B&W	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C.	"Blood and Sand" "I Wanted Wings" "Rebecca"	Para. Selznick
1941	Effects B&W Color Effects B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad"	Para. Selznick Korda
1941	Effects B&W Color Effects B&W Color B&W	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights"	Para. Selznick Korda Goldwyn
1941	Effects B&W Color Effects B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad"	Para. Selznick Korda
1941 1940 1939	Effects B&W Color Effects B&W Color B&W	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C.	"Blood and Sand" "I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind"	Para. Selznick Korda Goldwyn
1941 1940 1939	Effects B&W Color Effects B&W Color B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind"	Para. Selznick Korda Goldwyn Selznick-MGM
1941 1940 1939	Effects B&W Color Effects B&W Color B&W	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind" "The Great Waltz" "Spawn of the North"	Para. Selznick Korda Goldwyn Selznick-MGM MGM Para.
1941 1940 1939 1938	Effects B&W Color Effects B&W Color B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C. Karl Freund, A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind" "The Great Waltz" "Spawn of the North" "The Good Earth"	Para. Selznick Korda Goldwyn Selznick-MGM MGM Para. MGM
1941 1940 1939 1938 1937 1936	Effects B&W Color Effects B&W Color B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C. Karl Freund, A.S.C. Tony Gaudio, A.S.C.	"Blood and Sand" "I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind" "The Great Waltz" "Spawn of the North" "The Good Earth" "Anthony Adverse"	Para. Selznick Korda Goldwyn Selznick-MGM MGM Para. MGM WB
1941 1940 1939 1938 1937 1936 1935	Effects B&W Color Effects B&W Color B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C. Karl Freund, A.S.C. Tony Gaudio, A.S.C. Hal Mohr, A.S.C.	"I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind" "The Great Waltz" "Spawn of the North" "The Good Earth" "Anthony Adverse" "Midsummer Night's Dream"	Para. Selznick Korda Goldwyn Selznick-MGM MGM Para. MGM WB
1941 1940 1939 1938 1937 1936 1935 1934	Effects B&W Color Effects B&W Color B&W Color	Ernest Palmer, A.S.C. Ray Rennahan, A.S.C. Farciot Edouart, A.S.C. George Barnes, A.S.C. Georges Perinal, B.S.C. Gregg Toland, A.S.C. Ernest Haller, A.S.C. Ray Rennahan, A.S.C. Joseph Ruttenberg A.S.C. Farciot Edouart, A.S.C. Karl Freund, A.S.C. Tony Gaudio, A.S.C. Hal Mohr, A.S.C. Victor Milner, A.S.C.	"Blood and Sand" "I Wanted Wings" "Rebecca" "Thief of Bagdad" "Wuthering Heights" "Gone with the Wind" "The Great Waltz" "Spawn of the North" "The Good Earth" "Anthony Adverse" "Midsummer Night's Dream" "Cleopatra"	Para. Selznick Korda Goldwyn Selznick-MGM MGM Para. MGM WB
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By JOHN A. ALONZO

Director of Photography

Unusually enough, "CHINATOWN" was one of the very few pictures I've photographed that offered me absolutely no opportunity for advance preparation.

(EDITOR'S NOTE: Originally assigned as Director of Photography on "CHINA-TOWN", Stanley Cortez, ASC participated fully in the pre-production preparation of the photographic aspects of the film. After having completed the photography on approximately sixteen sequences of the feature during its first weeks of production, Mr. Cortez resigned from his "CHINA-TOWN" assignment.)

I had been getting ready to do a pilot film starring Cicely Tyson, with whom I made "SOUNDER". It was a film she wanted to do and I wanted to do it because of her. But if you believe in those so-called "mystical" things that channel our lives, you would probably say that Destiny took a hand in making things happen differently. Cicely burned her foot with hot wax on the night before I was to start preparing to photograph the film, and she was forced to bow out of the project. That being the case, I requested that I be excused from working on the picture.

That very afternoon — it was a Thursday — Bob Evans (Producer of

"CHINATOWN") and "Doc" Erickson (Associate Producer/Unit Production Manager) asked me to come over to Paramount to discuss shooting a picture for them. They handed me the script of "CHINATOWN" and I went home and read it until two or three o'clock in the morning. I showed up on Friday morning to shoot a very short scene and to meet the Director, Roman Polanski, for the first time. I had never met Dick Sylbert (Production Designer), nor Sam O'Steen (Film Editor), nor most of the other people working on the picture.

On that same day, Roman Polanski Continued overleaf





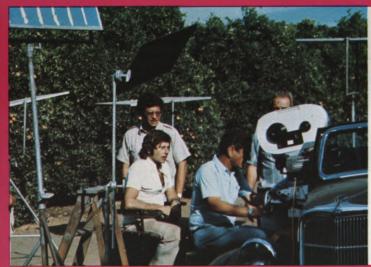








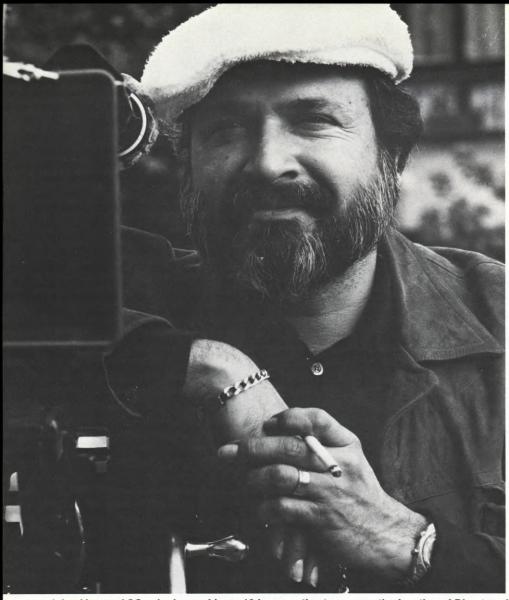
A Robert Evans Production of a Roman Polanski Film, "CHINATOWN" is a Paramount Presentation, starring Jack Nicholson and Faye Dunaway (ABOVE). It is the first film to be personally produced by Robert Evans, Paramount's highly successful Executive Vice President in Charge of Worldwide Production. It is also Polanski's first film in Hollywood since "ROSEMARY'S BABY", the hit thriller made in 1968 for Paramount. Photographed by John A. Alonzo, ASC from an original screenplay by Robert Towne (who won the Best Original Screenplay Academy Award for it), "CHINATOWN" is set in 1937. It was filmed on various locations in the Los Angeles area (BELOW), as well as on the sound stages of Paramount Studios.





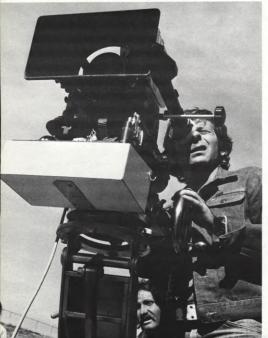






John Alonzo, ASC, who jumped in on 12 hours notice to assume the function of Director of Photography on "CHINATOWN", after it had been shooting for two weeks. Despite the fact that he had virtually no preparation time of his own, he observes that the picture had been so well prepared by the previous cinematographer, production designer, costume designer and director, that he was able to move in and concern himself solely with the aesthetics of the photography.

Director Roman Polanski checks a set-up through the viewfinder. A graduate of Poland's state institute of cinematography, he knows all phases of production.



and Dick Sylbert gave me a whirlwind tour of the sets that had been constructed and I got a quick look at the wardrobe. The company had already been shooting for ten days or two weeks, and so I spent Saturday and Sunday at Bob Evans' house looking at dailies and talking with Polanski about concept and what kind of visual style they wanted for the picture. Sylbert had that style more or less built in, as far as sets and backgrounds were concerned. He had designed offices in brownish tones, with ceilings and shiny brown woods, very much in keeping with the period.

The picture was being shot in the Panavision anamorphic format, using the Panaflex camera, and we had to consider how to compose within that aspect ratio, since Roman Polanski had shot almost all of his previous pictures in the 1.85 format. About Polanski — I must say that he is most articulate on

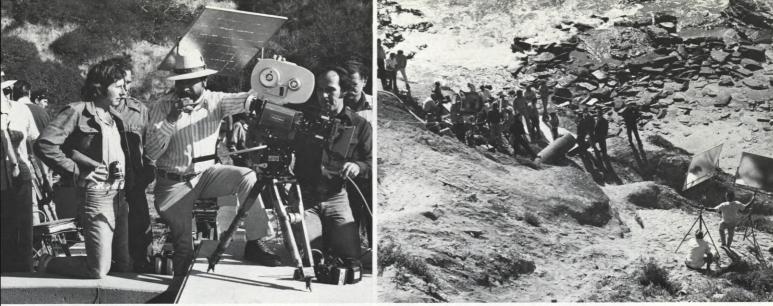
the subject of film-making. He comes from one of the great cinema schools of the world, the one in Poland, and not only is he cognizant of the cinematographer's problems, but he also is aware of the art director's problems. He knows lighting, as well as direction.

It was good for me to be working with a young man as knowledgeable about film-making as Polanski, because then we could get into some nice healthy debates. They were out-and-out arguments at times, but good healthy ones, because they were logical, rational, without egos involved.

I was made to feel additionally secure by having Earl Gilbert, a fine technician, as my gaffer. He had been in on the pre-production and had pre-rigged many of the sets, so he provided a valuable backup for me. I also had a couple of excellent operators, Arnie Rich and Hugh Gagnier.

Coming onto the picture late, as I did, I had not been in on any of the decisions regarding sets, wardrobe or choice of locations, but these had all been very well prepared by the previous Director of Photography (Stanley Cortez, ASC), so that the whole thing was laid out for me, in a way, and I could involve myself totally in the aesthetics of the filming. My aim was to find out what Polanski wanted to pull the juice out of what he wanted and try to give him that. He was very adamant about using no diffusion whatsoever on the film - no tricks or gimmicks, he said - which creates a bit of a problem in instances when you're trying to make the people in front of the camera look very attractive. So I had to rely on that great, straight lighting, or the kind that Jimmy Wong Howe and Gregg Toland knew how to use in order to make the ladies look beautiful.

It was a whirlwind beginning for me, but what happened was that my rapport with Polanski jelled very nicely. I'm Mexican and my first language was Spanish; Roman is Polish and his first language was Polish (although he also speaks French). What we had in common is that we both probably think in a language other than English. I saw in Roman what I used to see in myself. I'd get so frustrated because I couldn't find the right words, the right vocabulary. I could sympathize with him and I think this was the source of the camaraderie that developed between us. But I think the most important thing was that I had a great deal of respect for the man's knowledge of my craft, which is a very secure way for a cameraman to feel. It's nice to know that the director you're working with knows what you're doing. He would pick out a set-up in a specific place, using a specific lens and we'd



(LEFT) Polanski and Alonzo discuss and upcoming shot to be made with the Panaflex camera. They often became involved in "nice healthy debates" regarding technique — and even out-and-out arguments at times, but Alonzo characterizes them as "good healthy ones, because they were logical, rational and without egos involved." (RIGHT) Reflectors provide fill for sequence shot along a rugged stretch of California coastline.

compare notes about why this way or why that way. Sometimes we'd get into a debate and draw the compositions on the floor of the sound stage with chalk. He would insist that this was better composition than that and, by golly, most of the time he was right.

Another great plus, one that dispelled a lot of worry for me during the making of "CHINATOWN" was the fact that we were dealing with totally professional actors who were used to hitting their marks precisely, for purposes of lighting. Roman was my ally in this respect, because he insisted upon the actors hitting very specific marks not for the convenience of the cameraman, but for the sake of his directorial concept. This, of course, made it very easy for me, because Earl Gilbert and I could set lights right smack on the money where we wanted them and know that we could have Faye Dunaway walk right into the perfect key light and Jack Nicholson into the perfect shadow area. What I'm really saying is that - although I'd love to - I can't take full credit for the cinematography of "CHINATOWN", because I didn't prepare the picture in advance the way I usually do. But I will take credit for totally understanding what the director wanted and for somewhat giving him what he wanted. He had the freedom of knowing that if he didn't like a set-up once it was ready, we could always redo it, because I work relatively fast. I have a very fast crew and I think they're the best in Hollywood. We work that way, not simply for the sake of being fast, but so we can hurry up and see what the set-up looks like. If it doesn't look right, we can afford the time to do it another way.

I wish I could say that I spent three or four weeks preparing to photograph

"CHINATOWN", but I can't say that. All I can say is that I readily understood what Bob Evans wanted and what Roman wanted, and that with the help of very talented people like Dick Sylbert and Anthea Sylbert and Sam O'Steen and Faye Dunaway and Jack Nicholson, we accomplished something that I think is a good example of what the film industry is. It's very much a collaborative art.

As for concept, I think that Bob Evans, as producer, had in mind a rather "classic" type of picture. We speak of classic architecture as being in the Greek period or the Roman period or the Elizabethan period — in

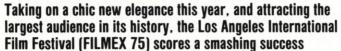
other words, segments of art which are called "classic" because they have lasted for long periods of time. I feel that in our industry there are also segments of art that can rightly be called classic — great pictures like "CITIZEN KANE", "SPELLBOUND", "THE BIG SLEEP", "THE BIG KNIFE", and many others.

I think that Evans made a brilliant decision in selecting a director who is a true student of film — a real film-nut, so to speak — a man who has studied film seriously and knows what the so-called classic type of mystery is all about. Because Roman — I found out after Continued on Page 564

Panaflex camera is set up on a raft lashed to a boat which the actors are rowing. This sequence was shot on a small lake in Los Angeles' Echo Park. Polanski sits behind the Panaflex, while Stanley Cortez, ASC, who served as Director of Photography on "CHINATOWN" during the first couple of weeks of shooting, anxiously checks out the sun with his viewing glass.









The night of March 13, the opening event of FILMEX 75, was one of those gala evenings you read about. Amid the monolithic towers of Century City, searchlights scanned the indigo sky, as limousines pulled up outside the ABC Entertainment Center (Plitt Century Plaza Theatres) and formally dressed celebrities stepped forth. A full orchestra played movie music. Live mannequins dressed as famous figures of the silver screen posed and moved like clockwork dolls, to the delight of the crowd. A brace of elephants (not pink, but yellow) swayed to the music. Banners billowed and the flags of many nations fluttered in the breeze. Jugglers juggled and leggy chorine types in Ruby







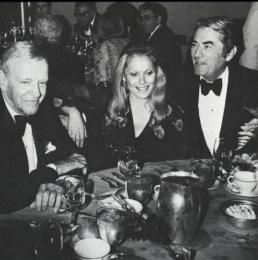
















(LEFT) At the gala opening night Filmex Society Benefit Ball, which followed the U.S. West Coast premiere of "FUNNY LADY", Fred Astaire and Gregory Peck share a table. (CENTER) Director William Wyler and his lovely wife enter the theatre for the opening night screening. (RIGHT) The Johnny Carsons chat with FILMEX Associate Director Gary Abrahams. The black-tie Benefit Ball is a posh dinner-dance held in the Los Angeles Ballroom of the Century Plaza Hotel (BELOW RIGHT) to help make up the inevitable FILMEX deficit.

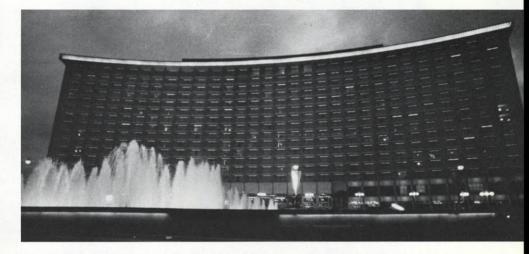
Keeler drag evoked nostalgia of the Busby Berkeley era. At a strategic moment, hundreds of multi-colored balloons soared into the sky. It was one of those magic moments, recalling the Golden Age of Hollywood and providing a colorful kickoff to FILMEX 75.

Now that the final figures are in, it can be reported that this latest edition of FILMEX attracted the largest audience in its history during the 14-day non-competitive event. Gary Essert, FILMEX Director, has announced that more than 80,000 people attended the 88 separate events, which included screenings of 236 films representing 27 nations. The enthusiastic public reaction resulted in an average audience size of 76% of theatre capacity.

The presentation of FILMEX this year featured several significant changes: The event was staged in a completely different locale, was greatly extended in scope and number of screenings, and took on a certain chic ambience that it never had before.

In past years, FILMEX had been headquartered in Hollywood, with the screenings being held at Grauman's Chinese (now Mann's Chinese) Theatre and (last year) at the Paramount Theatre, located just across the street on Hollywood Boulevard. Both of these houses are classic old movie palaces that enjoyed their heyday during the Golden Age of Hollywood. Screening the films in such surroundings evoked a kind of nostalgia not possible elsewhere. Moreover, the casual funkiness of FILMEX, as presented in Hollywood, gave the event a certain zany character that was quite charming.

It was feared, at first, that the move of FILMEX to the elegant, futuristic precincts of Century City might rob the event of its homey, hang-loose



Unflappable FILMEX Director Gary Essert talks with film star Rosalind Russell, who served as hostess emcee for the opening night screening of "FUNNY LADY". Miss Russell, a very public-spirited citizen in general, is a great friend of FILMEX and serves on its Board of Advisors. Belatedly, FILMEX is the first Film festival (or more correctly: Exposition) to be held in the film capital of the world.





Previously, FILMEX had been held in Hollywood, with screenings at Grauman's Chinese and Paramount Theatres. Much of the funky, hang-loose spirit was lost in the move to the elegant precincts of Century City (ABOVE), but the superb facilities of this new location more than made up for the loss. Famed French mime Marcel Marceau, whose name appears on the marquee, was not a part of the FILMEX program, but was appearing at the adjacent Shubert Theatre.

atmosphere, and, to a considerable degree, this turned out to be true. There were, however, trade-offs that served to balance the scales.

For one thing, the fact that there were two side-by-side theatres available in the ABC Entertainment Center meant that many more

programs could be scheduled than in past years and that they could start on time.

Second, the Plitt Century Plaza Theatres are magnificent auditoria in which to view films — designed in beautiful taste, with superb projection facilities, excellent acoustics, plenty of

Those enjoying the dancing at the Filmex Society Benefit Ball included the Dean Martins (LEFT) and Academy Award-nominated ("LENNY") actress Valerie Perrine and escort (RIGHT). The Hollywood film stars have taken FILMEX to their hearts and lend it generous support.





leg room and super-comfortable "rocking chair" seats.

Third, the extensive facilities of the Century City complex made it possible for FILMEX to be "all of a piece" - with everything that was necessary located in the same place. Besides the two theatres, there were FILMEX box offices, a large display area for the FILMEX 1-Sheet Show (an international exhibit of more than 400 movie posters), a choice of restaurants within the complex, a vast amount of underground parking (free to those attending the screenings) and, directly across the Avenue of the Stars, the Century Plaza Hotel, site of the \$100-a-plate Filmex Society Benefit Ball, a gala dinner-dance held in the hotel's Los Angeles Ballroom, following the U.S. West Coast premiere screening of "FUNNY LADY" on opening night. Those attending this black-tie affair didn't even have to cross the street to get to the hotel. They simply strolled through the attractive underground mall which connects the two areas.

As for the hang-loose charm of the Hollywood-based FILMEX of previous years — that was largely lost in the high-rise elegance of Century City. However, the audience brought with it a certain degree of built-in funkiness, composed, as it was, of primarily young film buffs and cinema students from the four large local film schools. So, while something was undeniably lost in the change of locale, it can be said that, on balance, the move to Century City was a wise one.

Opening night activities got underway at 7:00 p.m. in front of the Plitt Century Plaza Theatres when a marching band and 20 usherettes in top hat and tails 1930's costumes arrived via a Pasadena Red Car streetcar. Those awaiting the arrival of celebrities were entertained by various unusual performers, including jugglers and mimes doing impersonations of stars. All stars and celebrities arrived in classic cars and were welcomed by Charles Macauley, the official FILMEX greeter and announced by Army Archerd. Also arriving in their own chauffeured limousine were two "formally dressed" penguins. 5,000 ballons were launched, some containing free passes to FILMEX events. Aerial acts and a huge pyrotechnics display from the top of the twin theme towers climaxed the festivities, as moviegoers found their way to their seats.

"FUNNY LADY", a Rastar Production for Columbia Pictures, starring Barbra Streisand and James Caan, proved to be a perfect film for the opening night audience. A non-arty, pure entertainment musical, lush with nostalgia, it was a real crowd-pleaser. FILMEX screenings for subsequent programs covered a wide range of film fare.

Eight world premieres included Philippe Mora's feature documentary BROTHER, CAN YOU SPARE A DIME?; CHAC, a Mexican film directed by Rolando Klein; Richard Patterson's tribute to Charles Chaplin, THE GENTLEMAN TRAMP, from the USA; THE MAN WHO SKIED DOWN MT. EVEREST, a Canada/Japan presentation directed by Isao Zeniya; the British comedy, MONTY PYTHON AND THE HOLY GRAIL, directed by Terry Gilliam and Terry Jones; from France, Claude d'Anna's TROMPE L'OEIL; and WOMAN TO WOMAN, directed by American filmmaker Donna

George Cukor's LOVE AMONG THE RUINS had its world theatrical premiere. The Cukor film stars Katharine Hepburn and Sir Laurence Olivier and concerns an actress who turns to a former lover for legal help when she is sued for breach of promise by a young man she had decided not to marry. The film made its television debut on the ABC network on March 6, and its appearance at FILMEX marked the film's world theatrical premiere. This is the first film made for television to be selected for the Exposition.

Nineteen films received their American premieres, including Peter Hall's British film, AKENFIELD; TO PROXENIO TIS ANNAS (Anna's Engagement) by the Greek director Pantelis Voulgaris; from West Germany, DIE VERROHUNG DES FRANZ BLUM (The Brutalization of



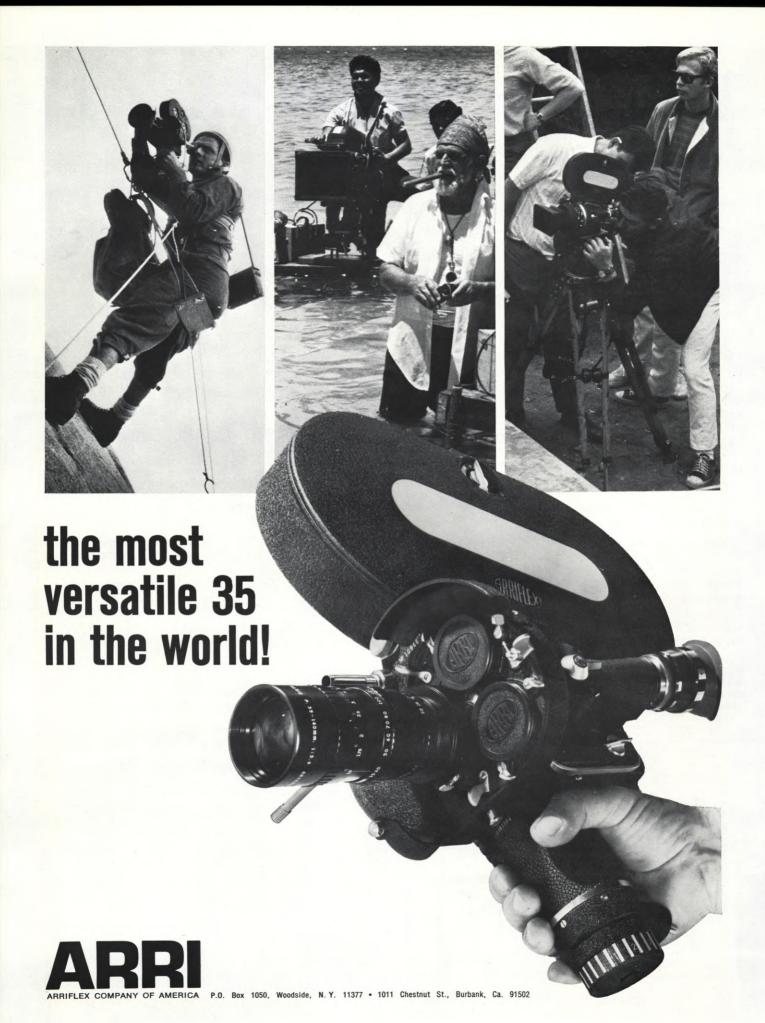
FILMEX 75 was dedicated in its entirety to the great D.W. Griffith, universally acknowledged as the "father" of the modern motion picture form, and the artist who did more than anyone else to define its grammar. The FILMEX program included a retrospective of his short films made during the phase of his career spent at the old Biograph Studios.

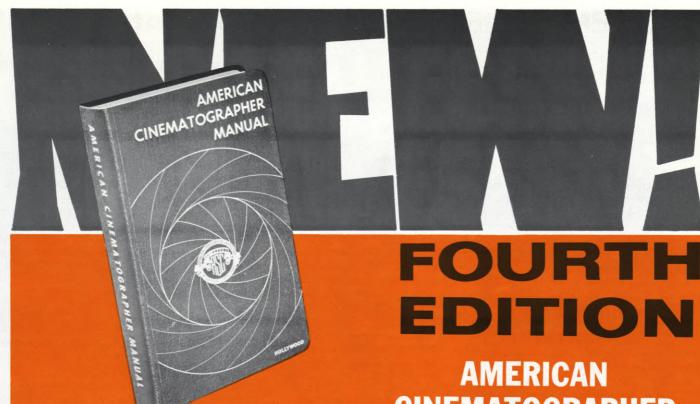
Franz Blum) directed by Reinhard Hauff; CHORUS, from India, directed by Mrinal Sen; from Poland, DRZWI W MURZE (The Wicket Gate) directed by Stanislaw Rozewicz, and SANATORIUM POD KLEPSYDRA (The Sandglass) by Wojciech Has; HOLT VIDEK (Dead Landscape) by Hungarian

director Istvan Gaal; Mexican director Arturo Ripstein's EL SANTO OFICIO (The Holy Office); Roberto Rossellini's ANNO UNO (Italy-Year One) and Carlo Di Palma's TERESA LA LADRA (Theresa the Thief); three French films, Jean Eustache's MES PETITES Continued on Page 554

An international Film Poster Art Exhibit, "The FILMEX 1-Sheet Show", was one of the major highlights of the Los Angeles International Film Exposition this year. The exhibit was comprised of more than 400 motion picture posters from over twenty countries. The non-competitive art show, which was free to the public, opened March 1, 1975, two weeks before the opening of the Exposition, and ran concurrently with it through March 26.







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ACADEMY SCIENTIFIC OR TECHNICAL AWARDS

At last — proper recognition for the men behind the men behind the camera, whose technical and scientific achievements make motion pictures in their modern form possible

In the past, much to the shame of the Academy of Motion Picture Arts and Sciences, its category devoted to Scientific or Technical Awards has always been treated as a kind of stepchild during the Awards Presentation.

Admittedly, these awards are not as glamorous or as interesting to the general television audience as, for example, those presented for "Best Actor" or "Best Actress". As a result, in years past, they have been presented in hurried fashion (and off the air) during commercial breaks in the awards telecast.

This has given short shrift, indeed, to that area of the film industry which, in the final analysis, makes all the rest of it possible. This year, to its credit, the Academy decided to recognize that fact and make these important awards with the degree of dignity to which they are entitled.

On March 21, at a special awards presentation ceremony/press conference held in the Champagne Room of the Beverly Wilshire Hotel, the awards were duly presented.

In a short speech prior to the presentation, Wilton R. Holm, Executive Director of the Research Center of the AMPTP, emphasized the importance of these awards, making the point that the film industry as we know it could not exist without the research and development which they represent.

The awards were presented by Academy President Walter Mirisch, with the assistance of Past President Gregory Peck, as follows:

Scientific or Technical Awards

These Awards were voted by the

Academy Board of Governors upon recommendation of the Scientific or Technical Awards Committee.

CLASS I (Academy Statuette)

CLASS II (Academy Plaque)

To Joseph D. Kelly of Glen Glenn Sound for the design of new audio control consoles which have advanced the state of the art of sound recording and rerecording for motion picture production.

These achievements represent a new generation of audio mixing-consoles which uniquely provide the flexibility to receive inputs from microphones and sound reproducers and to mix, process and combine them into desired outputs for recording in any configuration.

To The Burbank Studios Sound Department for the design of new audio control consoles engineered and constructed by the Quad-Eight Sound Corporation.

These new consoles have advanced the state of the art of sound recording and rerecording for motion picture production. They represent a new generation of mixing-consoles which uniquely provide the flexibility to receive inputs from microphones and sound reproducers and to mix, process and combine them into desired outputs for recording in any configuration.

To the Samuel Goldwyn Studios Sound Department for the design of a new audio control console engineered and constructed by the Quad-Eight Sound Corporation.

This new console has advanced the state of the art of sound rerecording for motion picture production. It represents a new generation of audio mixing-consoles which uniquely provide the flexibility to receive audio inputs and to mix, process and combine them into desired outputs for recording in any configuration.

To the Quad-Eight Sound Corporation for the engineering and construction of new audio control consoles designed by The Burbank Studios Sound Department and by the Samuel Goldwyn Studios Sound Department.

These new consoles have advanced the state of the art of sound recording and rerecording for motion picture production. They represent a new generation of audio mixing-consoles which uniquely provide the flexibility to receive inputs from microphones or sound reproducers and to mix, process and combine them into the desired outputs for any recording configuration.

To Waldon O. Watson, Richard J. Stumpf, Robert J. Leonard and the Universal City Studios Sound Department for the development and engineering of the Sensurround System for motion picture presentation.

The Sensurround System generates audible and subaudible frequencies which enhance audience sensory experiences of special-effect film scenes. The ingenious design of the system makes use of unique amplifiers, control logic and acoustic transducers.

(LEFT) At a special Scientific or Technical Awards Presentation, held at the Beverly-Wilshire Hotel, Academy Past President Gregory Peck and current Academy President Walter Mirisch present Class II Award to Waldon O. Watson, Richard J. Stumpf, Robert J. Leonard and the Universal City Studios Sound Department for the development and engineering of the Sensurround System for motion picture presentation. Mr. Watson and Mr. Leonard shown receiving the award. (RIGHT) A Class II Award to the Burbank Studios Sound Department for the design of new audio control consoles engineered and constructed by the Quad-Eight Sound Corporation. Award accepted by Robert K. Hagel, President, The Burbank Studios, and Al Green, Department Head, Post Production Sound, The Burbank Studios.





CLASS III (Academy Citation)

To the Elemack Company, Rome, Italy, for the design and development of their Spyder camera dolly.

This compact, versatile camera platform permits easy access and advantageous positioning of a motion picture camera in restricted spaces or other difficult locations.

To Louis Ami of the Universal City Studios for the design and construction of a reciprocating camera platform used when photographing special visual effects for motion pictures.

This unique camera mount provides the means to control and to repeat camera motions that create the image instability required in motion picture scenes such as those involving moving vehicles, earthquakes, or explosions.



Class II award to Joseph D. Kelly, of Glen Glenn Sound, for the design of new audio control consoles which have advanced the state of the art of sound recording and rerecording for motion picture production. Award accepted by Mr. Kelly.





(LEFT) Class II Award to the Quad-Eight Sound Corporation for the engineering and construction of new audio control consoles designed by the Burbank Studios Sound Department and by the Samuel Goldwyn Studio Sound Department. Award accepted by Robert L. "Bud" Bennett, President of Quad-Eight Sound Corporation. (RIGHT) Class II Award to the Samuel Goldwyn Studio Sound Department for the design of a new audio control console engineered and constructed by the Quad-Eight Sound Corporation. Award accepted by Don Rogers, Head of the Samuel Goldwyn Studio Sound Department.

(LEFT) Class III Award to Louis Ami of the Universal City Studios for the design and construction of a reciprocating camera platform used when photographing special visual effects for motion pictures. This unique camera mount, introduced during the filming of "EARTHQUAKE", provides the means to control and to repeat camera motions that create the image instability required in motion picture scenes, such as those involving moving vehicles, earthquakes, or explosions. Award accepted by Mr. Ami. (RIGHT) Class III Award to the Elemack Company, Rome, Italy, for the design and development of their Spyder Camera Dolly. Award accepted by Mr. Sante Zelli, President of the Elemack Company.

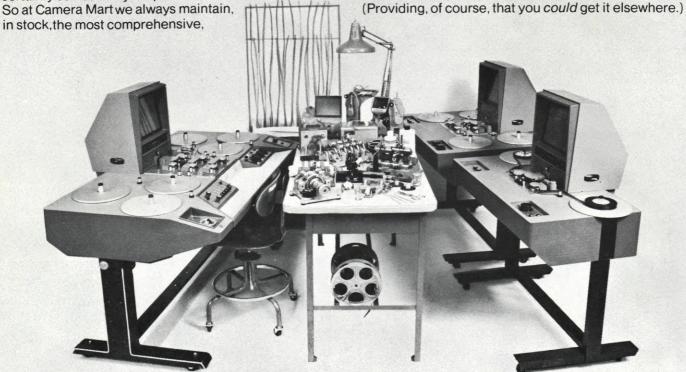




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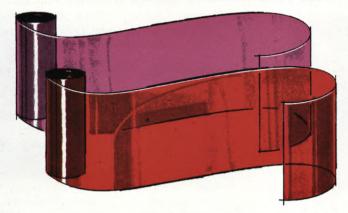
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TWO WAYS TO KILL THE GREEN

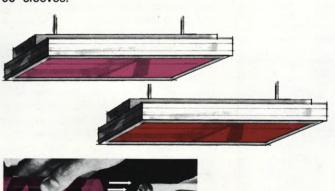


The light source most often specified for commercial buildings is and has been the fluorescent tube. The pervasive green tint associated with these lights, makes the rendering of normal flesh tones on film impossible without filtering.

When the only light source used is fluorescent lighting, then the filtering is best accomplished at the camera. When you want to mix fluorescent with daylight or incandescent light there are two ways to "get the green out."

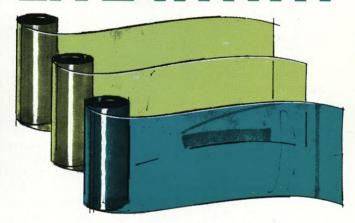
- TOUGH MINUSGREEN applied to Cool White or Daylight tubes converts fluorescent to a light compatible with "daylight".
- 2. FLUOROFILTER corrects fluorescent to 3200 K.

Both are available in 27" or 54" rolls as well as 48" and 96" sleeves.



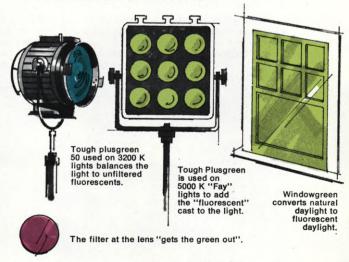
Sleeves are applied directly to the tube.

AND THREE WAYS TO LIVE WITH IT



If you can't kill the green at the source, here are three ways to add green to your other light sources, and then remove ALL of it by filtering at the lens.

- 1. WINDOWGREEN converts incident natural daylight to "fluorescent daylight". Available in 58" wide rolls.
- TOUGH PLUSGREEN is a heat-resistant polyester material used on "FAY" type lamps and other 5000 K. light sources to add the "fluorescent green". Available in 27" and 58" wide rolls.
- TOUGH PLUSGREEN 50 adds both green and blue to 3200 K. light sources to convert them to "Fluorescent daylight". It is also a heat resistant polyester and comes in 27" and 54" wide rolls.





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THE NEW PHILIPS AND MCA VIDEODISC SYSTEM

After many promises and delays, there appears at last to be a viable, low-cost system for playing videodisc programs on home TV receivers

At Universal City, California, on December 12, 1972, MCA Inc. presented a most impressive first public showing of its new DISCO-VISION system.

More than 300 press and industry executives viewed color and black-and-white excerpts from Universal's vast film library shown by means of DISCO-VISION on the screens of a variety of home television sets. The happy results were duly reported by an enthusiastic press (see American Cinematographer, February 1973).

Then followed more than two years of thunderous silence.

Now it has just been announced from New York that N.V. Philips and MCA, having apparently pooled their respective funds of expertise, will begin market introduction of their optical videodisc system in the fall of 1976. The system, consisting of a pre-recorded videodisc and a videodisc player that attaches to any standard home television receiver, relays full color or black-and-white pictures and sound to the viewer's own TV screen.

Pre-recorded videodisc albums will sell at prices ranging from \$2 to \$10, and the videodisc player will sell for around \$500.

These marketing plans were disclosed at a press briefing held by Philips and MCA at the Hotel Pierre. The press session was the first of a series of demonstrations currently being held by the two organizations which have joined forces to develop and market the first complete optical

videodisc system.

Other demonstrations are being held for invited representatives of the electronics and entertainment industries, the financial community, governmental agencies, and persons in the fields of business, education and programming.

Co-hosting the series of videodisc system demonstrations are Robert T. Cavanagh, vice president of North American Philips Corporation, one of the N.V. Philips group of companies, and John W. Findlater, vice president of MCA Inc., and president of its subsidiary, MCA Disco-Vision, Inc.

N.V. Philips of The Netherlands and MCA entered into a long-term agreement in the fall of 1974 for the development, manufacture and worldwide marketing of an optical videodisc system. At the time, each organization had an advanced optical disc system in active development. The Philips and MCA system combines the advanced technology and specialized strengths of both entities.

North American Philips Corporation and its subsidiary, The Magnavox Company, will be the operational entities in the United States for N.V. Philips. Magnavox will have responsibility for videodisc player production and marketing.

MCA Disco-Vision, Inc. will manufacture, market and distribute videodisc programming in support of the unified system. The company also will manufacture the mastering and repli-

cation equipment, and operate custom disc mastering-replication facilities at various locations. The vast film library of Universal Pictures, an MCA subsidiary, has more than 11,000 titles immediately available for transfer to videodiscs.

The videodisc player, which is easier to operate than a conventional phonograph, attaches to any standard home TV receiver and plays 30 uninterrupted minutes of high-quality pictures and sound from the pre-recorded videodisc. The technology permits 60 minutes of playing time.

The system is distinguished from others by its optical read-out. That is, there is no needle or stylus. When placed on the turntable, the disc is scanned by a focused light beam from inside the player unit. Through use of the optical scanning process, the system can offer the user such unique features as visual random access, speed-up, slow-down, freeze frame, reverse, and picture-by-picture presentation.

Mr. Findlater discussed the various dimensions of videodisc programming, including content, availability and distribution. He described the Universal Pictures film library as one of the world's largest, and noted that MCA has access to a reservoir of thousands of titles already in existence, dating from the present back to the 1930s. MCA also will acquire a variety of other program material from outside sources, including other major motion picture producers.

Available videodisc programming consists of theatrical (entertainment) and non-theatrical subjects, including: action adventures, cartoons, classics, newsreels, science fiction, short subjects, special subjects, specialized training, and sports, among others.

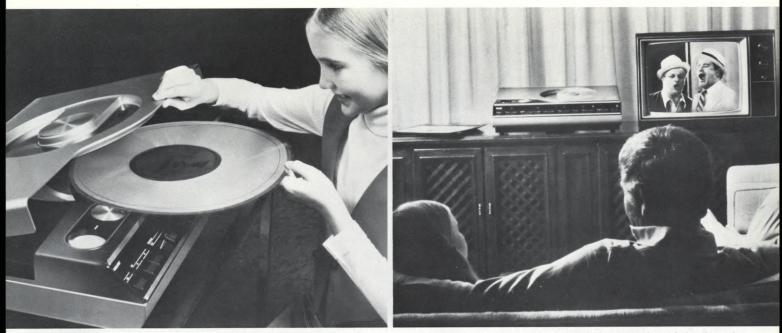
In addition to existing programming, according to Mr. Findlater, MCA will use its entertainment, educational, commercial and institutional divisions to create new, original programming.

W. Zeiss, manager of N.V. Philips videodisc system operations, described the total system as "one of the most important consumer market developments since the introduction of color television."

He said that when Magnavox and MCA begin national distribution of the optical videodiscs and players, it will be with a background of extensive

This compact videodisc player for use with the Philips and MCA Videodisc System attaches to the antenna terminals of any standard home TV receiver and plays 30 uninterrupted minutes of high-quality color or black-and-white pictures and sound from a pre-recorded videodisc. The technology permits 60-minute playing time. The player uses an optical system — a light beam rather than a needle or stylus — to relay the images and sound from the videodisc to the viewer's screen.





(LEFT) The videodisc player for the Philips and MCA Videodisc System is easier to operate than a conventional phonograph, and simple and safe enough for a child to handle. Once the videodisc is in place, a touch of the "play" button starts the programming. The disc itself is more durable than a long-playing record. And, since there is no physical contact between the player's laser readout and the videodisc, playback quality remains unchanged — even after years of use. (RIGHT) The user of the Philips and MCA Optical Videodisc System will be able to buy and own his programming from a vast selection which will be available. He will be able to sit back and watch a vintage movie, the latest hit, or a Mozart opera, if that suits his mood. Since he will be at the controls, he can slow down the action enough to watch an exciting football play — back up for an "instant replay" — or stop it completely for a longer, closer look at a golf swing.

experience in videodisc technology. "The key to any successful consumer product," said Mr. Zeiss, "is its usefulness and accessibility to the greatest number of consumers."

Mr. Zeiss said the confidence of Philips and MCA in the viability of the videodisc systems as a mass-produced consumer product "stems from the advanced stage of pre-production of the programming and player unit at this time."

He added: "MCA's commitment to make available custom product mastering and replication facilities to all programmers will ease the initial problems of independent producers, publishers, sports and educational program producers, international producers and countless other program sources."

In response to many queries already received from the trade, Mr. Cavanagh indicated that Philips and MCA already have developed licensing procedures, and that a liberal licensing policy is being pursued. Present plans, he said, call for establishment of a Philips and MCA licensing office in New York City.

Each demonstration at The Pierre this week is being conducted "live", in a typical living room and kitchen setting. Actors portraying a typical family — mother, father and child — show how the system is used, putting a disc on the turntable, playing it, freezing the action, re-running a sequence, and suggesting themes for family entertainment and instruction. Following each presentation, the speakers

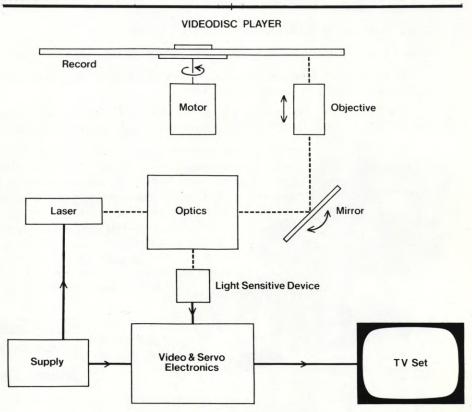
answer questions from the floor.

In addition to Messrs. Cavanagh, Findlater and Zeiss, others taking part in the program are: Kent Broadbent, vice president-research and development of MCA Disco-Vision, Inc., and Nathanael J. Adamson, vice president and director of products of the Magna-

vox Consumer Electronics Company, a subsidiary of The Magnavox Company.

The ultimate success of the videodisc player as a mass-market product will depend on the ability to offer an abundance of inexpensive, broadbased programming support, embody-Continued on Page 568

Simplified diagram showing how full color or black-and-white pictures and sound, optically recorded on albums of the Philips and MCA Videodisc System, are relayed to the viewer's own TV screen by means of a videodisc player that attaches to any standard home television receiver.



INTRODUCING THE NEW CP-1&R INFORMATION DISPLAY

Our information display system for CP-16R reflex cameras keeps you posted at all times about critical camera operating conditions. It is logically organized, easy to interpret, reliable and dependable in performance.

This is how it works.

Advanced solid state circuitry permits the use of dependable light emitting diodes (LEDs) as monitoring devices, rather than the usual delicate metering needles which are so susceptible to damage.

Above and below our unique CP-16R fiber optics viewing screen, various LEDs light up or change in intensity as they monitor vital camera functions. You get all the information you need, *only* when you need it. Most of the time, no more than two LEDs will be on at any given moment. So you can concentrate on your prime objective: filming the scene!

The following indicators are standard equipment on all 1975 CP-16R reflex camera models:

- for "Battery." It lights up only when your battery is low.
- for "Sync." It lights up only when your camera is running out-of-sync.
- for "Footage." It lights up *only* when you're about to run out of film (whether you're shooting with 200 ft. or 400 ft. film loads).
- for "VU Meter," of course. Here, the varying intensity of illumination indicates modulation levels in the CP-16R/A camera with built-in Crystasound amplifier.

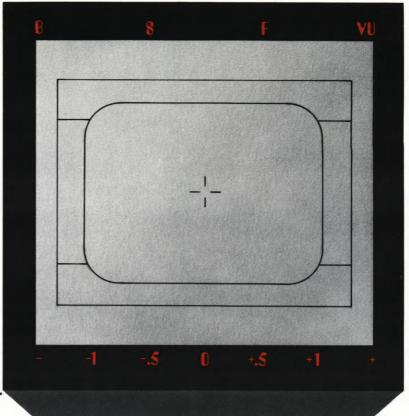
The exposure information (at the bottom of the display) is featured only in CP-16R reflex cameras equipped with our *optional* semi-automatic or fully automatic exposure control system. In which case, the illuminated represents "Correct Exposure." And the symbols to the right and to the left, progressing in ASA half-stop increments, light up to indicate over- or underexposure.

Our CP-16R information display truly informs, without distracting. Without cluttering up the viewfinder. Sure, 1975 CP-16R camera models cost more. But the information display alone is well worth the increase. And it is but one of the many new innovative design features that make the CP-16R reflex the most outstanding 16mm camera system ever!

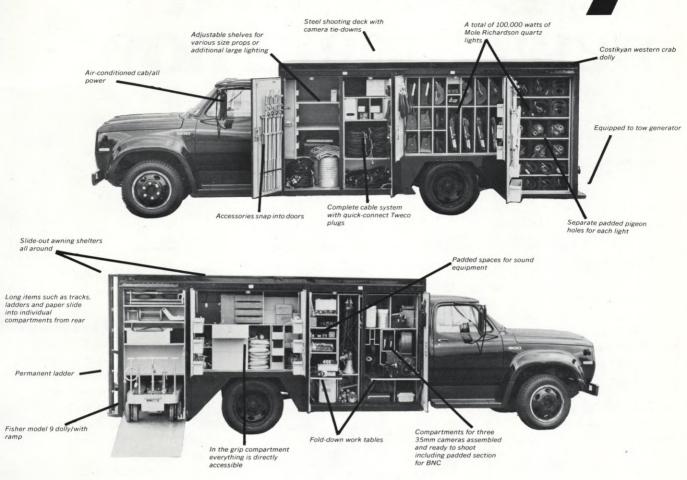
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ARRIFLEX 16BL	8390.	9426.	13,888.	+65%
ARRIFLEX 16 'S'	5543.	5883.	8654.	+56%
ECLAIR 16NPR	7830.	10,524.	14,700.	+88%
ANGENIEUX 12-120 ZOOM	895.	1140.	1995.	+123%
ANGENIEUX 25-250 ZOOM	2645.	3410.	5775.	+118%

If you want to beat this ridiculous inflation, you'll keep your present camera running longer and avoid the high cost of a new purchase. F&B/Ceco wants to help you fight these high costs. That's why we're offering a complete repair and service program.

Here's what we will do:

PREVENTIVE MAINTENANCE

- Check, clean and lubricate camera. Measure flange focal distance. Check ground glass depth. Check optical system.
- Inspect rollers. Clean film gate.
- Check lenses on collimator. Check motors for speed. Test batteries and cables. Test sync generator and cable. Clean and inspect magazine. Lubricate magazine rollers Set clutches.
- Check footage counters.
 PLUS
 our recommendations for necessary repairs, adjustments or replacement of parts.

COMPLETE OVERHAUL

- Completely disassemble camera and inspect each part for wear or defect. • Replace worn parts.
- · Clean and lubricate totally.

• Reassemble camera to factory specifications. • Adjust flange focal distance. • Adjust ground glass depth. • Adjust film gate. • Set pressure plate. • Align optical system. • Set motors for proper speed. • Check sync generator. • Guarantee: Same as Manufac-



Here's what it will cost:

PREVENTIVE

	MAINTENANCE*	OVERHAUL**
16MM ARRI 'S'	\$45.00	\$210.00
16MM ECLAIR NPR	90.00	300.00
16MM SINGLE SYSTEM NEWS CAMERA	45.00	180.00
35MM ARRI	45.00	210.00
BNC REFLEX	120.00	750.00

^{*}Includes Camera Body, 1 Magazine and Lenses in Turret.

Contact us for repair and maintenance rates on other cameras or we will be happy to give you a repair estimate for a nominal charge of \$30.00 deductible from the cost of your repair.

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So we can put the identical equipment in your hands during the repair — and save you half the rental cost.

Bring or ship your camera in today. You'll save money and help fight inflation at the same time.

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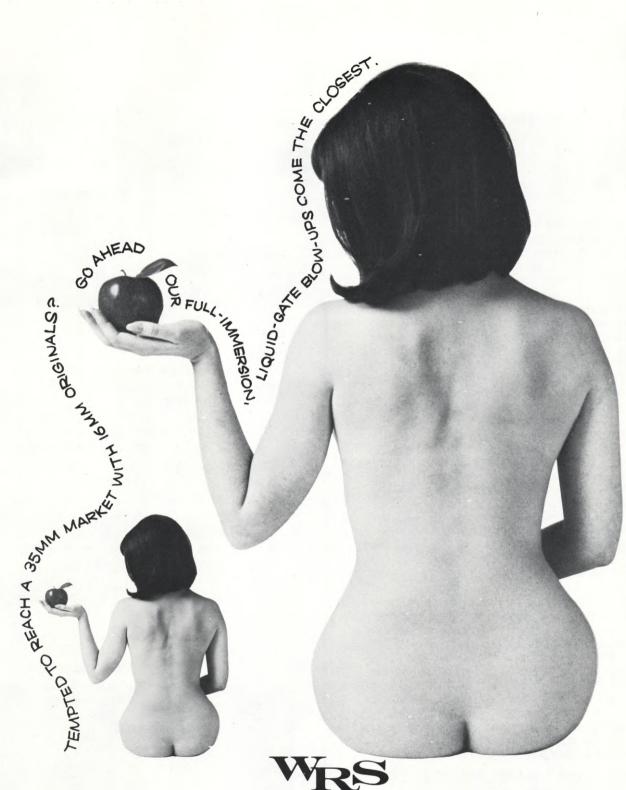
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THE FIVE BEST PHOTOGRAPHED MOTION PICTURES OF 1974

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-bitting 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 65,000,000 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, world-wide, 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 chose 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 47th Annual Awards Presentation:

JOHN A. ALONZO, ASC "Chinatown"

PHILIP LATHROP, ASC "Earthquake"

GEOFFREY UNSWORTH, BSC "Murder On The Orient Express"

FRED KOENEKAMP, ASC JOSEPH BIROC, ASC "The Towering Inferno"

BRUCE SURTEES "Lenny"

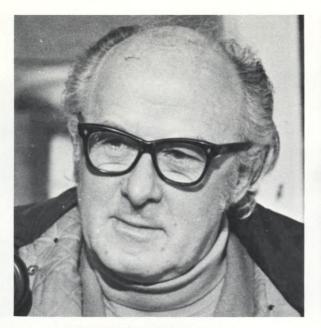


"EARTHQUAKE"

"EARTHQUAKE" — photographed by Philip Lathrop, ASC, is a disaster film on a cataclysmic scale which shows Los Angeles being totally levelled by a tremor far more violent than anything yet actually experienced. In recording the impact of this holocaust in cinematic terms, Lathrop has managed to preserve the intimacy of individual stories, while, at the same time, portraying the tragedy and desolation on a vast scale. The balance between the two is achieved with an uncommon degree of accuracy.



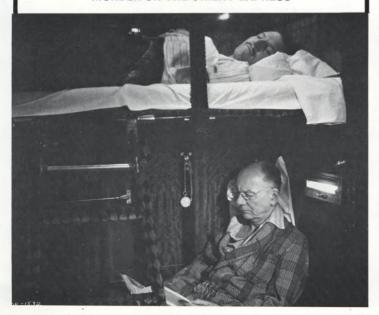




GEOFFREY UNSWORTH, BSC

"MURDER ON THE ORIENT EX-PRESS" — Photographed by Geoffrey Unsworth, BSC, is a tour de force of high-style cinematography made incredibly more difficult to achieve by virtue of the fact that 98% of the action takes place aboard a train. Yet, within the confines of tiny drawing rooms and narrow dining cars, the cinematographer manages to achieve an amazing versatility in terms of camera angles and mood. Technically impeccable photography, laced with a soupcon of decadence and a touch of menace.







"CHINATOWN"

"CHINATOWN" — photographed by John A. Alonzo, ASC, is a strange cinematic anachronism, in that it tells a story of the thirties, creating a period mood, but using such modern elements as the anamorphic format and color. The cinematographer employs selective lighting and shadow to create an aura reminiscent of the Dashiell Hammett and Raymond Chandler mysteries so popular during the Golden Age of Hollywood. Old-fashioned lighting units were ressurected to get a dated look, without using diffusion.



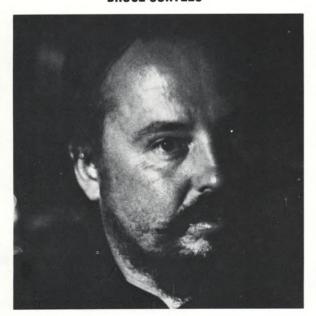




"LENNY"

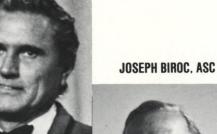
"LENNY" — Photographed in stark black and white by Bruce Surtees, purports to tell the true-life story of Lenny Bruce, a strange and tormented tragi-comic figure on the American scene of a couple of decades ago. In this sometimes tender, often brutal film biography, Surtees stretches the range of black and white photography to delineate a wide range of moods. The tawdry glamour of the spotlight gives way to the murky tones of despair, as the central figure descends into a Hell from which there is no escape.

BRUCE SURTEES





FRED KOENEKAMP, ASC



ALTIC.

"THE TOWERING INFERNO" photographed by Fred Koenekamp, ASC, and Joseph Biroc, ASC, is a gem of a disaster film. which shows what could happen when a super-high-rise building catches fire. The two cinematographers, shooting in separate units, manage to capture both the spectacle of the catastrophe and the intimate details of the individual human tragedies and blend them together into a perfectly fused artistic whole that appears on the screen to be the work of a single creative entity.

"THE TOWERING INFERNO"



ACADEMY AWARDS Continued from Page 525

Messrs. Brendel, Whitlock and Robinson. And we wish to emphasize our certainty that the oversight was inadvertent on the part of the Academy. We mention it here simply to set the record straight.

To readers of this journal, the most important Oscar is always the one awarded for "Best Achievement in Cinematography". This year — in "the year of the disasters" — that award was shared by Fred Koenekamp, ASC, and Joseph Biroc, ASC, for their spectacular lensing of "THE TOWERING INFERNO". The work of both of these men on "INFERNO" is analyzed in detail in the February 1975 issue of American Cinematographer.

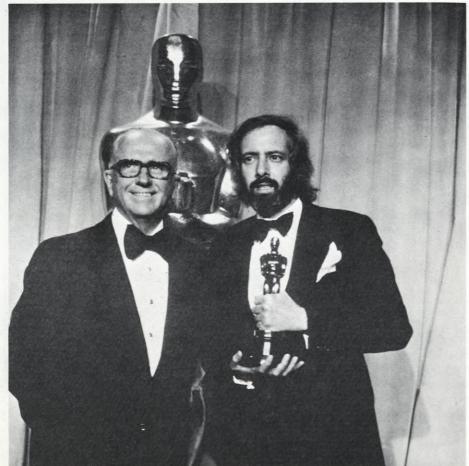
In accepting the coveted statuettes on his own behalf and that of Mr. Biroc, Mr. Koenekamp graciously expressed the wish that he could share the honor with special effects wizard L.B. Abbott, ASC (who, incidentally, possesses an armful of Oscars and Emmys of his own).

The staff of American Cinematographer joins with their fellow cinematographers throughout the world in extending heartiest



Frank Brendel, Albert Whitlock and Glen Robinson hold Oscars presented to them, as "EARTHQUAKE" was voted a Special Achievement Award for Visual Effects, for its realistic depiction of the devastation of Los Angeles by an earthquake. Once a regular category in the awards, the Visual Effects Award is no longer mandatory, but is voted only "at such time as, in the judgment of the Board of Governors, there is an achievement which makes an exceptional contribution to the motion picture for which it was created."

A touch of class was added to the program by having the writing awards presented by America's foremost living author, James Michener. He is shown here after having presented the "Best Original Screenplay" award to Robert Towne for his script of "CHINATOWN".



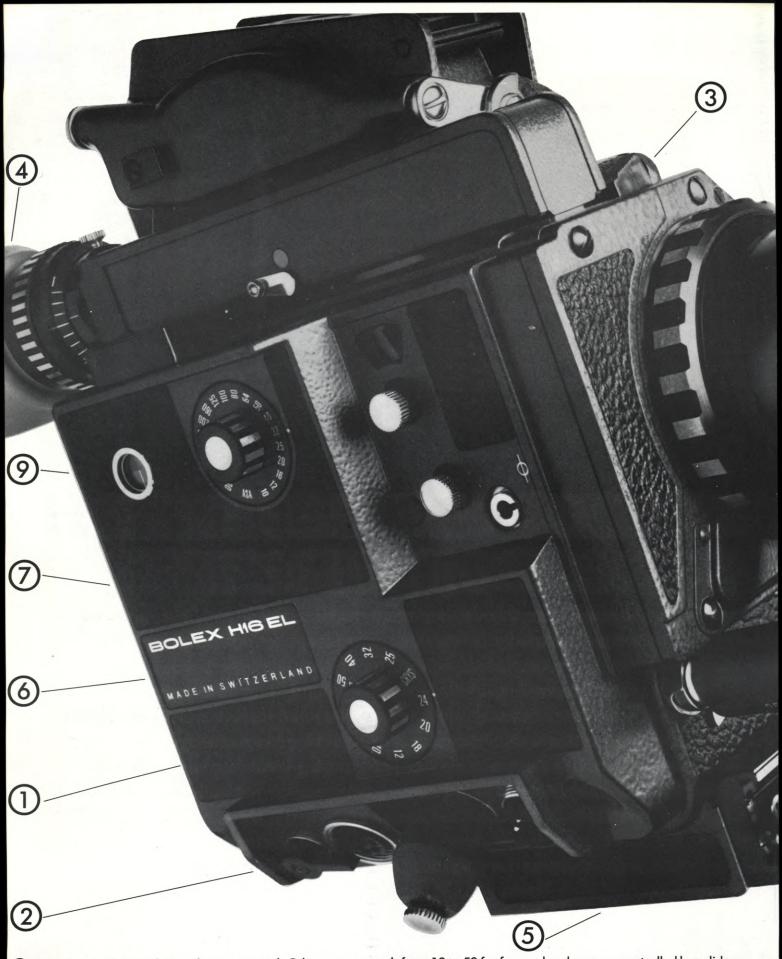
congratulations to the Messrs. Koene-kamp and Biroc.

HOW THE OSCARS ARE AWARDED

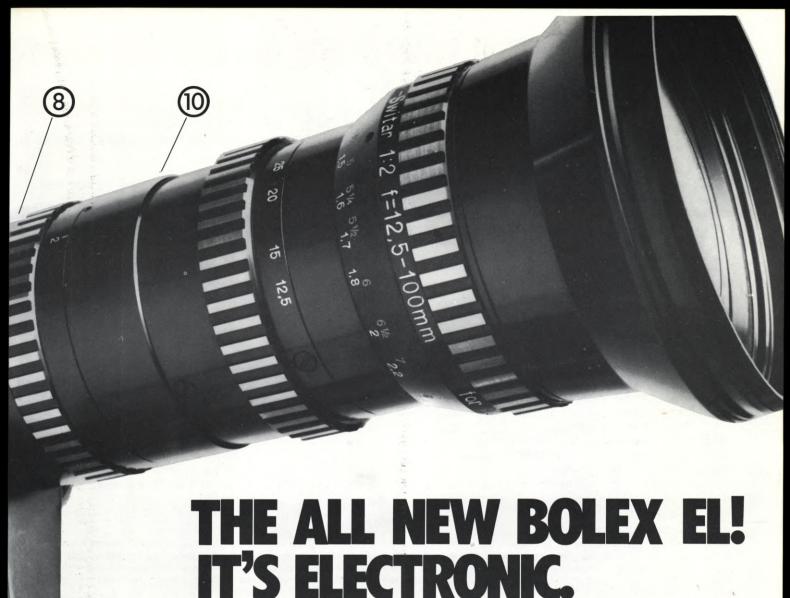
More than 3,000 voting members of the Academy of Motion Picture Arts and Sciences — in the United States and abroad — have determined which film achievements would be Oscarhonored during the 47th Annual Oscar Awards program.

Eligible for awards are any films which have been exhibited in 35mm or larger for paid admissions in a commercial motion picture theater in the Los Angeles area (defined as Los Angeles, West Los Angeles, and Beverly Hills) betwen January 1, 1974 and midnight of December 31, 1974, if the picture played at least seven days starting before midnight of December 31. This year 264 motion pictures were eligible.

Continued on Page 596



① Crystal control motor for wireless sync sound. Other motor speeds from 10 to 50 fps forward and reverse, controlled by solid state electronics. Automatic slating with sync-pulse generator. ② Rechargeable battery that adds a mere 13 oz. to the weight and attaches right to the camera. ③ Technologically, the most advanced through-the-lens metering system. The silicon cell has no memory. So it reacts instantly, responds uniformly to all colors and is practically unaffected by temperature changes. Rugged, accurate and reliable. ④ Light-emitting diodes indicate correct exposure in bright 13X reflex finder. The completely electronic system has no mechanical parts or moving needles that can fail due to rough handling. Lighted diodes are always visible even in dim light. ⑤ Electro-magnetic control for instant start and stop with shutter in closed position. ⑥ Electronically controlled single frame capability assures the kind of accuracy and reliability found only in specially built animation units. ⑦ Superb picture steadiness to



We built this camera with every essential feature successful professionals use to create outstanding 16mm commercial films. Yet until now these same pros have had to pay thousands more for these same advantages—without having them in one camera.

And, with the Bolex EL, a pro can film more easily and get superb results. As a matter of fact, so superb, he can blow up his film to 35mm for theatrical release if need be.

Now, study each Bolex EL feature carefully. Inspect the camera inside and out. Compare the price, quality and features of our camera with any other 16 available. Then choose your very own Bolex EL. And go out and experience camera performance.

satisfy the demands of the most discriminating pro. (8) The lens mount is so rugged and well-engineered you can safely carry the camera by the lens. (9) Automatic threading and spool ejector for swift change of film. (10) Complete line of superb optics: macro, power zoom, lenses with fully automatic exposure control, automatic depth of field scales, automatic diaphragm pre-setting,

super fast f/1.1. aperture. Professional accessories include 400′ magazine, matte box, blimp, shoulder brace, u/w housing and many more. Bolex also has four H16 cameras, accessories and Bolex 421 optical/magnetic sound projector. Write for full-color brochure and catalog and tell us if you'd like to see a film we produced about the EL.

BOLEX

Paillard Incorporated 1900 Lower Road, Linden, New Jersey 07036 Canada: W. Carsen Co. Ltd., 31 Scarsdale Rd., Don Mills, Ont.

UNIQUE MINI OPTICAL PRINTER FOR SUPER-8 AND 16mm

The compactness, ease of operation and low cost of this Miniprinter, plus the wise range of special and optical effects it can execute, should prove a boon to professional 16mm and Super-8 film-makers

The term "optical printer" conjures visions of a huge, complicated, exorbitantly expensive maze of machinery — and the imagery is accurate, because that's what an optical printer, by virtue of its basic function and inherent configuration, must actually be like.

All except one.

For now comes a totally "revolutionary" (to use an overworked term) new optical printer for 16mm and Super-8 blow-up, 1-to-1 and reduction printing.

Unlike the classic optical printer, which is a rather tall vertical hunk of apparatus, the new printer is low, readily movable, and horizontal in configuration — resembling at first glance one of the new generation of flatbed editing consoles. It has been designed with the accent on compactness, professional quality, simplicity of operation and low cost.

The Acme Miniprinter is probably the most innovative optical printer to come along in years. The unit was first shown at *Photokina* in 1974 and again at the SMPTE Exhibit in Toronto last November.

PSC Technology Inc. (formerly Producers Service Corporation) designed, developed and is now manufacturing this unit for six major market areas:

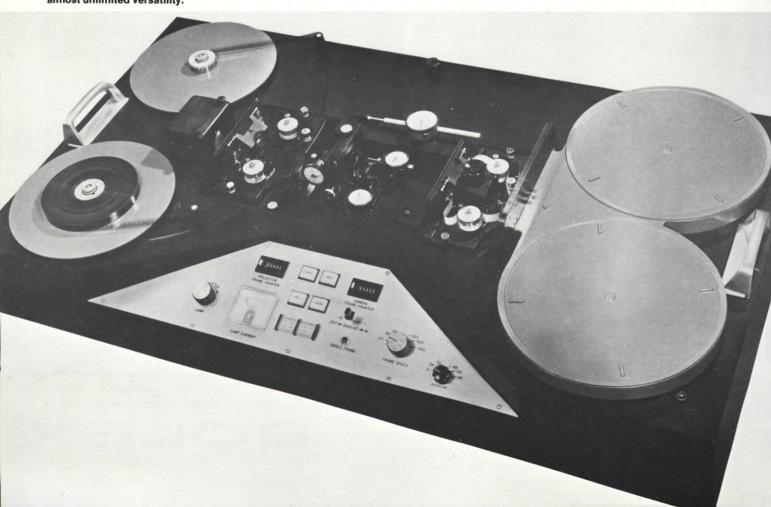
- 1. Newsfilm duplication
- 2. Sportsfilm prints
- College and Universities audiovisual and cinematography departments
 - 4. Super-8 and 16mm labs
 - 5. Special effects companies
- 6. 16mm and Super-8 production companies

The Miniprinter's features are numerous. Some of the most important ones include:

Printing from 16mm to 16mm

- Printing from 16mm to dual rank Super-8 (1-4 format)
- Printing from Super-8 to dual rank Super-8 (1-4 format)
- Printing from Super-8 to 16mm
- Eyepiece for camera line-up
- Precision dial indicators
- Fades and dissolves 16, 24, 32, 48, 64, 96 frame lengths
- Freeze-frame
- Camera/Projector forward or reverse
- Variac lamp brightness control
- Daylight operation
- Filter holder for color and density correction
- Five-digit counters for camera and projector
- Professional quality lenses for blow-up, reduction and
- 1-to-1 printing
- Interchangeable cameras and projectors
- Speeds; 80, 160, 320, 640 and 960

The Acme Miniprinter, shown below, is probably the most innovative printer to come along in years. PSC Technology Inc. (formerly Producers Service Corporation) designed, developed and is now manufacturing this unit for six major market areas, including: newsfilm duplication, sports films, colleges and universities, Super-8 and 16mm labs, special effects companies, and 16mm and Super-8 production companies. It is totally unique in design and, at first glance, resembles one of the new generation of flatbed editing consoles. The simple-to-operate unit has almost unlimited versatility.



frames per minute

 Operates from any 110-volt, 60Hz, 15-amp circuit.

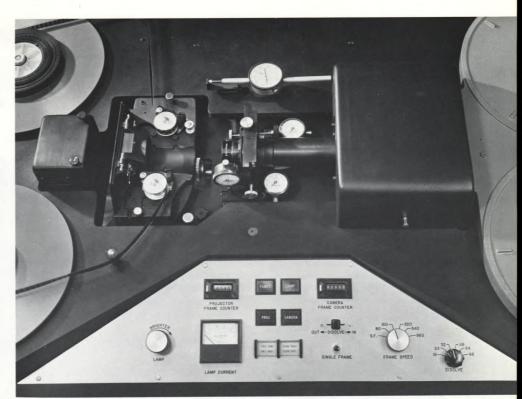
PSC recognized the need for a highquality optical printer for the 16mm and Super-8 professional and semi-professional and decided to develop this important new product. In addition to



High quality optics are used in the Miniprinter. Here you see the Kodak Ektar 103mm lens for one-to-one printing. The precision dual indicators allow the operator to quickly and repeatably adjust the position of the lens in all four directions (North, East, South & West). The lens is completely interchangeable with the Kodak Ektar 89mm lens used in blow-ups and reductions.

straight printing, the Miniprinter will do fades and dissolves, subtractive density and color correction and freeze-frame printing.

Clearly, the cost of large optical printers is prohibitive for most of the Super-8 and 16mm professionals. Furthermore, these units offer more features than those required by the companies listed in the previously discussed market areas. As a result, the growth and fantastic potential of professional Super-8 filmmaking has been somewhat restrained. With the advent of the Acme Miniprinter, its



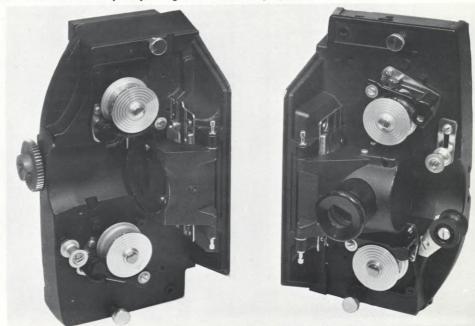
The Miniprinter control panel is conveniently arranged for simplicity of operation. There are separate projector controls and counter and similarly for the camera so that each unit may be operated independently. Note the single frame (freeze frame) control, dissolve, speed and lamp brightness controls. Also note light-tight cover on camera which allows complete daylight operation.

many features and low cost (\$13,500. basic unit), professional-quality optical printing is within the reach of those who were formerly priced out of the market.

The Miniprinter is easily operated and does not require the special operator-skills a large optical printer requires. The unit operates from any office current, 115V, and does not require plumbing, air conditioning or any other special environmental feature.

For further information contact PSC Technology Inc., 1200 Grand Central Avenue, Glendale, California 91201. Phone (213) 245-8424, Telex 69-8231.

Cameras and projectors for the Miniprinter are completely interchangeable. On the left is a 16mm projector; on the right is a 16mm camera (dual rank Super 8, 1-4 format). Note viewer eyepiece for image line-up in the camera. The thumb screws at the top and bottom of each unit allow the user to quickly change camera and/or projector.





Authorized **CP-16 Dealers** and Service Centers

North American

D — Dealer S — Service D/S — Dealer & Service

CALIFORNIA

Alan Gordon Enterprises, Inc. D/S 5362 N. Cahuenga Blvd North Hollywood, Ca. 91601

lolph Gasser Inc. D/S 181 Second St. San Francisco, Ca. 94105

F&B/Ceco, Inc. D/S 7051 Santa Monica Blvd. Hollywood, Ca. 90038

San Diego Camera Exchange S 1071 Sixth Ave. San Diego, Ca. 92101

COLORADO

Stan Phillips & Associates/ Denver, Colorado 80211

DISTRICT OF COLUMBIA Brenner Cine-Sound D/S

5215 Wisconsin Ave., N.W. Washington, D.C. 20015 FIORIDA

Image Devices, Inc. D/S 811 N.W. 111th St. Miami, Fla. 33168 GEORGIA

Atlanta Film

Equipment Rentals D/S 1848 Briarwood Rd., N.E. Atlanta, Ga. 30329

HAWAII

Pacific Instrumentation D/S 5388 Papai Street Honolulu, Hawaii 96821

ILLINOIS

Victor Duncan, Inc. D/S 676 St. Clair St. Chicago, III. 60611

LOUISIANA

Pan American Films D/S 822 N. Rampart St. New Orleans, La. 70116

MASSACHUSETTS

Sanford Camera & Projector Repairs S 1054 Massachusetts Ave Arlington, Mass. 02174

MICHIGAN

Victor Duncan, Inc. D/S 11043 Gratiot Ave. Detroit, Mich. 48213

MINNESOTA

Galaxy Film Service D/S 3000 France Ave. Minneapolis, Minn. 55416

MISSOURI

Calvin Cinequip, Inc. D/S 215 W. Pershing Road Kansas City, Mo. 64108

NEW YORK

F&B/Ceco, Inc. 315 West 43rd St. New York, N.Y. 10036

The Camera Mart D/S 456 W. 55th St. New York, N.Y. 10019

NORTH CAROLINA

Standard Theatre Supply Co. D/S 125 Higgins St. Greensboro, N.C. 27420

TENNESSEE

Bill Billings Photo D/S 129 South Front Ave. Rockwood, Tenn. 37854

Motion Picture Laboratories, Inc. D/S 781 S. Main St. Memphis, Tenn. 38102

Victor Duncan, Inc. D/S 2659 Fondren Ave. Dallas, Texas 75206

Stockdale & Co., Inc. D/S 200 E. First South Salt Lake City, Utah 84111

WASHINGTON

Glazer's Camera Supply D 1923 Third Ave. Seattle, Washington 98101 Phototronics S

223 West Lake North Seattle, Washington 98109

CANADA

Cine Audio 10251-106 St. Edmonton, Alberta

Alex L. Clark Limited D/S 3751 Bloor Street West Islington, Ontario M9A 1A2

Branches: 1070 Bleury Street D/S Montreal 128, Quebec

7104 Hunterwood Rd., N.W. D/S Calgary 51, Alberta

Steve's Camera Service S 189 East 28th Ave. Vancouver, B.C. V5V 2M3

MEXICO

Alan Gordon Enterprises, Inc. D/S O R.E.C.E.S.A Rio Amazona 85 Mexico 5 D.F.

Listing as of: Mar. 1, 1975



FILMEX 75 **Continued from Page 533**

AMOUREUSES (My Little Loves), Barbet Schroeder's documentary feature, GENERAL IDI AMIN DADA, and Claude Sautet's VINCENT, FRANCOIS, PAUL ET LES AUTRES (Vincent, François, Paul and the Others); SKARSELD (Purgatorio) by Swedish director Michael Meschke; three films from the Soviet Union: KALINA KRASNAYA (The Red Snowball Tree) directed by Vasiliy Shukshin, ROMANS O VLJUBLENN-CYCH (A Romance for Lovers) directed by Andrei Mikhalkov-Konchalovsky, and PIROSMANI (winner of the top award at the Chicago Film Festival) directed by George Shengelaya; from Iran, A SIMPLE EVENT directed by Sohrab Shahid-Saless; Maud Linder's film compilation A TRIBUTE TO MAX LINDER: and from Belgium, Thierry Zeno's VASE DE NOCES (The Wedding Trough).

THE LAW, directed by John Badham, had its American theatrical premiere.

Sixteen programs were sold out, including the special sneak-preview of Mike Nichols' film THE FORTUNE from Columbia Pictures. Five of the sold-out programs were repeated, including MONTY PYTHON AND THE HOLY GRAIL, THE GENTLEMAN TRAMP, CELINE AND JULIE GO BOATING (by French filmmaker Jacques Rivette). A TRIBUTE TO THE WARNER BROS. CARTOON UNIT, and COMING SOON! (a 3-hour program of coming attraction trailers).

An International Film Poster Art Exhibit, "The Filmex 1-Sheet Show," was one of the major highlights of the Los Angeles International Film Exposition. The Exhibit was comprised of more than 400 motion picture posters from over twenty countries.

The non-competitive Art Show, which was free to the public, opened March 1, 1975, two weeks before the Exposition and ran concurrently with the Exposition through March 26.

The exhibit was compiled from several collections, including New York's Museum of Modern Art, the 1974 Cannes Film Festival poster competition, the Polish Film Museum, motion picture distributors in this country and abroad, private collections and from designers themselves.

The exhibit was selected by a panel of the nation's most prominent graphic art authorities, including international designers Saul Bass, Lou Danziger, Anthony Goldschmidt, Milton Glaser, Art Director of NEW YORK MAGAZINE. and Kenneth Donahue, Director of the Los Angeles County Museum of Art. The exhibit was coordinated by Jivan Tabibian and Sally Shapiro.

Many special programs were presented, including "Six Documentaries" consisting of films which explore such diverse subjects as oil drilling in the North Sea to the esthetics of Hatha Yoga.

"Three Portraits" included Martha Coolidge's OLD FASHIONED WOMAN. Swedish cinematographer Sven Nykvist's THE VOCATION and THE SAFE-CRACKER by Czechoslovakian filmmaker Jaromil Jires.

"Five Contemporary Artists" featured short films based on the lives and works of East African artist Jesse Allen (INSIDE THE WORLD OF JESSE Continued overleaf

Natalie Wood and husband Robert Wagner were among the stars who turned out to celebrate the opening at the Filmex Society Benefit Ball. Starting with an idea in the minds of a few brave souls, FILMEX has grown steadily in scope since it began in 1971 and is now regarded as the most comprehensive film exposition in the world. It is officially accredited by the International Federation of Film Producers Associations, Paris.



Trade up to a CP-16/A and save \$1225.

Within three short years, the CP-16/A has become the most preferred 16mm sound camera in the TV-newsfilm/documentary field — with many of the larger stations standardizing their entire newsfilm operation on the CP-16 camera system.

No matter what new equipment developments may be in the offing for TV-news, our non-reflex CP-16 and CP-16/A camera models continue, and will continue, to make good equipment sense. Especially for those who operate "one-man-band" style.

A special offer from Cinema Products and your local CP-16 dealer. *

Even though upgrading TV-newsfilm equipment is relatively inexpensive, there are stations that may find it increasingly difficult to do so — what with ever tightening budgets and the shrinking purchasing power of the dollar.

And so, to introduce you to the CP-16 camera system, a system fully supported by an extensive, well trained dealer/service network, we are pleased to offer you, for a limited time only, a unique opportunity to acquire a CP-16 or CP-16/A at fantastic savings!

Here's all you have to do. Trade in any 16mm newsfilm-type camera you presently own — whatever its condition, no matter how old — for a brand new, *all new* CP-16/A with built-in Crystasound amplifier.

Your authorized local CP-16 dealer will give you \$1225 off list price on any CP-16/A camera package. Or \$1000 off on a standard CP-16. (Of course, this is

in addition to
the savings you
normally get if
you also buy the
zoom lens
for the

CP-16
or CP-16/A at
the same time.)

Plus two-year warranty and free "loaner."

Its proven performance in the field has established the CP-16 as the most reliable and dependable camera system, least likely to break down in the day-to-day grind of newsfilm work.

As part of this special offer, we take great pride in extending our factory warranty to a full two years on all mechanical and electronic components. *Provided* you purchase your camera from your authorized *local* CP-16 dealer.

And, should your CP-16 or CP-16/A require any repairs covered by this special two-year warranty, your local dealer will provide you with a free CP-16 "loaner." This is but one example of the outstanding after-sales service and total back-up you can expect from your authorized local CP-16 dealer.

But you must act now!

With savings and benefits like these, why risk your precious equipment dollars on yet another "re-manufactured" conversion?

Move up to a brand new, *all new* CP-16/A, the uncontested leader in the TV-newsfilm/documentary field. You owe it to yourself.

But remember, this unusual offer is good only from March 1st to July 1st, 1975. So hurry. See your authorized local CP-16 dealer now.

*See adjacent page for listing of authorized North American CP-16 Dealers participating in this special offer.





2037 Granville Avenue, Los Angeles, California 90025 Telephone: (213) 478-0711 ■ Telex: 69-1339 ■ Cable: Cinedevoc



Rosalind Russell introduces Los Angeles Mayor Tom Bradley from the stage of the Plitt Century Plaza Theatre #1, prior to the opening night screening of "FUNNY LADY". The mayor welcomed the audience, told them how proud Los Angeles is of its film exposition and pledged the city's continued support to the project.

ALLEN); conceptual artist Christo (CHRISTO'S VALLEY CURTAIN); Carmen D.Avino (BACKGROUND: CARMEN D'AVINO); Dutch graphic artist M. C. Escher (ADVENTURES IN PERCEPTION); and Piet Mondriaan (PIET MONDRIAAN: A FILM ESSAY.)

Irene Dunne, one of the Great Ladies of the American screen, arrives for this year's special "star tribute", hosted by Roddy McDowell. Five hours of clips from her films were screened.



The Art of Animation offered a sampling of the best of that art form from 11 countries, including Romania, Greece, Bulgaria and the Soviet Union.

Sixteen films, ranging in length from one minute to twenty-five minutes, comprised the "Student Film" program representing entries from film schools throughout the country, while the films of avant garde filmmakers from Great Britain, the USA and Ireland were presented in "Experimental Filmmakers".

"The Main Title" was a comprehensive review of the art of feature film title-design from its creative development in the mid-fifties to the present, largely through the work of title-innovator Saul Bass. Examples of many titles concepts, from the directing and shooting of entire special live-action sequences to the use of still photos were shown, many in 70mm.

"Coming Soon!" was a 3-hour survey of coming attractions, trailers and other unusual film advertisements. Over 100 of these "miniature movies" from the beginning of sound to the present were featured. The trailers were from major studios, trailer-distributing companies and private collections. This presentation was made possible through the cooperation of National Screen Service Company.

"The Exploitation Film" explored the highlights of this film genre. Drawing from research for his "Sex In The

Cinema" series in Playboy Magazine, Arthur Knight moderated the programs in conjunction with film researcher David Friedman.

A special retrospective program featuring the work of director James Whale consisted of the presentation of six of his films in matinees, including FRANKENSTEIN, BRIDE OF FRANKENSTEIN, THE INVISIBLE MAN, THE KISS BEFORE THE MIRROR, ONE MORE RIVER, and THE MAN IN THE IRON MASK; plus two evening presentations: THE OLD DARK HOUSE and SHOW BOAT.

D. W. Griffith, the father of American motion pictures, was saluted with a selection of his short silent films from the Biograph years (1908-1913). FILMEX 75 was dedicated in total to Mr. Griffith in this centennial year of his birth.

A special program honoring the memory of Jack Benny featured a screening of TO BE OR NOT TO BE (1942), directed by Ernst Lubitsch, starring Benny and Carole Lombard.

The National Film Board of Canada, which has for nearly 40 years funded, produced and distributed features, shorts, documentaries, and many innovative quality programs, was honored with a 2½-hour program of short films.

Two programs featuring the work of Walt Disney studios and the Warner Bros. cartoon unit were presented. The collection of Disney cartoons included rarely-screened "Silly Symphonies" from the 1930's and excerpts from animated features of the 1940's. Stars of the selections included Mickey Mouse and Donald Duck.

Warner Bros. Cartoons, created and drawn by Tex Avery, Robert Clampett, Friz Freleng, Chuck Jones and others — featuring Bugs Bunny, Porky Pig, the Roadrunner and Daffy Duck — were presented.

Most certainly, the highpoint of FILMEX 75, as far as the sci-fi film buffs were concerned, was the 50-hour Science-Fiction Movie Marathon. Playing to an audience of 2,200 people, it started at 9 p.m. Saturday, March 15, with a premiere screening of A BOY AND HIS DOG, based on a prizewinning story by Harlan Ellison, and, for the next 3,001 uninterrupted minutes (until Midnight, Monday, March 17) 25 full-length science-fiction features and 28 excerpts and trailers were shown — all for a single \$5 admission charge.

Miss Irene Dunne, making a personal appearance, was honored at this year's special star tribute, hosted by Roddy McDowall. The five-hour FILMEX tribute program consisted of two hours of film clips from 15 of Miss Dunne's films including ROBERTA, THEODORA GOES WILD, A GUY

NAMED JOE, ANNA AND THE KING OF SIAM, THE AWFUL TRUTH and PENNY SERENADE. At Miss Dunne's request, LOVE AFFAIR with Charles Boyer and directed by Leo McCarey had been chosen to be presented in its entirety prior to the film clips. After the screening, Miss Dunne discussed various aspects of her career informally with Mr. McDowall and answered questions from the audience.

One of the most popular programs featured a screening of THE FOUR HORSEMEN OF THE APOCALYPSE, starring Rudolph Valentino. The 1921 silent classic, which was directed by Rex Ingram, was accompanied by a full symphony orchestra conducted by Fred Werner. Mr. Werner had prepared a score from themes by Erich Wolfgang Korngold and from his own original works.

A special program was devoted to screenings of the five features nominated for the Academy Award for "Best Foreign Film". These included CAT'S PLAY (Hungary), AMARCORD (Italy), THE TRUCE (Argentina), LACOMBE, LUCIEN (France) and THE DELUGE (Poland).

A three-part *Tribute to Roberto Rossellini* was a retrospective featuring screenings of six of the famous Italian director's films.

Capacity crowds were drawn each day to the free morning series featuring the works of Nobel Prize-winning authors, a program made possible by a grant from the Atlantic Richfield Company.

Eugene O'Neill, Thomas Mann, William Faulkner and Sinclair Lewis were among the thirteen Nobel Prizewinning authors whose works were featured in the free morning series of films. The event was designed to pay tribute to some of the great authors of the century, whose works have served, since the first days of movie-making, as an inspiration for some of the greatest films made. The motion pictures presented were some of those which most successfully made the transition from literature to film. Included in this special series were: George Bernard Shaw's PYGMALION, directed by Anthony Asquith; John Steinbeck's EAST OF EDEN, directed by Elia Kazan; and Sinclair Lewis' ARROW-SMITH, directed by John Ford in 1937.

Other films in the series included Joseph L. Mankiewicz' 1948 production of John Galsworthy's ESCAPE; Francois Mauriac's THERESE DESQUEYROUX, directed by Georges Franju; William Faulkner's INTRUDER IN THE DUST, directed by Clarence Brown; and Rabinandranath Tagore's CHARULATA, directed by Satyajit Ray.

The final selection of films in this series included Luchino Visconti's film

of Thomas Mann's DEATH IN VENICE; two works by Rudyard Kipling presented as a double-feature program for children, ELEPHANT BOY, directed by Robert Flaherty, and KIM, directed by Victor Saville; Knutt Hamsun's HUNGER (directed by Henning Carlsen), Frank Borzage's 1932 film of Ernest Hemingway's A FAREWELL TO ARMS; the 1922 Swedish production of Selma Lagerlof's THE PHANTOM CHARIOT, directed by Victor Sjostrom; and Sidney Lumet's production of Eugene O'Neill's LONG DAY'S JOURNEY INTO NIGHT.

A unique highlight of FILMEX 75 was the first full-scale Motion Picture Marketing Conference to be presented in the United States. The event was sponsored by the Eastman Kodak Company (Motion Picture and Audiovisual Markets Division), which enabled it to be offered free to the public during the last five days of the Exposition.

The conference was designed as a forum for the entire spectrum of ideas concerning the promotion, distribution, exhibition and advertising of motion pictures. Diverse attitudes concerning film marketing were examined — ranging from traditional studio methods to the newer, more unconventional techniques developed by independent companies and filmmakers.

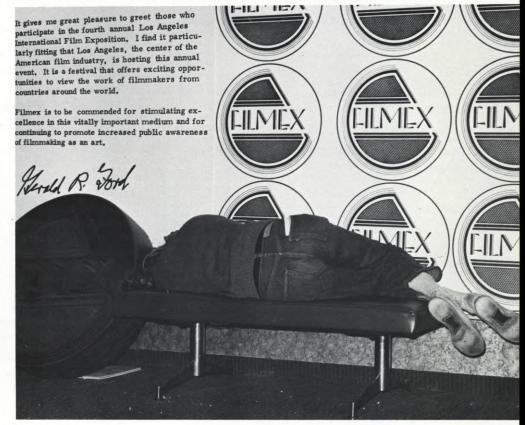
The conference included representatives from all segments of film marketing, distribution and



Elsa Lanchester sits in front of a poster advertising one of her best-remembered roles, that of "THE BRIDE OF FRANKENSTEIN".

promotion. Studio personnel, independent distributors and film-makers who are seeking alternatives to the customary methods of movie marketing, graphic designers, ad agency representatives, broadcast and print specialists, and film critics were

An exhausted sci-fi film buff flakes out on a bench in the lobby of the theatre to grab a few winks of sleep during the continuous 50-hour Science-fiction Movie Marathon, which presented 25 full-length features and 28 additional clips and trailers. Opening with "A BOY AND HIS DOG", based on a prize-winning story by Harlan Ellison, it was a highpoint of FILMEX 75. Next to the sleeper is a blown-up message of greeting from President Ford.





FILMEX 75 was by far the most successful event since the Expositions began. More than 80,000 people attended the 88 separate events, which included screenings of 236 films representing 27 nations. The enthusiastic public reaction resulted in an average audience size of 76% of theatre capacity, a very high percentage, indeed.

among the participants. The conference consisted of seminars conducted by a panel of experts in their field, but representing, in some cases, divergent points of view.

Topics for discussion at these seminars included the question of whether advertising/sales people or filmmakers should have control over marketing decisions; the film critics' power and degree of influence and if massive promotion actually sells tickets. Other seminars examined ideas on designing an ad, the roles of the audience and market research, discussions on the foreign film in America, non-theatrical distribution, the short film market, and the effectiveness of various media used for advertising.

Some of the participants in the Conference were Richard Lederer, Warner Bros. V.P. of Advertising and Publicity; Jonas Rosenfield, 20th Century-Fox V.P. of Advertising and Publicity; Richard Kahn, M-G-M V.P. of World Wide Advertising, Publicity and Exploitation; Charles Sellier, Sun Classic Films; Ira Teller, Bryanston Films; Dan Davis, Kaleidoscope; Ronald Haver, Film coordinator — Los Angeles County Museum of Art; Philip Chamberlin, Director of Special Projects — Academy of Motion Picture Arts and Sciences; ad designers Saul Bass, Bill Gold and Tony Seiniger; exhibitors Max Laemmle (Laemmle Theaters), Jimmie Johnson (Pussycat Theaters), and Bob Maestri (Fox Venice), Herbert Hauser, Chairman of the Board, Diener-Hauser-Greenthal; film journalists Kevin Thomas, Marilyn Beck, Art Murphy, David Sheehan, Gregg Kilday, and John Dorr, and film

producers Marvin Worth and Tony Bill.

Some of the 127 participants in attendance at FILMEX 75, most of whom had films presented, either new or in retrospective programs, were David Lean, Mike Nichols, Arthur Penn, Jane Fonda, Haskell Wexler, ASC, George Pal, Buster Crabbe, Elsa Lanchester, Sol Lesser, Robert Wise, Jackie Coogan, Warren Beatty, and Blanche Sweet. Among international filmmakers in attendance were Arturo Ripstein and Rolando Klein (Mexico); Jean Eustache, Yannick Bellon, and Maud Linder (France); Thierry Zeno (Belgium); Mrinal Sen (India); Pantelis Voulgaris (Greece); Monty Python's Flying Circus and Rex Pyke (Great Britain); Masaki Kobayashi (Japan); and two special delegations, one from

the Soviet Union which included directors Andrei Mikhalkov-Konchalov-sky and Tolomush Okeyev and actress Irina Kupchenko, and the other from Canada which included representatives of the National Film Board.

The lavish FILMEX 75 opening night gala, organized by Wendy Goldberg, President of the Filmex Society, was attended by such Hollywood celebrities as Mr. & Mrs. Dean Martin, Mr. & Mrs. Johnny Carson, Fred Astaire, Gene Kelly, Mr. & Mrs. Freddie Brisson (Rosalind Russell), Natalie Wood and Robert Wagner, Valerie Perrine, and Mr. & Mrs. Gregory Peck, among others. FILMEX closed with the World Premiere presentation of Arthur Penn's new suspense melodrama, NIGHT MOVES, from Warner Bros., starring Gene Hackman.

The Exposition was budgeted at \$265,000. Preliminary unaudited information indicates that income from ticket sales (including the opening night benefit) amounted to \$187,000 (\$75,000 more than last year). Additional income, including monies raised through the Filmex Society, amounts to \$104,000 to date. Total income was more than \$290,000. Expenses are estimated at \$306,000, indicating a much smaller loss than in previous years, and possibly even approaching a "break-even" situation. The total accrued debt to date, including the past four Expositions, stands at \$165,000. The next Exposition will be held March 24 through April 6, 1976.

FILMEX is presented annually in association with the City of Los Angeles and with the cooperation of the Academy of Motion Picture Arts and Sciences, the American Film Institute, the Los Angeles County Museum of Art, and the film schools of UCLA, USC, Cal-Arts, and Loyola.

Chart showing "vital statistics" of past and the latest FILMEX. This year the deficit was the smallest yet, even though expenses were higher, and final figures may bring it up to the break-even point.

FILMEX PR	OGRESS R	EPORT			
April 1, 1975					
	1971	1974	1975		
Duration	11 days	13 days	14 days		
Participating nations	13	19	27		
Participants attending	85	118	127		
Programs	43	50	88		
Features	53	60	102		
Shorts	54	77	134		
American Premieres	9	17	19		
World Premieres	0	3	8		
Sold-Out Houses	9	13	16		
Total Attendance (approx.)	30,000	60,000	80,000		
Budget	\$150,000	\$230,000	\$265,000		
Ticket Sales & Opening Night Benefit	\$ 47,000	\$112,000	\$187,000		
Grants & Contributions	\$ 19,000	\$ 66,000	*\$ 85,000		
Miscellaneous Income	\$ 2,000	\$ 21,000	*\$ 19,000		
Expenses	\$115,000	\$239,000	*\$306,000		
Yearly Profit or (Loss)	(\$ 47,000)	(\$ 40,000)	*(\$ 15,000)		
Total Accumulated Deficit		(\$164,000)	*(\$179,000)		

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INDUSTRY ACTIVITIES

A.S.C. COLLEGE FILM AWARDS BANQUET DATE CHANGED

The awards committee of 24 selected to judge the first annual Best Photographed College Film Awards entries for the competition sponsored by the American Society of Cinematographers has completed preliminary jury screenings.

The Board of Governors of A.S.C. announces that the Awards Banquet, originally scheduled for May 19, will instead be held at the A.S.C. clubhouse in Hollywood on the evening of May 21, in order to avoid a conflict in date with the Emmy Awards Presentation.

TRAINING PROGRAM FOR ASSISTANT CAMERAMEN

A Training Program for Assistant Cameramen to be sponsored by the Association of Motion Picture and Television Producers will commence on or about August 1, 1975.

Those interested in this program should request an application by contacting: Mr. Jack Carlson; Association of Motion Picture and Tele-

vision Producers; 8480 Beverly Boulevard; Los Angeles, California 90048; Telephone (213) 653-2200.

All completed applications must be received by the above-named no later than Friday, May 23, 1975.

Applicants must meet the following requirements: 1. Possess a High School Diploma or General Education Development equivalent. 2. Have U.S. Citizenship or permanent residence status. 3. Be at least 18 years of age. 4. Possess the physical ability to perform the duties of the job.

This is a non-discriminatory program.

IFPA ANNOUNCES 16TH ANNUAL "CINDY" COMPETITION

The Information Film Producers of America, Inc. (IFPA) has expanded its "Cindy" Competition for 1975 to include 35mm Film Strips. The format for their submission is: 35mm Film Strip or 35mm Slides with sound supplied on a Phillips tape Cassette utilizing the silent 50- or 1000-cycle automatic advance. No cartridges of

any size, kind, or type will be accepted.

Film Strip Competition will be in the same categories as for Films or Video Tapes.

This year's "Cindy" Competition will offer a trophy for the BEST IN SHOW (Film or Video Tape).

This year's "Cindy" Competition will offer a trophy for the BEST IN SHOW (Film Strip or Slide Film Program).

A special award will be made for OUTSTANDING ACHIEVEMENT IN VIDEO TAPE PRODUCTION (no film transfers).

In celebrating "Cindys" 16th Anniversary Competition the following categories will prevail:

1. Art and Culture

Business/Industry/Government

2a. Industrial Relations

2b. Employee and/or Management Training

2c. Technical Report and/or Information

2d. Recruiting Classroom Education

3a. Language Arts

3b. Science and Math Continued on Page 594

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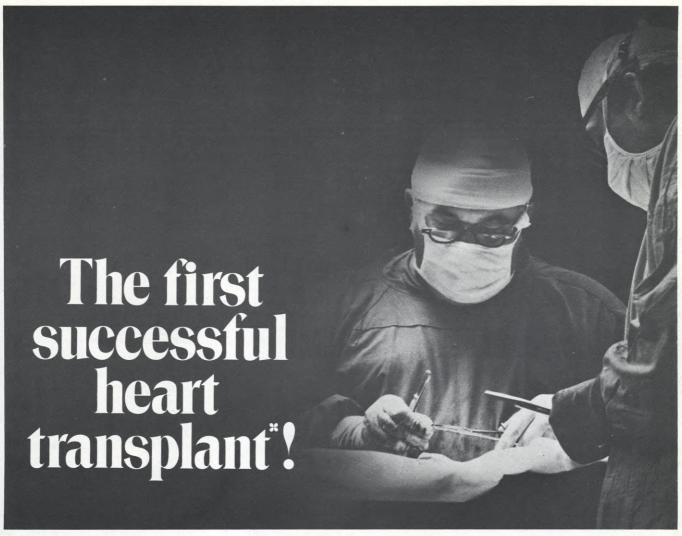
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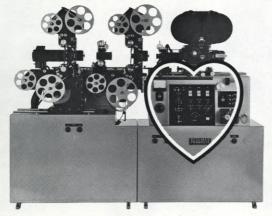
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International users: U.S.A. Export/Import loans are available. Send for details.

FILMING "CHINATOWN" Continued from Page 529

talking with him — is totally informed about Raymond Chandler and Dashiell Hammett. He has a tremendous comprehension of that kind of literature, of that kind of Americana.

Evans was also very wise in selecting as Production Designer a man like Dick Sylbert. He had done the Mike Nichols pictures and had displayed a great talent for that kind of design in detail.

Why I was called in to do the photography I really can't say. I know that I've worked on some very good films, but certainly no examples of the classic mystery. Maybe somewhere along the line. Bob Evans and Doc Erickson said: "Alonzo is a student of film, too, and he might complement Roman's personality." Because the fact is that I am a film student, and I have studied and researched a lot from the cameraman's point of view. I'm nutty about the work of James Wong Howe and Winton Hoch and Walter Strenge and Floyd Crosby and the other classic cameramen. I can tell you practically every film they made, because when I was a kid in Dallas, Texas, and in Mexico, movies were my entertainment. Sometimes I'd see two or three films a day. I wasn't necessarily doing it to study cinema, at the time. At least, I wasn't aware of it but my brain was being saturated with that kind of information.

What Roman wanted, too, for "CHINATOWN" was this sort of classic mystery storytelling style. He said to me: "I want very much for the photography to complement the story in such a way that it will be alright if people say

it is beautifully photographed — because I will bring the content up to that level."

It was a curious way of saying it, but I understood what he meant. There are instances, as we all know, when a scene is so terribly weak that you do everything you can with lighting and camera angles to bring it up dramatically and at least give the audience something pretty to look at. On the other hand, there are instances when the drama is so strong that a fine director like Martin Ritt will say: "I don't want cinematic gymnastics. Just leave it there. The actors now have the stage, and I don't want the camera to take anything away from them."

That's a valid point. But Roman's approach was to have everything on the same high level. In other words, he would see to it that the concept and performances were as good as the production design and cinematography — or better. The cinematography should never, never, in lighting or in composition or moves, distract — but neither should it be minimized simply because the material is too strong for it.

Roman is a stickler for details. He wanted everything just right — Faye Dunaway's fingernails, Jack Nicholson's ties and coat, the color balance of the clothing against the wall, the perspective of the cyclorama, the backings outside the windows. He told me that the levels of all of our crafts within this picture had to be at their peaks, and that he wanted, in a classic sense, to tell a mystery story of the Raymond Chandler or Dashiell Hammett type. So he led the way. He did this by staging the action in a particular way, by mak-

ing certain words within a scene more important than others, by requesting that I light — and sometimes *not* put light on — actors. There were times when he felt that he wanted the audience to listen to the words, as opposed to seeing the actors speak them. Roman might put it in an entirely different way, but that's how I interpreted his discussions with me.

He showed me his films, "CUL DE SAC" and "REPULSION", for two reasons, I believe — to show me that he had a very good concept of storytelling and he also had a concept of cinematography. It was as if he were saying to me: "Okay, we are on the same basis now. Let's respect each other." He was taking everybody else's word for me. On his side, he could show me what he could do, but he didn't have time to look at my films — and even if he had, they wouldn't have helped him very much, because they had nothing to do with this kind of picture.

While Roman was aiming toward a classic film, he was applying some of the modern film techniques to it. For example, he was directing the action in a classic manner, but shooting in the anamorphic format — which is not classic. And he was using color, which is not classic. So he added two new elements. Being a young man, he brought his psyche, his personality into the picture — but he did design some interesting shots that you might say came right out of "CITIZEN KANE" or "SPELLBOUND" — except that they were in color.

I remember him saying once that the story was to be told from Jack Nicholson's point of view, but he would shift from that to the audience's point of view

(LEFT) Polanski uses his director's viewfinder to check the set for an upcoming camera angle, while Alonzo awaits the decision. The two men, respecting each other as artists, quickly formed a very close and functional working rapport. (RIGHT) The male star of the show, Jack Nicholson, shares a joke on the Paramount lot with Robert Evans, Producer of "CHINATOWN". Evans is the executive in charge of production at Paramount, and "CHINATOWN" was his first venture as a producer. The picture garnered 11 Academy nominations — not bad for a first time out.





at times. He was introducing modern technology and a modern concept, but leaning on knowledge he had gleaned from the old films. I think that I lot of cameramen nowadays do that. I do it. I can't honestly say that I'm doing anything that hasn't been done before. No cameraman has the right to say that this or that is being done for the first time. The only time he can say that is in terms of technology, perhaps - faster lenses, a faster film, more portable equipment - but not in its artistic concept. Yes, I have faster lenses than Jimmy Wong Howe had in the early days, and faster film and more portable equipment, but the artistic and aesthetic concept is basically what Wong Howe did, though I may be applying it in a slightly different way.

So I think that Roman would probably agree that he was relying on a background he gained as a film student, having studied the classic mysteries that were done in the American cinema. The European cinema never has, in my opinion, come up to the level of the great productive years that Hollywood had, while making all those wonderful, wonderful mystery films.

Polanski did some rather daring things in "CHINATOWN" — like shooting Faye Dunaway without diffusion, so that you could see the scar on her face. That would never have been done in the "classic" period. Greta Garbo and all those beautiful people would have looked perfect. He also had the great guts as a director to allow his leading man, Jack Nicholson, to go through half the picture with stitches in his nose. No one would ever have done that to Humphrey Bogart.

I can remember saying to Polanski: "Roman, you've seen the lighting that Gordon Willis did in 'GODFATHER',

which I think is beautiful. You've seen the lighting Owen Roizman did for 'FRENCH CONNECTION', which I think is just great. Then there is Geoffrey Unsworth's wonderful lighting in 'CABARET'. Talk to me about lighting; how do you see it?" And he said: "I don't see it with any diffusion. I see lighting as very, very natural — but I see no rationale for using the source-lighting technique."

I said: "Okay, you and I are in agreement on that, because cameramen like James Wong Howe (I keep using him as an example, but I can't think of anyone better) base their styles on the idea that there is a reason for a source of light, but many times they introduced light from nowhere - with no excuses. Why? Because it makes a better picture, a better painting - whatever you want to call it. Such light is not distracting to the audience; if anything, it helps focus their attention. When Roman told me that he didn't agree with the logic of source lighting, I knew what he was talking about.

Then Earl Gilbert and I got together and assembled very lightweight equipment. We got rid of an awful lot of things that we had thought we needed and went to some rather tried and true methods, such as using old fashioned #4 Photofloods stuck up on the wall with Chinese tracing paper in front of them, or bouncing light off of a white card. Some people who make commercials think that's a brand new thing, but Wong Howe and Floyd Crosby were doing it 20 or 30 years ago, using giant sheets or whatever to bounce light from the sun.

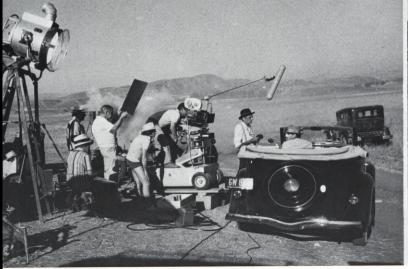
We used little lamps and, of course, we had at our disposal all of the wonderful new materials made by the

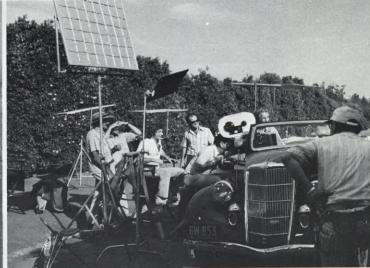


Polanski tries out a wheelchair as a possible dolly for shooting a garden sequence. However, it didn't work out, so instead, the operator was carried about on a sort of litter arrangement.

Rosco people. And we had the Panaflex camera. There is no camera in the world like the Panaflex at the moment. It made it possible for us to work without having to knock walls out. In my opinion, a certain thing happens to a cameraman when he has the convenience of knocking a wall out. It suddenly makes things a little too convenient and he is no longer forced to be Continued on Page 572

(LEFT) The crew shoots on location in the Mojave desert. (RIGHT) Shooting in an orange grove near San Bernardino, California. Sequences for "CHINATOWN" were filmed in many diverse locations in and around Los Angeles. However, approximately 65% of its total footage was shot on sets built inside Paramount sound stages. Despite this fact, it is a tribute to Production Designer Richard Sylbert that the entire production filmed in actual locations.





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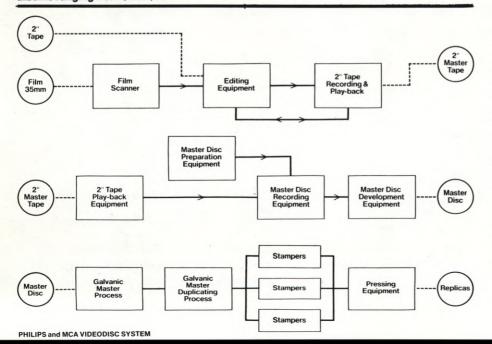






The Philips and MCA Videodisc System's unique capabilities (random access, speed-up, slow-down, freeze-frame, reverse and picture-by-picture presentation) will make it an excellent tool for home training and study. The user will become a student in his own home, learning photography, carpentry, science, math, languages and other subjects. Children will be able to review their school subjects, from algebra to zoology, quickly and conveniently.

Diagram detailing steps in the mastering and replication of videodiscs for the Philips and MCA Videodisc System. The fact that it is an optical system makes possible the sale of albums ranging from \$2 to \$10.



VIDEODISC SYSTEM Continued from Page 541

ing a wide spectrum of entertainment values without commercials, designed to meet a variety of audience tastes, and supplied in large amounts at easily accessible outlets.

Speaking before an invited audience at the Cotillion Room of the Pierre, Findlater explained that, in this respect, MCA stands alone, with virtually unlimited entertainment and educational programming resources. "Through the Universal Pictures film library — one of the world's largest," he said, "MCA Disco-Vision, Inc. has access to a reservoir of more than 11,000 titles already in existence, top quality programming dating from the present back to the '30s.

"Furthher," he continued, "Universal is the world's largest and busiest film production studio and, through its facilities, MCA Disco-Vision has the capability of producing — and will produce — a vast variety of new, original programming especially tailored to the unique characteristics of the videodisc player for the Philips and MCA videodisc system and other compatible optical systems."

Resembling present-day long-playing phonograph records, MCA Disco-Vision videodiscs will be packaged, priced and marketed similarly to LPs. Expected to retail at \$2 to \$10 per album, depending upon length and content, MCA Disco-Vision videodiscs will enable consumers to build their own home libraries, Findlater pointed out — to provide viewers with a greater variety, a broader range of choices — the "what you want, when you want it" programming concept.

Programming Availability

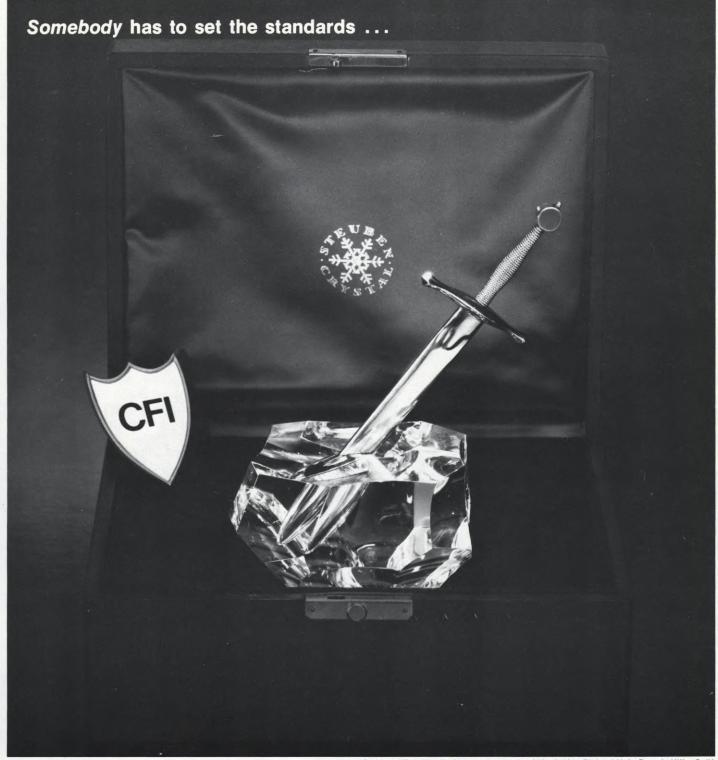
Available MCA Disco-Vision videodisc programming for the living room theater includes theatrical (entertainment) and non-theatrical subjects, such as:

Action adventures, cartoons, classics, comedies, culture, documentaries, dramas, language training, musicals, mysteries, newsreels, science fiction, short subjects, special subjects, specialized training, sports.

In all, existing product in the Universal library represents more than a million hours of potential viewing time on videodiscs and more is being produced each year in a never-ending supply for "theater-in-the-home" programming, Findlater said.

A few of the thousands of films in Universal's library available for transfer to MCA Disco-Vision videodiscs include:

Continued on Page 592



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By DAVID SAMUELSON

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Large animals are an essential part of the series and the animal department has "on hand" three lionesses, one lion, one leopard, two porcupines and a baby elephant. All the lions and the leopard were brought to Kenya from the U.S.A., where they were reared in captivity. As we British would say, like taking coals to Newcastle.

Hubert Wells, who trains the animals, explained to me that the essential differences between training for the Circus, compared with film work, are that in the Circus the animals are always on hand and contained within a cage, together with their trainer, whom they

trust and know will feed them if they do as they are told. For film work, on the other hand, it is essential that they be released, must carry out pre-determined movements such as "enter screen left, pause, look around and exit screen right" and must work among strangers, some of whom may act, or react, in an unfamiliar manner.

The greatest danger for the crew lies in the fact that they see the trainer on familiar terms with the big cats, and think they can behave likewise. The golden rule when the animals are unleashed is that the minimum of people should be around and those who are should, whenever possible, be safely inside automobiles.

BORN FREE is not only about animals, however. As with the two prior feature films, BORN FREE and LIVING FREE, it is loosely based on the experiences of a real person, Joy Adamson, who lives in that part of Kenya and although "Joy Adamson" is played by an actress, Diana Muldaur, the real Joy Adamson is always very much in evidence when the shooting is taking place.

Color is added to the Series by dressing the background, as necessary, with the highly colorful tribes which are dotted about Kenya.

To achieve this, a local White Hunter/Farmer, Andrew Holmberg, who knows the country and all its many tribes intimately, has become the Unit's local liaison man, whose job it is to go into the Bush, find a colorful tribe. negotiate a deal with them to come to Naivasha for the week, arrange a bus, make arrangements with both their local District Offices for them to leave their area, and with the Police along the route for them to pass through, provide food to their taste, accommodate them in a special grass-roofed building kept for the purpose and initiate them with the art of walking through a village on cue, in the manner of a film extra.

When I was visiting the unit they were shooting an episode called "The Flying Doctor", and the visiting tribe were the Turkhana who came from the north of the country, close to the Somali border.

In their native habitat they just wander around, do not work, earn no money and suffer from malnutrition. With BORN FREE they still happily wander around but for this "work" are paid \$3.60 a day, plus food and chew-

A buslike vehicle, locally known as a "mammy wagon", is pressed into service as a camera car to shoot scenes for the "BORN FREE" TV series in Kenya. The roof of the vehicle is used as a parallel when extra elevation is required. Although the "BORN FREE" series has left the networks since this on-the-spot story was written, it is enjoying great popularity in syndication around the world.







(LEFT) The company sets up to shoot in a Kenyan market, a most colorful and busy bazaar of exotic sights and sounds. (RIGHT) Assistant cameraman uses a soft brush to clean dust from the Panavision R-200 camera. In a dry location like this, the fight against dust goes on continuously all through the shooting day, with the final cleaning back at the hotel in the evening. Very useful were the clean air aerosols, which were used constantly between takes to whisk away dust.





(LEFT) The local people, working as "extras", seemed to enjoy the experience. This is the type of exotic talent that Central Casting doesn't provide. Whereas in their native habitat these people wander around, do not work and suffer from malnutrition, on "BORN FREE" they still happily wander around, but for this "work" are paid \$3.60 a day, plus food and chewing tobacco. (RIGHT) Actress Diana Muldaur plays the role of Joy Adamson. Although she does not appear on camera, the real Joy Adamson is always present on the set as Technical Advisor.

ing tobacco. They seemed to be very happy with the arrangement and the 46 present included chiefs, best wives and children of all ages.

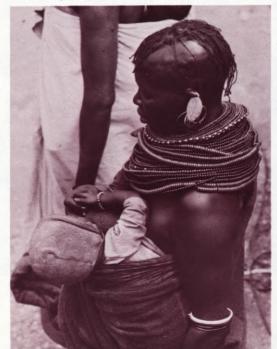
The Director of Photography on the series is Austin Dempster, BSC, who showed his "class" in A TOUCH OF CLASS.

He describes working on this series as shooting a feature film every two weeks. Actually, it is not quite as pressured as that; they shoot a TV hour in ten days, every two weeks, but with the production values they seek to achieve and the uncertainties of the animals and the natives, it just seems like a normal full feature.

Director and Director of Photography of the animal unit is Jack Couffer, ASC, who numbers among his credits the direction of LIVING FREE and RING OF BRIGHT WATER and the dual chores of JONATHAN LIVING-STON SEAGULL.

Continued on Page 578

Two very exotic personalities appearing as extras in the "BORN FREE" series. People from many tribes are brought into Naivasha, as needed, for a week of shooting. A local White Hunter, Andrew Holmberg, who knows the country and all its tribes intimately, serves as the liaison man. He goes into the Bush and selects tribes, negotiates with them and arranges for their transportation, food and accommodations.





FILMING "CHINATOWN" Continued from Page 565

ingenious. Necessity is the mother of invention, as the old saying goes, so if you are forced to shoot within a four-walled room, you start creating ways of doing it and making it look real and making it look good. The Panaflex allows you to do that. Instead of knocking the wall out, you just put the Panaflex in a corner where you couldn't have

put a larger camera before.

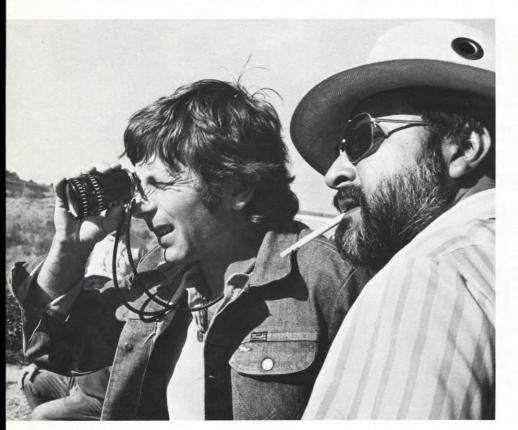
The new Panavision fast lenses made things easier, too. Using them with 5254 and forcing the whole thing one stop allowed me to shoot with 100 foot-candles of light, at the most. That was the highest key used inside on the set. About 80% of the time, though, we'd work at around 50 foot-candles as our main key, using f/2.8 to f/4 as the f-stop. All of these technological advances gave us a little edge over our

predecessors by way of making things easier.

When shooting outside, I forced the development also - not because additional speed was needed, but because I was trying to maintain a consistent negative quality throughout the picture. Then, too, since we were shooting in the anamorphic format, I needed a little extra depth of field and being able to work at a smaller f-stop was beneficial. Roman had said that he wanted a bit of the classic depth of field style that Gregg Toland used to achieve, but that's pretty hard to get when your average lens is a 50mm. I told him about my feeling - which is strictly my own concept - that in the anamorphic format, the lens that best reproduces what the human eye sees is the 40mm — just as in the 1.85 format the 25mm lens serves that purpose. So I said to Roman: "I have an idea that if we shoot the remainder of the picture with a 40mm, 45mm or 50mm lens, whenever possible, this will give the picture a very subtle look - not a distorted look. It won't be 'A CLOCK-WORK ORANGE'. We'll shoot the closeups with a 75mm lens, maximum. We'll use the zoom lens only to trim 4 to 6 millimeters with a dolly - never strictly as a move. If you'll let me stick to that approach, I think it will influence the atmosphere of the picture in a subtle way.

He agreed to that. We used the short Panafocal lens, which has a range from 45mm to 95mm and I don't think we ever used the full range of that zoom in any one move. It was always 5 to 10 millimeters.

Another interesting thing about



(ABOVE LEFT) Polanski and Alonzo tracking down a camera angle. (BELOW LEFT) The Panavision R-200 camera is lined up for a close shot of Faye Dunaway. Alonzo lauds the fact that he was working with totally professional actors like Dunaway and Jack Nicholson, who can hit position marks precisely, and a director like Polanski who insisted that they do so. This enabled him to set lights exactly where he wanted them. (RIGHT) Shooting outside an apartment in the old, nostalgic part of Hollywood.





"CHINATOWN" was the way the color tones were purposely altered for effect. The picture that is seen now in release does not look the way it looked when we shot it. The subtle brown-beige tone that it has was added in modifying the matrices during the course of the imbibition process. Here, again, I was dealing with a director who knew what could be done afterwards. He didn't expect to see it in the dailies. I didn't have to do any tricks. I did talk to Technicolor and told them that I wanted all my dailies to come out slightly warm, just a little "toasty", in order to enhance what Dick Sylbert had done with his sets and Anthea Sylbert had done with her costumes. My intention was to enhance all of the fine work that had gone into this picture prior to my arriving on

I've always worked very, very closely with the laboratories. I'm a thorn in their side. I'm a horrendous pest, because I'm always investigating what they're doing in the lab. I want to know as much as possible. This is a result of my early experience in working as an assistant to Winton Hoch and Gene Polito, both of whom are very knowledgeable about the technology of our business. They both encouraged me to draw on this area of their expertise.

I worked very closely with Skip Nicholson at the Technicolor lab. We went over the dailies of the footage I shot on that first Friday and he said: "Normally it will print around such and such a light, and this is what it would look like if we were timing it."

It turned out that the middle light — the cyan light — was about 27, or Continued on Page 585



For a film crew to end up in some odd places is all in the day's work. Here they are shown on the tiled roof of a private residence, checking out the camera angle for a hand-held shot. Polanski is in the foreground, with Stanley Cortez, ASC behind him. The visual approach to "CHINATOWN" has the feel of the thirties, studiously avoids gimmicks and self-conscious techniques.

(LEFT) Veteran director John Huston is briefed on the final sequence of "CHINATOWN" by young director Polanski. Huston, a fine actor, plays the incestuous villain of the piece. (RIGHT) The final sequence of the film was shot on Ord Street on Los Angeles' Chinatown — thereby giving the producers a valid excuse for the film's title. Modern street lights had to be turned off and modern store fronts had to be camouflaged to preserve the thirties flavor.





This latest in a series of tributes to manufacturers of outstanding motion picture equipment honors a company which, in an incredibly short time, has become a major American designer and builder of 16mm and 35mm cameras

By SCOTT HENDERSON

While driving out to West Los Angeles to explore the new manufacturing facilities of Cinema Products, I mentally reviewed some of the facts I already knew about this unique organization: In seven short years and starting from absolute scratch -Cinema Products has become a major American camera manufacturing company serving the professional motion picture industry. It seems incredible that this could have been accomplished during a period of a generally depressed economy - particularly in an industry which, by tradition, had always been extremely conservative in its acceptance of new technology. But the facts hold up under scrutiny. In these few short years, 16mm and 35mm filming equipment designed and manufactured by Cinema Products has, indeed, achieved widespread acceptance in this highly critical industry. The only remaining question: How and why did it all come about?

Continued overleaf



(ABOVE LEFT) Top management conferences between Ed DiGiulio, President (right), and Milton Forman, Consultant and Member of the Board of Directors (left), include the most detailed analysis of the requirements of the film industry, the relative priorities of engineering budgets, personnel, and corporate and financial needs. (BELOW) This modern manufacturing facility combines mass production techniques with 100% individual quality control, testing and check-out. (LEFT) Precision body castings for the CP-16 camera. (CENTER) Assembly of PLC-4 magazines. (RIGHT) Individual inspection and check-out of camera in "silent room".







This high precision modern machine shop permits the in-house control of all high-tolerance components for 16mm and 35mm Cinema Products cameras and magazines. The company currently manufactures the CP-16 and CP-16R 16mm single/double-system 16mm cameras and the XR35 lightweight studio camera. It will shortly introduce the exciting new GSMO camera and the revolutionary "STEADICAM" selfstabilizing camera system.











The Sound Test Room (LEFT) was specially designed for total isolation, and is used to set standards for the 35mm and 16mm "quiet" CP cameras. (CENTER and RIGHT) The tape-controlled, high precision, milling machines. Cinema Products has three machines of this type which produce the high precision, interchangeable parts for the 35mm and 16mm cameras.

(LEFT) One of the tape-controlled milling machines simultaneously producing 10 high-precision identical parts for the CP-16R. (CENTER) Check-out equipment for lenses which must be fully tested and completely checked out before delivery to user. (RIGHT) An environmental test chamber.







(LEFT) Ed DiGiulio analyses engineering problems with John Jurgens (Vice President of Engineering and Manufacturing) and Bob Auguste (Chief Engineer). (CENTER) A view of the engineering office. (RIGHT) Full view of the "silent" room where all cameras are individually checked out before shipment. This is the final phase of quality control, but every component is subjected to multiple inspection along the way during camera manufacture.







High quality, low cost production can only be achieved by providing adequate space, comfortable surroundings and proper tools and equipment. This permits these highly skilled workers to properly fulfill the reliability requirements of the film industry. Cinema Products new facility was designed with space to spare for several years, it was thought, but unprecedented demand for the company's products has filled that "spare" space in short order.











(LEFT) Despite the high precision, mass production techniques used, the rigid standards of the film industry require 100% testing and inspection of each camera. This is done in this Quality Control department by highly trained technicians. (RIGHT) Electronic assembly requires a dedication to careful, high quality workmanship. Cleanliness, proper lighting, and a smooth flow of 100% inspected materials provide the base for reliable end products — the professional cameras.

This was the question that was uppermost in my mind when I was greeted by Ed DiGiulio, affable President of Cinema Products, upon my arrival at the company's impressive headquarters.

Talking to DiGiulio, I became aware that the growth of Cinema Products actually originated from a certain vacuum that had developed over a period of time within the professional motion picture equipment industry.

While excellent professional motion picture cameras, both 16mm and 35mm, had long been designed and built in the United States, the American manufacturers of this equipment finally seemed to reach a point of "status quo", a period characterized by a certain slowness to respond to the changing needs of the industry. As a result, they left the field, by default, to the foreign camera manufacturers.

Producers of excellent equipment abroad, particularly in West Germany and France, took up the challenge and soon gained dominance in the field, supplying United States and world markets.

In recent years, however — due to skyrocketing costs, inflation and devaluations of the American dollar, this excellent equipment had become harder and harder for American filmmakers to afford.

In the meantime, the outstanding American manufacturer, Panavision, Inc., had done an excellent job of designing and building professional 35mm camera equipment — the latest example of which is the superb new Panaflex camera. However, Panavision has always pursued a policy of only leasing and never selling its equipment. As a result, independent studios, rental companies and producers who preferred to own their equipment outright were under considerable pressure to find sources for purchasing such equipment.

This, then, was the background against which Cinema Products was able to achieve its phenomenal growth.

Enter Ed DiGiulio. An electronics engineer by education and training, he originally came to the film industry with a rich and varied background in the computer and aerospace industries. In 1963 he joined the Mitchell Camera Corporation as Director of Engineering and was later promoted to Vice President in charge of Engineering. He brought with him a fresh awareness of how various aspects of space-age technology could be applied to some of the technical problems which beset the

motion picture equipment industry. Clearly, professional studio equipment needed updating in order to enable the cinematographer to take advantage of the technological advances being made in other aspects of production. As a result of his experience with Mitchell, DiGiulio became convinced that existing studio equipment just had to be modernized.

He left Mitchell in 1967 and, a year later, started the new company which was to become known as Cinema Products Corporation.

TO MODERNIZE AND UPDATE EXISTING EQUIPMENT

"Where to begin? There was a massive amount of work to be done, but priorities had to be established," DiGiulio recalls. "Because of the huge investments held by independent cameramen, producers, studios and rental companies in the form of existing equipment, I felt that I could best serve their needs by embarking initially on a program to modernize and improve that existing equipment."

The first product of the new company was the Silent Pellicle Conversion of the Mitchell BNC. The use of a thin beam-splitting mirror, rather than a Continued on Page 580

(LEFT) The heart of a product is in its design and engineering — and these two extraordinary engineers provide imaginative and creative solutions: John Jurgens (left), the overall conception and mechanical design, and Bob Auguste (right), the most advanced and efficient electronic use of micro-circuitry. (RIGHT) William Sandstrom (left), Plant Manager, is meticulous in organizing the complex processes by which Cinema Products produces the professional cameras that meet the rigorous standards of the motion picture and television newsfilm







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(LEFT) Trainer Hubert Wells shows how tame is his "one-man" leopard. All of the lions and the leopard were brought from the United States, where they had been reared in captivity. (RIGHT) Rewarded for the day's work one of the three lionesses playing "Elsa" in the series settles down in her own commissary. Animals slated for this kind of work must be trained to work outside cages and move among strangers.



(LEFT) Filming a street scene in Naivasha. The company was shooting blind for three months straight because, while film was shipped to Hollywood three times a week, not even printer-light information, let alone dailies were received back. However, no news seemed to be good news. (RIGHT) Director Paul Krasny talks to the extras, using a native interpreter as intermediary.

(LEFT) In the morning, the Panavision camera equipment is unpacked and brought out for the day, and the battle against dust begins immediately. (RIGHT) Director of Photography Austin Dempster, BSC (who numbers "A TOUCH OF CLASS" among his credits), checks a camera set-up. He describes working on this series as shooting a feature film every two weeks. Director and Director of Photography on the animal sequences is Jack Couffer, ASC, who numbers among his credits the direction of "LIVING FREE" and "RING OF BRIGHT WATER" and dual chores on "JONATHAN LIVINGSTON SEAGULL".





FILMING "BORN FREE" Continued from Page 571

His camera assistant is Mathew Kipain, a member of the local Masai tribe.

It is just as well that Mathew wears western dress because if he were to wear the native costume of the Masai, be assured the lions would be impossible to work with.

They had this experience when one of the scripts involved Masai tribesmen and all the tame lions went almost berserk and had to be rested.

Neither Hubert Wells nor Jack Couffer can offer an explanation for what happened, for even if there was a single Masai in the crowd the animals would lose their cool.

They think that perhaps it is because the Masai have always been associated with lion hunting and killing for hundreds of years, and that the animals, even if born in captivity, have an instinctive dislike, distrust and fear of them.

Other theories are that the smell of the ochre which the Masai use for their makeup or the patterns of their shields are upsetting. Certainly, it was impossible to have a Masai shield within sight of a lion.

In the end, the only way to get the shots called for in the script was for Hubert and the other handlers to double for the natives, blacking up and dressing in the cages with the lions so that the animals should know that it was all make-believe.

The camera crew's natural enemy is not wild animals, however, but dust. Fine dust, like mud-colored talcum powder, in which vehicles speed almost axle-deep.

The cameras, which came out of London, must continually be cleaned from the moment they are taken out of their cases until late in the evening, when they have had their final cleanup, back in the hotel.

Very useful in this respect are the clean air aerosols (filled with Dichloro-dofluoromethane) which are constantly used, even between takes, to dust off the lens and filters without fear of doing damage by abrasion.

As with working with the animals, where familiarity may lead to a dropping of the guard, so with dust — and at times all the anti-dust procedures in the book must be observed. Precautions include such actions as: putting the camera down on a box when temporarily removing from the tripod for a change of setup, putting aperture covers on the lens port and magazine openings if the lens or magazine are removed for more than a second, check-



Stuntman crashing a motorcycle throws up a cloud of dust. There are not many dull moments when shooting on a series like this. Every day presents a group of new challenges and the humdrum routine of the studio is soon forgotten. On the other hand, there is no local supply of anything the least bit technical. Each item needed for filming must be brought in specially — preferably in advance.

ing and changing gelatine filters frequently, avoiding excess oil anywhere (which attracts dust), brushing down the exterior of the camera frequently, and panning the camera away whenever a car passes by, and so on. It is a constant battle.

In the three months that have elapsed since they commenced shooting, the crew have not had a single adverse laboratory report. Indeed, the dailies are shipped to Hollywood three times a week and not even a printer light information, much less dailies to view, has been received back in Kenya. Austin says he presumes it must all be OK, he says they seem pleased with the material and hopes that in the four

months of shooting to come he will continue not to earn a lab report, which now could only be to inform him of some impairment. Very stoically he says, "They seem to like T/16 back in Hollywood."

He is using two lightweight Brutes for fill light purposes and says the fact that they have smaller fresnels than normal and cannot give the spread of a Brute with a 24" fresnel, does not worry him in this instance, as he would always have been spotting the big ones anyway.

It becomes dark very early in Kenya and even to continue working until 6:30 p.m. (they start at 8) he must plan the Continued on Page 597

Director Phil Krasny rather anxiously checks to see if the sun in going to stay around for any length of time. Although this part of Africa has fairly constant weather at certain seasons, during other times of the year it can be quite changeable. The company shooting "BORN FREE" was quite lucky in this respect.



CINEMA PRODUCTS Continued from Page 576

rotating mirror, permitted the reflexing of existing quiet BNC cameras, thus giving the cinematographer the benefits of parallax-free, through-thelens viewing — essential to the use of the new high-quality zoom lenses. The design of this modification was so efficient that it received a Class II Academy Award in 1968 for scientific/technical achievement.

J-4 Zoom Control. The wide and ever-increasing use of the new high-quality zoom lenses created a need for high-precision, silent motors for the control of such lenses. Cinema Products responded to the demand and its design of sophisticated motorized zoom controls also won a technical/scientific Academy Award in 1971.

The J-4 Zoom Control gives the cameraman the ability to execute a smooth, jerk-free zoom over a wide speed range, from 1-1/2 seconds through 4-1/2 minutes in duration. Its exceptionally silent and reliable performance has made it the standard in zoom controls.

Crystal-controlled Motors. It is the policy of Cinema Products Corporation to consult regularly with the most technically astute people in the industry, and to listen to and evaluate their concepts of the needs of the industry. And so, as a result of close cooperation and discussions with the heads of camera departments, studio technicians and with Wilton Holm, Executive Director of the Research Center of the Association of Motion Picture and Television Producers, the company developed a series of crystalcontrolled motors for the Mitchell and Arriflex 35mm cameras. This was probably the first use of advanced crystal technology and integrated micro-circuitry in the motion picture industry. Cinema Products' design of a



Seen in front of the main 24,000 sq. ft. manufacturing facility are (from left to right) Ed Di-Giulio and visiting Eastman Kodak executives James W. Parker, Robert Hufford and Robert T. Scott. In addition there is a 6500-square-foot Research & Development and model shop in a new building directly behind the facility shown above.

crystal-controlled, lightweight motor for the hand-held 35mm Arri 2C also won a scientific/technical Academy Award in 1971.

From the filmmaker's point of view, the basic advantage of the crystal motor-drive system is that it eliminates the need for power cables to AC mains or the requirement for an umbilical or wireless transmission between the camera and the sound recording equipment. The separate self-contained crystal units on both the Continued overleaf

(LEFT) A recent addition to the capability of the company is the computer terminal which makes available the most advanced computers for use by the Research & Development, Engineering, Accounting, Inventory Control and Sales departments. (RIGHT) Marketing and sales campaigns are planned by Peter Waldeck, Marketing Manager and Vice President of CPD International (center), Abbott Sydney, National Sales Manager, and (right) Gabrielle Waldeck, Export Manager





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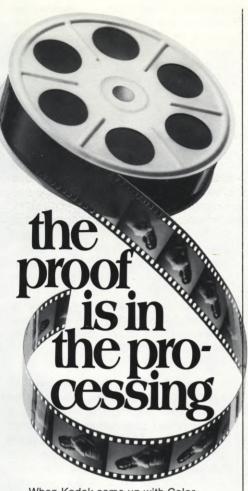
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camera crystal-controlled motor and the tape recorder provide an absolute common reference synchronization. As a result, any number of cameras can be operated, in perfect sync, with a single recorder. Theoretically, the cameras could be in Los Angeles and the recorder in New York — and still remain in perfect sync!

While all of these developments were in the nature of accessories to existing equipment, their impact on filmmaking was enormous, since they permitted the cinematographer far greater creativity and flexibility than ever before. And, coincidentally, they also helped to make the filming process more efficient and less costly.

FULFILLING THE NEEDS OF THE 16mm NEWSFILM / DOCUMENTARY CAMERAMAN

The growing and vitally important TV newsfilm industry had been served, in the main, for the better part of 20 years, by the Bach-Auricon Cine-Voice 16mm single-system sound camera, and a wide range of adaptations of the basic equipment had become standard within the industry. Imaginative cameramen and enterprising equipment houses were constantly devising any number of modifications and conversions of this basic Auricon camera in their efforts to adapt it to meet the highly specialized TV newsreel requirements.

The CP-16 TV newsfilm/documentary camera. After numerous discussions with many of the top TV newsfilm cameramen in the field, and in close consultation with the major television networks and their technical personnel, Cinema Products developed the non-reflex CP-16 camera — a technologically advanced 16mm sound camera, lightweight and well-balanced for on-the-shoulder operation, with single-system/double-system sync sound-recording capabilities.

Aside from a significant reduction in weight, the major innovation in the new CP-16 camera was its built-in, extremely compact crystal-controlled DC motor which was driven directly from a compact 1 lb. plug-in battery. The basic principle of the excellent Bach-Auricon movement was kept, but the center plate was redesigned and improved with the use of modern materials. Several features were designed and human-engineered for the convenience of the cameraman, from the vitally important short viewfinder (a "must" for on-theshoulder operation) to a quickoperating magazine snap-latch, a behind-the-lens filter slot, etc. The

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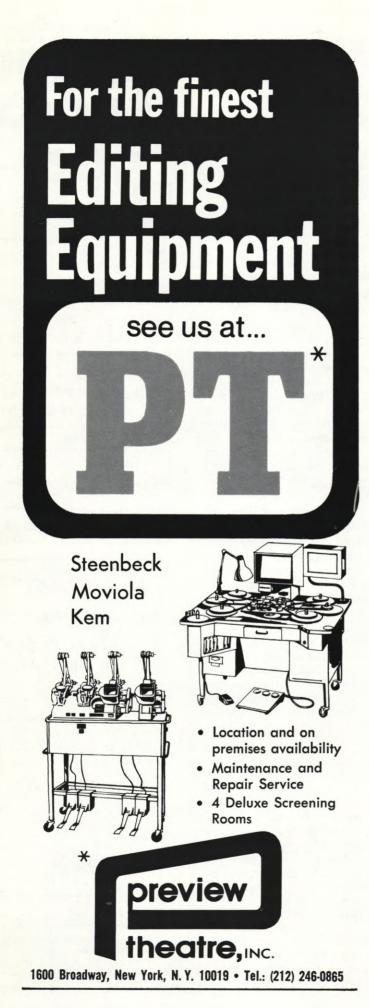
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addition of the built-in Crystasound amplifier made the CP-16 ideal for the "one-man-band" newsfilm cameraman who was responsible for both film and sound recording in the field.

The total camera package, including amplifier, 12-120mm Angenieux zoom lens and a fully loaded 400-foot magazine, weighed in at less than 17 lbs. Relatively low in cost, the new CP-16 turned out to be extremely quiet. rugged and reliable, able to withstand the most rigorous field conditions. Predictably, it was quickly accepted by the television newsfilm industry throughout the United States, Latin America, and most English-speaking countries abroad. In the United States alone, ABC, CBS, NBC and their affiliates have already purchased hundreds of CP-16s, with many smaller, independent broadcasting groups and stations switching their entire newsfilm operation to standardize on the CP-16.

The CP-16R reflex camera. The CP-16 non-reflex camera fulfilled the basic needs of the newsfilm/documentary cameraman in the United States and in the English-speaking countries which followed American television newsfilm trends. However, this non-reflex camera did not fulfill standard requirements for documentary and television filmmakers in Europe and other parts of the world where the Arriflex and Eclair reflex cameras had been the accepted cameras.

And so Cinema Products developed its own 16mm reflex, the CP-16R. Utilizing the same type of design technique that proved successful in the design of Cinema Products' XR35 studio camera (to be discussed later). the new CP-16R reflex camera, introduced in 1973, features a rotating mirror shutter which is driven by a small gear cluster in a sealed gear box resulting in extremely quiet operation. The CP-16R also utilizes a fiber optics viewing screen which is superior to conventional ground-glass viewing screens, especially in high ambient light levels, where the lens iris is stopped down and where the conventional ground-glass image tends to become coarse and grainy, as well as unusually dark. The fiber optics viewing screen permits full-screen critical focusing so that depth of field can be accurately determined over the entire picture area. This is important to the cameraman shooting documentaries and studio-type features and commercials. Automatic exposure control is available as an option.

The CP-16R also features a Continued on Page 598

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FILMING "CHINATOWN" Continued from Page 573

something like that. I said: "Well, let's stay with that, and under no circumstances are you ever to time my dailies for me. Even if I make a horrendous mistake or you feel that the assistant forgot to set the stop, you stay to that light that we've selected, because I won't learn anything if you help me out that way."

He said: "Fine. We've been doing that all the way along anyway." The fact was that especially on this particular picture, where I was going for something I'd never tried before, I really wanted to see what my limitations were. So, if the dailies were printed at that one light and I'd made an error in exposure, I could readily see it. If it were correctable, it could be smoothed out later in the lab. Thank God I didn't make any gross errors, but it did teach me a lot.

Because Roman agreed with the concept of not rationalizing where the light came from, the ambient light that is always existent in rooms, we were going back a bit toward the style of the classic mystery films that had been made. I thought it might be wise to look at some of those pictures and see what I could come up with.

Earl Gilbert had told me about using Master Lites instead of arcs. "We"ll be using them just to punch up areas," he said. "You just tell me what you want to punch up in a scene and we'll just put them in and punch it up."

What he meant was that I would get a composition set up, especially if it was outdoors at night, and I would say: "Okay Earl. Just put a splash of light on that building over there and another splash on that other building, and be very subtle about it. Don't try to light the whole street. Go back to the Wong Howe and Floyd Crosby trick of backlighting a street or backlighting a telephone pole. We'll steal from the masters, because that's the best place to steal from."

The tracing paper gimmick I mentioned before is an old still photographers' trick. You use four #4 Photofloods mounted on a batten of wood. I use blue bulbs on a set where there is tungsten lighting, because the tracing paper is brownish and the blue lamps bring the correct color balance back. Through the tracing paper you get this wonderfully diffused light. Of course, the amount of light is cut down a lot, but I was not working at a high key, so I could afford to do it.

We found a material called Foamcore, which has two white surfaces and a layer of foam in the middle. I've used





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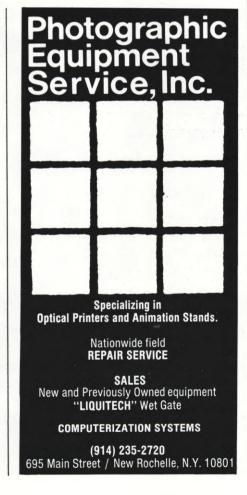
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it a great deal and I like it because you can bounce a light into it and it bounces the light back at the same Kelvin rating. It doesn't raise or lower the color temperature. Wherever possible I made up little cards of this material for bouncing light. I told Earl that I wanted to work at a very low key and use these white cards for kicks into the eyes. I'm a great believer in putting light into an actor's eyes, since they're the "windows of the soul", so to speak. The old great masters of our craft believed in doing that and so do I, even if it's just a little kick light. These lights for the eves do not necessarily illuminate the face: all they really do is reflect in the iris of the

As far as lighting units are concerned, we used a multitude of inkies, little tiny lights that we could hide in various places. We used a lot of Babies and Seniors and 10K's without irises in them, so that we could get hard shadows through venetian blinds. We used some arcs on the sound stage, but not on location. We had them on a set when I really wanted to pour very hot light into it. Like in the morgue, for example.

In photographing "CHINATOWN" we resurrected an old-fashioned type of light usually called a "chicken coop", although various studios used different names for it. This light has been around for a very long time and when I told Earl to hang up a chicken coop over the morgue set and put a black skirt around it, he said: "My God, I haven't seen that in years!" I said: "Well, why not? If it was good enough for Jimmy Howe, it's good enough for me." So he did it. And, of course, Sylbert did me a great favor by building a white morgue with a white floor. I had seen what Sven Nykvist did in some of his pictures by using a white floor to reflect light off of, so I used that

We also used the little "Obie" light, which Lucien Ballard originally designed for photographing Merle Oberon. I modified it by mounting a very tiny quartz bulb as close as possible to the matte box and putting a shield of spun glass and blue gel in front of it. I bring it up slowly until it just kicks into somebody's eyes or gives me a little extra illumination.

We certainly didn't introduce any new lighting equipment in shooting "CHINATOWN". The Master Lites, for example, had been around for years. Also, Earl had made up a lot of gimmick lights in the past and we simply pulled them out of mothballs and used them. One of these was a little peanut light that was often used behind a candle to illuminate an actor with "candlelight". It is a low-wattage lamp (about 150 watts)

and has been around for years. Earl goosed them up with a little transformer to increase the Kelvin and we hid them inside cars to get little kicks into Faye Dunaway's eyes.

The only lights we used that were even relatively new were the nine-lights which served not to replace arcs, but simply to provide fill light. The Rosco people put out a wonderful diffusion material called Roscomatte. We would put this in frames in front of the nine-lights and it would totally diffuse the nine bulbs to create a one-source shadow.

You couldn't say that we were very innovative in our uses of lighting equipment. We just went back and used lighting that was traditional, in the sense of the classic concept I spoke of earlier. Why not use it? There's nothing wrong with it.

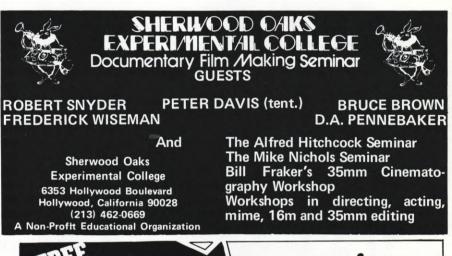
On location we didn't use arcs. If the sun was out we used the Foamcore that I spoke of. On occasion we would use nine-lights with the Roscomatte in front of them to provide a very diffused fill. I went a little bit against tradition in never really balancing the shadows to the sunlight - not really bringing them up as bright as shadow areas usually are. I would let the sun take over and just fill in under the hats, but very little. If the sun read f/11, the shadow area might read f/6.3, or maybe f/5.6 - not more than that. I felt that a normal balance of key to fill would seem unrealistic, in terms of Roman's concept. He didn't want it to have that bright look.

Whenever we shot in a practical location - an actual house, for example — we would intensify the ambient light coming in from the outside just enough to get an f-stop, even if it had to be f/2.8. For example, in the sequence where Jack Nicholson walks into the house and finds the woman dead, the total lighting was one #4 blue Photoflood mounted as close to the wall as possible. I should explain that I'd had a great deal of experience in documentary photography working for Wolper Productions, where we had to make do with one light bulb. So I simply fell back on that experience and stuck a bulb up there and started hanging little strips of gaffer tape in front of it, like an old-fashioned coucoloris.

At the end of that sequence, when Jack Nicholson walks into the kitchen and the police turn the light on, it was just one light bulb again, the normal kitchen light.

On night exterior locations we used the Master Lites extensively, together with single sealed-beam lamps. These are the same lamps that are used in FAY nine-lights, except that each is mounted in its own individual unit. Earl Gilbert made up a bunch of these and









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they're quite wonderful, because they project far and you can put a hot kick wherever you want it. We were literally painting with light, when using these units.

As far as other equipment is concerned, perhaps the most unusual was the Stindt dolly. I first used it on "PETE AND TILLIE" at Universal and I've used it on every picture since then. A grip by the name of Bob Stindt designed it and it has a unique combination of characteristics. It goes as high as the Moviola dolly and as low as the Fisher. It is as narrow as the Fisher, but much shorter. The wheels will spin out 180 degrees and it has the same stability as the Moviola. It is the kind of dolly that two grips can pick up, if they have to, because it's not that heavy. It has the same hydraulic system and the same steadiness and smoothness and the same up and down movement as the McAlister dolly.

The Stindt dolly is wonderful because we are no longer putting 110 lbs.' worth of camera equipment on it. We are putting a Panaflex on it, which weighs 40 lbs. maximum, with the Obie light and everything. So, as far as I'm concerned, it's as if that dolly had been designed specially for the Panaflex camera. The gear head I used is a very small gear head, a prototype of the new head Panavision has designed for the Panaflex. It's very tiny compared to a standard gear head and Panavision allowed me to use the prototype. Here again, it was almost as if Stindt knew that such a head was going to be designed. He didn't really, but the combination of camera, head and dolly made it possible to give Roman those rapid little moves in and out of corridors whenever he wanted such a movement

Some people, after viewing "CHINA-TOWN" come away with the idea that the picture was shot entirely on location. But the truth is that a great deal of it was filmed on the sound stage. I've never figured out the percentages, but I would say that approximately 65% was shot on the stage. The interior of the Hall of Records, the Department of Water and Power, Gittes' living rooms, the interiors of that wonderful old house in Pasadena — all these were studio sets.

I've been asked whether I prefer shooting interiors on location or in the studio, and the answer is fairly complex. I couldn't say this a couple of years ago, but now that I have the knowledge and the technical wherewithal to handle the sound stage, I can say: "Yes, I like the sound stage." In the past, when I really didn't have that knowledge, my comment would have been the opposite. As a documen-

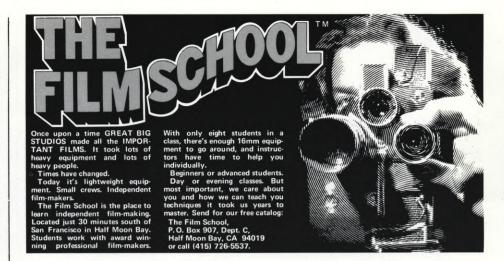
tarian, I preferred shooting on location. I worked better on a practical set. I can intellectualize it that way, but I think that if I were to really dig deep, I would say that I prefer the practical location — with a good production designer. From my point of view, the practical location does present certain challenges. It stimulates the brain to work a little harder. You don't go the convenient route.

But I can work comfortably on the sound stage, too, because I know what I'm doing now, I've paid a few of my dues. It's interesting how my career seems to have been guided by Destiny. The first feature picture I did was all outdoors. The second picture was mostly outdoors, with just a bit indoors. The third picture was half-and-half. By the time I was thrown into the den of a Martin Ritt, we were back to outdoors ("SOUNDER"), but now the challenge was not one of outdoors or indoors, but whether I could work with a director of that stature. Progressively I was offered the right kinds of things. I did "LADY SINGS THE BLUES", which was all shot on sound stages with horrendous lighting problems, because of the period and the costumes and the differences in skin tones of the black people and the white people. I found it to be a tremendous challenge, but little by little something has protected me up to the point of doing "CHINATOWN".

Perhaps the most complex challenge in that film, from the cinematographer's point of view, was the final sequence, which was actually shot on Ord Street in Chinatown. We had the problem of blocking out the mercury lamps, which were not in existence during the 30's. Earl had to have them all turned off and it was a horrendous chore for him, because the City of Los Angeles was totally opposed to that sort of thing.

For the night shooting in Chinatown, we used the Master Lites again, but this time they were on individual transformers which served to brighten them up and raise the Kelvin rating. When you put them on a transformer and start kicking them up, you increase their intensity considerably, especially if they're two blocks away. At great distances they're very hot — good for backlighting a street. When you kick them all the way to the top they get a bit bluish, but you correct that by putting a little amber gel in front of them.

On the street in Chinatown we used the Master Lites to punch up areas and used lights hidden under the awnings of shops wherever possible, as well as practical lights. I asked the assistant director, Howard Koch, Jr., to spot the extras wearing the lightest clothes into





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(PATENTED)

the areas that had the least light — again, stealing from the pros. Then, at the last minute, so to speak, an interesting thing happened. Roman suddenly said: "I want a crane." I said: "You want a crane?" And he said: "Yes, I've just figured out how to end this picture." And it appeared that he had, right then and there on the spot.

He said: "In the sequence, up to this point, Faye Dunaway has been shot. You see the police officer fire a shot and you hear the car stop and. obviously, Faye Dunaway is dead, because you hear the horn blowing. Now, where do we go from there? Well, here's the idea: we go hand-held and all the actors come toward the camera and you do a news-documentary kind of thing. You whip-pan over to show Faye for just a brief moment. I want to see the destruction of her eye. Then the police detective sits her up and you pan around onto him, then onto Nicholson, then back to the detective, then back to Nicholson as he's pulled away by his two friends. Then I want the camera to climb 27 feet into the air — hand-held."

When he told me that, I said: "Roman, you're contriving a shot. You're contriving it because you don't know how to end the picture. You're performing cinematic gymnastics."

I was kidding him about it, but he said: "No, no, no — it really fits. This is how it has to work . . . "

And he worked it out for me. But a shot like that isn't easy to pull off. First of all, there's no room for the assistant to follow focus, because the camera is surrounded by the actors and extras. There's no place to put lights on them, because when you have a camera that is that close, with a 40mm lens and an actor who is two feet away from you, your own camera would cast a shadow on the actor if you put any lights behind it. To solve the lighting problem I mounted the little Obie light next to the lens, ran the wire down to my feet and taped it so that Earl Gilbert could keep his eye on it constantly and keep it up. We pre-checked the exposure wherever possible.

The next problem was that of following focus. Well, relying on my experience as a documentary cameraman, I asked permission of the union and they allowed me to operate the camera on that shot myself, because I can do that sort of thing. The next problem was what to do about the damned camera shadow. Roman came up with an idea. He said: "Put a hat on the camera. You'll see a shadow if you look at the picture closely, but it will look like a hat shadow." We put a hat right over the Obie light, so that any lights that hit me as I was panning

around, cast a shadow that looked like somebody's hat.

The scene was shot in very close quarters. The actors attacked. I say "attacked" because that's literally what they did. They came right at the lens and I whipped down to Faye Dunaway, then whipped up to John Huston, who was crying over the death. I panned over to Perry Lopez, the detective, then panned over to Nicholson, who said a line, then panned back to Lopez. Roman has since put a cut in there, but originally it was intended to be one continuous shot. Lopez said: "Get out of here, Gittes." As Nicholson's partners took him away, I followed them slightly, then walked to my right and climbed onto the platform of the Chapman crane. They released it and I started going up in the air. The whole thing was hand-held and I couldn't have shot it at all in sync-sound if it hadn't been for the Panaflex. It's an amazing shot, if I say so myself, and I wish it could have been used in its entirety instead of being cut.

Now that "CHINATOWN" is in release and enjoying critical as well as commercial success, I think back to that Friday when I met Roman Polanski for the first time and started working with him. At first we were playing a sort of subtle game with each other. I'd set the camera up. He'd look at it and move it a little bit. We began to set the ground rules even on that first day. He was subtly telling me: "I know what I'm doing, so let's be friends. Let's really work together like two artists to make a good picture."

All through the filming, Roman gave careful consideration to ideas offered by Dick Sylbert or myself and adopted many of them. What I'm really doing is giving him a terrific pat on the back, and I hope I don't sound like I'm overdoing it, but I really mean it when I say that he is a very thorough and investigative type of director who gives credit where credit is due. He figures that if he has hired certain technicians, they must be good at what they do. That's one of the things that made working with him on "CHINATOWN" a pleasure.

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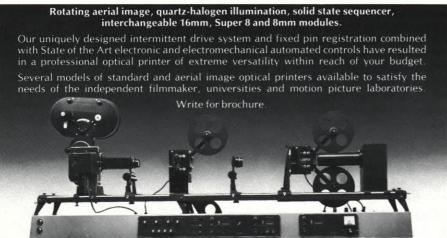
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VIDEODISC SYSTEM Continued from Page 541

Dramas: "Airport'75", "Earthquake", "Slaughterhouse Five", "Airport", "Diary of a Mad Housewife", "Little Miss Marker", "Portrait in Black", "The Blue Dahlia", "The Day of the Jackal", "The Ugly American", "To Kill a Mockingbird", "The Lost Weekend".

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Mystery, Horror and Intrigue: "The Andromeda Strain", "Arabesque", "Dracula", "Frankenstein", "Frenzy", "The Birds", "Psycho", "The Big Clock", "The House of Seven Gables", "The Ipcress File".

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Humorous Series: "Abbott & Costello", "Burns & Allen", "Francis the Talking Mule", "Henry Aldrich", "Ma & Pa Kettle".

Talent

Among the thousands of stars in these and other Universal films which may be made available on MCA Disco-Vision videodiscs are:

Julie Andrews, Lew Ayres, Ingrid Bergman, Marlon Brando, Richard Burton, Lon Chaney, Jr., Carol Channing, Ronald Colman, Gary Cooper, Doris Day, Kirk Douglas, Jimmy Durante, Clint Eastwood, W.C. Fields, Charlton Heston, Bob Hope, Rock Hudson, Glenda Jackson, Boris Karloff, Burt Lancaster, Jack Lemmon, Carole Lombard, Bela Lugosi, Shirley Mac-Laine, Dean Martin, The Marx Brothers, Walter Matthau, Paul Newman, Donald O'Connor, Gregory Peck, Anthony Perkins, Sidney Poitier, Dick Powell, William Powell, Claude Rains, Robert Redford, Vanessa Redgrave, Edward G. Robinson, George C. Scott, James Stewart, Elizabeth Taylor, Shirley Temple, Lana Turner, John Wayne, Mae West.

Other Programming

In addition to entertainment pro-

gramming, Findlater noted, MCA will call upon the resources of its educational, commercial and institutional divisions to create new, original programming in educational, cultural, how-to and similar areas, providing a diversified mix for general audiences as well as for smaller, special interest groups. There will also be a great deal of program material acquired from distinguished outside sources, including other major motion picture producers, he added.

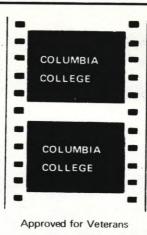
CINEMA WORKSHOP Continued from Page 504

with one of his own Arri 35 underwater units.

The design of the housing is very important. It must be perfectly matched and coordinated with a specific camera/battery combination. The center of gravity must be concentric with the center of buoyancy; otherwise the camera will have a tendency to twist on axis, or pitch forward or backwards. The complete rig should have a slight negative buoyancy when fully loaded. Some cameramen prefer a neutral buoyancy, but never a positive one. This may sound strange, as the camera will slowly fall to the bottom when let go. This is actually preferable to the camera floating to the surface. Rarely is a crew working in an area so deep that the camera cannot be recovered from the bottom. As a matter of fact, it is convenient to leave the camera on the bottom when going topside to get instructions. The camera doesn't have to be hauled up and down unnecessarily. In addition, it is easier to spot a camera on the bottom than it is to locate one looking up at the back-lit rippling surface of the water. The slight negative buoyancy is also more natural to work with.

Designing and building an underwater housing is an exacting science. In addition to proper balance and buoyancy, a housing should have a good finder system and a means for determining footage. The better housings will have magnified reflex viewfinders, allowing the cameraman a through-the-lens view, even with his face mask on. There are several firms that make professional underwater housings for both sale and rental. Check the features and, if possible, try it out before the actual shoot. It is also a good idea to check with a cameraman who is familiar with the unit in question. He may be able to give you an insight into the particular "personality" of the

Starting with a good underwater housing is basic. Next month we will delve more deeply into the subject and explore underwater technique.

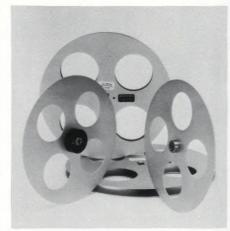


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INDUSTRY ACTIVITIES continued from page 560

- 3c. Humanities/Social Sciences/ History
 - 3d. Vocational Skills and Guidance
 - 3e. Health
 - 4. Environment and Ecology
 - 5. Fund Raising
- 6. Health and Medicine (not classroom educational films)

Public Relations (Enhance the image of, but *not sell;* a Product, Service, Process, Organization or Institution).

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- 7b. Over 20 minutes in length. Public Service/Information (Non-Profit, may be indirectly sponsored).
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 - 9. Documentary
 - 10. Safety

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- 11b. Over 20 minutes in length.
- 12. Science (not classroom educational films)
 - 13. Sports and Recreation
 - 14. Travel
 - 15. Humor
- 16. Special (For those subjects not specifically called out in the category headings).
 - 17. Student Films

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Classes are held in air-conditioned, professionally-equipped studios located in midtown Manhattan and at the NYU Washington Square Center. All materials, laboratory services and instructions are included in the \$675 tuition.

For further information, call (212) 598-2375, or write to Raymond P. Zelazny, Director of the Summer Session, New York University School of Continuing Education, 2 University Place, Room 21, New York, N.Y. 10003.

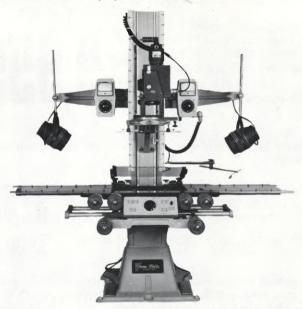
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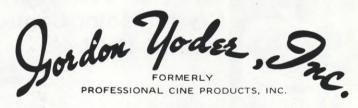
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ACADEMY AWARDS Continued from Page 549

Each branch of the Academy of Motion Picture Arts and Sciences conducts its own nominating procedures under rules established during the 47-year history of the awards program.

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

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

Documentaries and Short Films also are nominated by committees. Scientific or Technical Awards are voted by the Board of Governors based on the recommendations of the Scientific or Technical Awards Committee.

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

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

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

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

FILMING "BORN FREE" Continued from Page 579

last shot as an effect shot, even allowing for the fact that he has three superspeed lenses, (one of them T/1.1) and a 200° shutter on the Panavision R-200, all of which he uses frequently to extend the working day.

There are not many dull moments when shooting on a series such as this. Every day is a new challenge and the humdrum routine of a studio must be quickly forgotten.

Jack Couffer told me that after long discussions it was decided that there would be no armed guard to shoot a lion should it attack a man. It was reasoned that if this situation were to occur and a man and a lion were to become interlocked in a struggle, a trigger-happy security guard would as likely hit the man as the lion, if not someone else. Much better to have the trainer and handlers, whom the animals trust and obey, constantly on hand.

They have had their moments, however.

I was told of a prop man who played a bit part of a villain in an early episode and from then on the lioness remembered him and sorted him out with a special growl whenever the two were on the set together.

On another occasion they released one of their tame lions to shoot a sequence of a wild elephant being chased by a lion. It so happened that the lioness they chose for this assignment (there were three Elsas) had been raised in a circus alongside elephants and so was very sympathetically inclined towards them.

They drove out into the country until they found a likely-looking wild elephant and released the lion, who loped off in friendly pursuit, perhaps for a chat.

The elephant wasn't informed of this and took off for the nearest clump of trees, when she turned around and bellowed at "Elsa".

"Elsa" then came out of the trees and walked away in disgust.

After Jack Couffer had taken all the shots he required of the chase, the handlers set off to retrieve the lion that was slinking away, offering her raw meat and tidbits.

It was only when they got very close, with hands outstretched, that they realized that this wasn't "Elsa", but a real lioness!

Who knows, perhaps the last episode of the series might even be a reenactment of some of the real adventures encountered while shooting the remainder of the series!

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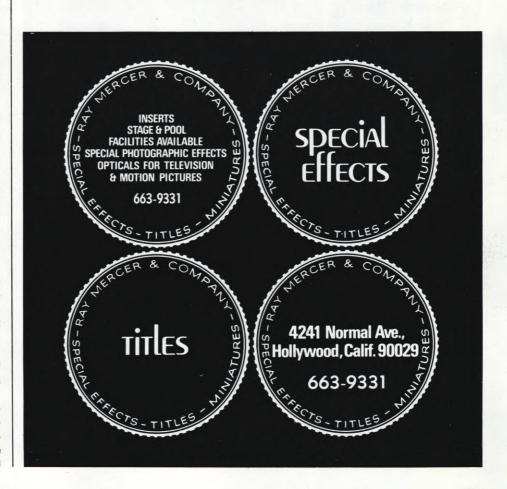
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CINEMA PRODUCTS Continued from Page 584

miniaturized BNCR-type mount with a positive-locking ring against the lens flange, so that there is no possibility of lens movement or torque-related damage. Incorporating the basic design features of the CP-16, the CP-16R follows the conventional Auricon film-threading configuration and can accept either 400-foot or 1200-foot Mitchell-type magazines. The result is a sophisticated 16mm reflex single/ double system sound camera so rugged and reliable that it immediately gained wide acceptance throughout the world. The CP-16R now dominates the American market.

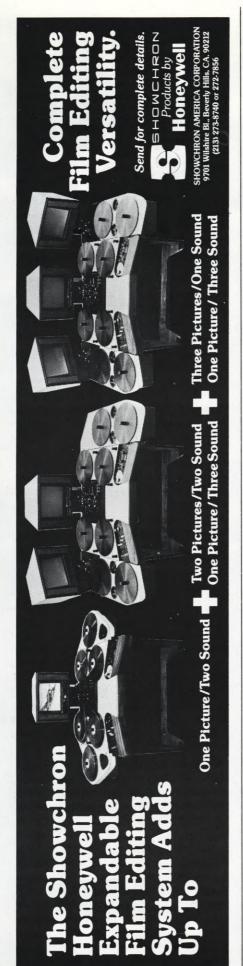
RELIABILITY OF FILM EQUIPMENT IS PRIME REQUISITE

Whereas in feature film production an occasional missed or spoiled scene can usually be retaken (though often at considerable expense), the newsfilm/documentary cameraman almost never has such an opportunity. His equipment must be critically reliable to enable him to cover fast-breaking news events, never-to-be-repeated exclusives, and many scenes that, by their very nature, are only going to happen once.

The staggering costs of feature film production, where peripheral costs alone can run upwards of \$20,000 per day, permit little tolerance for equipment breakdown. But costs aside, how painful it would be to find out that an exceptionally fine performance of a difficult scene has been lost because of camera malfunction. It is no wonder that through the years standards of reliability for professional motion picture camera equipment have become extremely rigorous. The nature of the art, and production costs being what they are, there is hardly any margin for error. So, the highest reliability for precision camera equipment is a prime requisite.

The CP-16R studio version. While normal 16mm motion picture cameras are not quite up to professional Hollywood sound-stage standards, the new CP-16R has proven itself to be silent enough for close-up shooting on location and in the studio. Its proven reliability, extremely steady pictures, and great flexibility in magazine capacity (up to 1200 feet) make it ideal for hand-held shoulder operation, as well as tripod or dolly operation.

In its studio version, the CP-16R is mounted on a riser block which carries matte box rods. The rods support a



follow-focus mechanism fully adjustable to accommodate both zoom and fixed-focal-length lenses, and a full-production matte box capable of carrying an assortment of square or round filters, rotating pola-screen, etc. Equipped with its "studio rig," the CP-16R is rated at 28 dB (\pm 1 dB) when measured on the weighted "A" scale at three feet from the front of the optical flat in the matte box.

The development of Eastman Kodak's new 7247 color negative stock (which can be blown up to 35mm with a high degree of sharpness) has prompted Wolper Productions to consider shooting some of the Bicentennial special television series in 16mm color. The studio version of the CP-16R proved to be guieter than the two other leading 16mm professional cameras tested, and so all six one-hour episodes of SANDBURG'S LINCOLN were shot with the new CP-16R at Paramount Studios. (See the September 1974 issue of American Cinematographer for the full story on the filming of SANDBURG'S LINCOLN.) Another Wolper Productions' Bicentennial television special, THE HONORABLE SAM HOUSTON, was also filmed with the CP-16R studio version at Paramount.

The development of the XR35 lightweight studio camera. When I first heard that Cinema Products was developing a new 35mm studio-type camera at the same time that it was engaged in increasing production to meet demand for the new CP-16, I thought to myself: How do they dare to put money into the design of a 35mm studio-type camera in the face of the excellent camera being produced by Panavision, the Panaflex? In the face of an excellent camera being designed by Arriflex, the 35BL? In the face of the hundreds of existing Mitchell studio cameras? To be perfectly honest, I was very doubtful that this program would be successful.

However, when I discussed the question of the XR35 with Ed DiGiulio, I found out that, in spite of all the very obvious "facts of life" I mentioned above, Cinema Products is backordered on the XR35 studio camera for a full year. Apparently the XR35 was designed to fill a very specific vacuum in the motion picture industry, and it is filling it very well.

When the first production model of the XR35 became available in 1973, Arriflex was still in the process of perfecting its excellent 35BL camera, and the Panaflex camera was available for rental only. The special characteristics of the XR35 were designed to satisfy the urgent demand of the major rental houses in the world (including many of

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the studios that rent their facilities to independent production companies) for a 35mm camera that was as reliable as a studio camera, and lightweight enough to perform easily and well in difficult and tight physical locations.

Weighing in at 93 lbs. complete with motor and magazine (but without lens and film), the XR35 is considerably lighter than ordinary studio cameras. Its unitized construction, with the magazine blimp permanently attached to the camera-body blimp, makes it possible to store the XR35, complete with magazine and ready to shoot (except for lens), in one compact carrying case, which means that it is very easy to handle and it doesn't require two people to move it. There is nothing to assemble. You can remove it from its case within one minute, set it on the tripod, and you're ready to shoot. The "clam shell" opening at the rear of the magazine blimp housing provides easy access for magazine loading, yet requires no side or headroom clearance. The XR35 reflex rotating mirror stops automatically in a viewing position. The film transport system is designed around the dependable standard Mitchell pin-registered compensating link movement, equipped with Cinema Products' exclusive two-axis, vari-pitch stroke adjustment, which helps make it an exceptionally quiet camera, with no lens shroud required. (The camera being tested at the Cinema Products sound room while I was there registered an amazing 261/2 dB!) The XR35 does indeed give the cinematographer all the advantages of a studio camera, plus the added benefits of greater mobility and ease in setting up on location — despite the fact that it is not a hand-held camera.

The Canon aspheric lenses for 35mm motion picture production.

When I read a couple of years ago (see American Cinematographer, August 1973) that Cinema Products held the exclusive worldwide distribution rights to Canon's aspheric lenses (which were then still being developed and tested), I filed this interesting bit of information away. But now I couldn't resist asking DiGiulio for the full story.

It turned out that when DiGiulio and Wilton Holm (of the AMPTP Research Center) attended a special conference held by the Japanese counterpart of the Society of Motion Picture and Television Engineers, DiGiulio found out that Canon had actually achieved a breakthrough in devising a method of grinding aspherical surfaces by means of automatic machinery, thus making it possible to manufacture ultra-high-

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WILCAM PHOTO RESEARCH INC. 8619 Yolanda Avenue Northridge, Ca. 91324 (213) 885-9974 speed, high-resolution, low-flare lenses at a reasonable cost, DiGiulio saw the possibility of developing a special series of aspheric lenses for motion picture photography and, with the cooperation of Wilton Holm (who was instrumental in developing the specifications for the Canon T/2.8 K-35 25-120mm Macrozoom lens), urged Canon to develop such a series of aspheric lenses for use with professional 35mm motion picture cameras.

Two years ago Canon had already produced the first aspheric lens in the series, the 55mm (T/1.4), and was in the process of having Cinema Products and the Research Center test out and evaluate the 24mm (T/1.6) lens. As of this writing, the 35mm (T/1.4) and the 85mm (T/1.4) aspheric lenses, which complete the series, are also available from Cinema Products.

What is so exciting about this series of aspheric lenses is that it is most ideal for night-for-night photography with available light, which is very much the trend in filmmaking today. By causing the marginal rays to be in sharp focus and, at the same time, rejecting random or spurious rays, the aspheric lenses reduce glare sharply and improve definition and contrast of the scene, regardless of the variations of light level. The result on film is photography that is clear, sharp, well-defined, and well-balanced with good color rendition and saturation, especially with regard to flesh tones.

Cinema Products also supplies a full range of lenses for both their 16mm and 35mm motion picture cameras. I am told that Cinema Products is now the largest single customer of the Angenieux Company for the film industry.

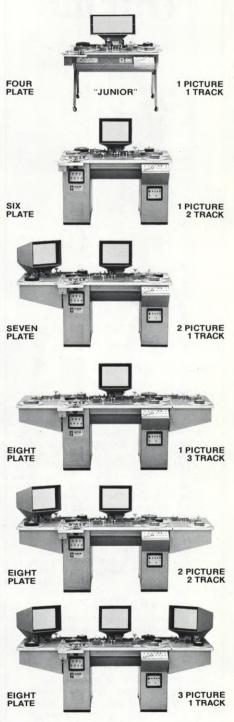
DESIGN FOR RELIABILITY

In following the history of this company I learned that Cinema Products has had unusual success with each one of its products, primarily, it would seem, because it fulfilled very specifically the needs of the cinematographer and also because the equipment was extremely reliable. From my own experience in the industry, I know the tortuous development that a design for a new product goes through - from a working prototype at the start, to a finished, proven and reliable product. The process of "debugging" prototype models alone is both lengthy and costly. Cinema Products, though, did not seem to have encountered undue problems in following through from prototypes to finished, reliable products, and in my discussions with company personnel, I was extremely

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So I sat down and had a long and detailed discussion with John Jurgens, Cinema Products' tall and lanky vice president of engineering and manufacturing. Formerly a chief engineer at Photo-Sonics and at Mitchell Camera Corporation, Jurgens is known to be one of the most outstanding mechanical engineers in the United States when it comes to motion picture camera and photo instrumentation design. I found out that he had an unusual ability to understand and to conceive of the totality and the interrelationship between all of the mechanisms that go into a camera, and reduce it to detailed drawings before production is

"The first step in our procedure in approaching a new product is to conceptualize everything on paper,' Jurgens explained. "Then we have functional mockups made up of every composition and every subassembly. We next proceed to take each one of the components and subassemblies and test it out for sound level, environmental stress and overall reliability, to the point where we're convinced that we've reached the desired optimum. At this stage, it is turned over to our design-detail engineers, who will design it for the optimum in production reliability and efficiency."

This procedure employs principles of mass-production techniques, and resolves and eliminates the problems before the production components are made. It is this procedure, and the great care taken in the earliest planning stages, that is the basis for the reliability which comes later. I was indeed impressed when I examined Jurgens' original sketches of the CP-16 reflex and non-reflex cameras and the XR35 camera. You could literally see on paper the development and the progression of each stage of the design, including how mistakes were corrected before the cameras were actually produced.

The PLC-4 magazine. The same meticulous procedure was followed in the design and production of the PLC-4 magazine, which is a completely new type of 16mm 400-foot magazine, inaugurating the use of man-made plastic materials. The magazine is made of high-impact glass-filled Lexan® (an extremely rugged material used in the manufacture of hard hats and football helmets). This new material completely eliminates the problem of film-spotting caused by particles of magnesium adhering to the

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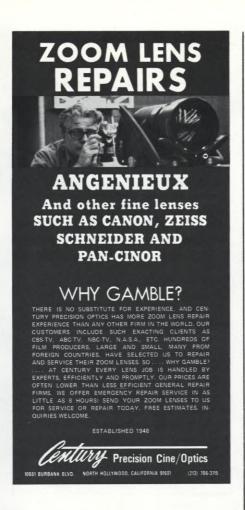
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ROUTE 3, BOX 24A SARASOTA, FLORIDA 33580 TELEPHONE: 813/355-4470 film emulsion and then reacting in the developing bath. The PLC-4 is a compartment-type magazine, permitting the use of either 200 or 400-foot darkroom cores or daylight-load spools. It utilizes hinged doors which provide quick access for loading and unloading, a great advantage in newsfilm/documentary filming.

The cover and the doors are made by a process of plastic injection molding utilizing a high-precision steel die. A series of subassemblies and internal components are efficiently mass-produced on Cinema Products' premises. These sophisticated production techniques make it possible to pass on the savings in costs to the user by keeping the price of the new magazine reasonably low.

The main concern in the manufacturing process of every camera is, of course, precision and reliability. Every part, every circuit board, every modular component and subassembly, and every finished product — all are subjected to the most rigorous quality-control inspection and testing procedures. Cinema Products' cameras are always assembled in their final stages in the "silent room," immediately adjacent to the sound-test room.

THE USE OF ADVANCED ELECTRONICS

Since Cinema Products claims to make greater utilization of advanced electronics than any other motion picture camera manufacturing company, it was interesting to have a long discussion with Bob Auguste, Cinema Products' chief engineer. Prior to his joining Cinema Products, Auguste was chief electronics engineer with Cinerama Camera Corporation and Mitchell Camera. He is considered a most brilliant electronics engineer in the field of designing motor servo-controls, power supply regulation, and amplifier design.

In talking to Bob Auguste, I found out that Cinema Products' micro-circuit designs incorporate the latest hybridization techniques in advanced microelectronics. The use of hybrids permits the addition of several miniaturized components (which would normally be on the circuit board itself) into one basic 3/4" x 7/16" little black box which contains several integrated circuits. This means that large portions of the board can be tightly packaged within each hybrid in an inert gas atmosphere and, as a result, there is great increase of reliability over a wide temperature range, preventing the formation of ice and moisture on the delicate circuit. The result is very high reliability,





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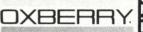
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compared with the old wire-andsoldering type of circuitry.

One of the by-products of microcircuitry is that the COS/MOS integrated circuits consume about 1,000 times less power than other types of integrated circuits. This is very significant for the filmmaker because he can shoot much more footage before requiring the recharging of batteries.

An Improved motor for the (English-made Eclair ACL camera.

The standard ACL motor was considered to be under-powered to drive the 400-foot magazine of the Eclair camera. The problem was due basically to the use of previous circuit technology. With Cinema Products' new electronic design, a sufficient amount of power was saved in the control circuitry to make possible heightened performance with increased efficiency. The new circuitry permits the old motor to drive the 400-foot magazine, in addition to providing variable speeds, with power to spare.

This type of advanced electronics and reliable and efficient micro-circuitry is incorporated into all cameras manufactured by Cinema Products.

NEW PRODUCTS

During my visit to Cinema Products, I talked to Milt Forman, who is the company's Consultant and a member of its Board of Directors. During my subsequent discussions with Forman, John Jurgens and Ed DiGiulio, they gave me a verbal preview of some of their plans for the new products currently in development at Cinema Products.

The most exciting project currently in development involves the new GSMO cameras - reflex and non-reflex 16mm double-system sound cameras which are compact, extremely quiet, and feature 100-foot coaxial, snap-on, quick-change magazines, crystal-controlled sync and variable speeds. The GSMO design incorporates all the latest technology of miniaturization of electronic components and integrated micro-circuitry. The GSMOs will be low in cost and unbeatable for rugged reliability and simplicity - the space age replacement for the legendary Filmo.

I could get no further details on these cameras at this time, and Ed DiGiulio swore me to secrecy when he showed me the drawings and the subassemblies which have already been tested. But he did promise that *American Cinematographer* would be the first to have all the information when the camera is introduced officially.

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Still under wraps is the new "STEADICAM" system - a unique selfstabilizing camera system that is being developed for 16mm and 35mm motion picture cameras, as well as video cameras. The most important aspect of this system is that it will permit the most stable and highest-quality recorded image. And Cinema Products' team of engineers and designers are betting that the new system will revolutionize the way films are shot.

It is projected that the "STEADI-CAM" system will release the motion picture camera from the constraints of studio dollies and tripods and all sorts of mounts, opening to the cinematographer new vistas of creative expression. Having become by now well aware of the company's excellent track record in regard to new products, I am looking forward to finding out more about the "STEADICAM" system. All I can testify to is that test clips of film shot with the system drew absolute raves from A.S.C. members and other cinematographers who attended Cinema Products' party last December and the A.S.C. meeting in Hollywood in February of this year.

UNUSUAL MARKETING OF **PRODUCTS**

During my years in the motion picture industry. I have often observed companies which, despite turning out excellent products, still failed to achieve financial success. In this respect. Cinema Products exudes health, and this made me most curious to find out how it markets its equipment.

What I discovered was quite unique. In my discussions with Abbott Sydney, Cinema Products National Sales Manager (who was previously a Vice President of the Arriflex Company of America), I found out that instead of trying to build sales volume by an indiscriminate proliferation of dealers all over the United States and the world. Cinema Products followed a cautious but more reliable marketing program.

Sydney told me that they sold the 35mm equipment directly to studios, guaranteeing full factory-backup and service, and only to the most reliable and largest rental houses and professional dealers who had the technical capability and know-how to support the 35mm equipment.

Basically the same type of policy was followed with respect to the 16mm equipment. Instead of indiscriminately setting up hundreds of dealers and constantly worrying about how well they can service the users, Cinema Products started out originally by selecting only three top professional



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dealers in the United States for the CP-16 line. But these dealers were fully capable of supporting the equipment in terms of maintenance and any other service problem that could possibly develop. Cinema Products now has only a select group of about 19 CP-16 dealers in the United States. Sydney advises me, though, that once the new GSMO cameras are introduced, it may become necessary to expand the dealer program.

Most important, as part of this marketing and distribution program, Cinema Products insists on continuous feedback from the users (of both the 35mm and 16mm equipment) as to their experiences with the equipment, so that Cinema Products' design engineers can continue to improve and perfect the equipment based on actual experience.

One of the most interesting discussions I had during my visit was with Peter Waldeck, overall marketing manager of Cinema Products and Vice President of CPD International, Inc. (which is Cinema Products' export marketing arm). Waldeck, who was formerly Vice President in charge of sales at Bach-Auricon, is a multilinguist par excellence. Waldeck informed me that, during 1974, Cinema Products was able to realize in excess of 25% of its gross sales abroad. From previous experience, I do know that most new companies find it very difficult to develop international markets

In the course of our discussion, I found out that they followed the same principles involved in their domestic sales policy, of selling only to those companies that were qualified to support the equipment fully. And Waldeck told me that he was traveling outside the United States about nine months of the year, supervising the quality of maintenance service and getting feedback from users all the way down the line. Waldeck pointed out that Cinema Products has already penetrated the following markets: South Africa, the Philippines, Japan, Southeast Asia, South America, Canada, England, India, Austra', Turkey, the USSR and the Arab countries. The CP-16R reflex is also making inroads into the European market until now exclusive Arriflex and Eclair territory.

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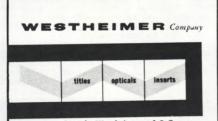
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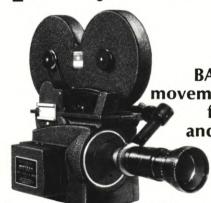
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