

1971-1972

# ECOLEX

## REPORTER

## BOLEX REPORTER

Vol. 21, No. 2

1971-1972

### The Latest in Movie Cameras and Projectors

|               |      |
|---------------|------|
| Super 8 ..... | 4, 5 |
| 16mm .....    | 23   |

### The Creative Moviemaker

|  |   |
|--|---|
| An Open Letter to Bolex<br>by Ronald Davis .....                             | 3 |
| "At Ease, Charlie" — A Three-Screen Experiment<br>by Dr. Edward De Roo ..... | 6 |
| The Film in the Back-Up Camera<br>by Bob Lehmann .....                       | 8 |
| "Condensed" Films: New Movie Inspiration<br>by Walter Braun, Editor .....    | 8 |

### The Pro—Travelogues and Nature Films

|  |    |
|--|----|
| Our Bolex Has Wings<br>by Matilda Metcalf .....                            | 11 |
| Winter and Desert Wildlife Filming<br>by Richard and Rochelle Wright ..... | 14 |

### Educational Movies

|  |    |
|--|----|
| The Making of "Easy Reader"<br>by Chris Lytle .....                    | 17 |
| Filming Childbirth for Police Training<br>by Walter T. Leamy, Jr. .... | 18 |

### Sports Filming

|   |    |
|---|----|
| The Bolex in Ice-Cube Alley<br>by Kip Taylor .....            | 19 |
| Quality Sports Films at Half the Cost<br>by Ernst Wildi ..... | 20 |
| My Aerial World — and Bolex<br>by Stan Bandranke .....        | 22 |

The *Bolex Reporter* is published by Paillard Incorporated, 1900 Lower Road, Linden, New Jersey 07036. In the United States, the magazine is available twice a year through franchised Bolex Dealers at a price of 50 cents, or from the publisher on a subscription basis at \$2.00 per four issues. The editors will be pleased to consider original articles and photographs on movie-making. All manuscripts and photographs submitted become the property of the Paillard organization or its designees upon publication and payment at rate current. Copyright 1971, Paillard Incorporated, Linden, New Jersey.

## An Open Letter to Bolex

by Ronald Davis

Dear Sir:

I am writing you this letter for two reasons: (1) to tell you that it was a pleasure to use your Bolex Super 8 Macrozoom camera, and (2) to inform you of a movie which I have been working on now for the past four months.

Presently I am teaching at Maplewood Junior High School, Maplewood, New Jersey, and attending the School of Visual Arts in the evenings, where I am taking courses in photography and film editing.

After this spring I plan to leave the field of teaching and attend the School of Visual Arts, their day program, in film next fall. I was accepted as a third year student on the basis of the film which I am currently making.

Basically the film is, on one hand, about a day in the life of a school teacher. On the other hand, it is not about his teaching in a ghetto school (although in the film he actually does), nor does it really concern itself with education at all.

The story opens with a sunrise over New York City, trains arriving at Hoboken, New Jersey, and commuters hurrying off to work in the early hours of dawn. Then there are shots of Marty, the school teacher, waking up, rising, and rushing off to catch a bus.

We see him on the bus preparing a lesson plan for the coming school day and correcting papers. From time to time, he looks up from his work and stares out of the windows and there follow scenes of his weekend in Pennsylvania with friends, shots of his mother, and shots of some friends.

The rest of the film follows in the same vein. In other words, we continue to pass through an entire day with Marty: at school, teaching; at home, preparing to go out for the evening; at a party, sharing a deep involvement with friends in an astrological seance. However, intertwined with all these various occurrences are Marty's dreams, fantasies, and remembrances. I am trying to give a portrait of a man, a person seriously involved with the times, with people, and with himself.

For instance, when Marty reprimands a young black boy in his class for cutting, he recalls a scene from his own childhood as he is seriously speaking to his students. We see a very small child seated alone in a classroom in front of a very beautiful but nevertheless very austere nun who clutches a ruler and menacingly, slowly paces the room. There follow close-ups of her approaching the little boy, overwhelming him with intimidation, and, eventually, physically assaulting and subduing him in a closet into which she has dragged him. Immediately following this brief scene, we return to Marty, the teacher, speaking to his own student and a close-up of their faces.

Another such remembrance of fantasy occurs when Marty returns home after school. He comes into his apartment, lays down his attaché case, leans exhaustedly against one side of an archway which leads into his living-room, and stares listlessly in front of him. The next shot shows us the interior of a living-room, supposedly his, but obviously not, as it becomes apparent that the very center of the floor is opening up! From the bowels of what may be hell itself comes a coffin rising straight into the room. There is a shot of Marty's name on a placard reading "Martin Sanchez," followed by another shot of the casket, this time with Marty in it. There are more shots of his friends arriving at the funeral home to

pay their last respects: friends from Pennsylvania whom we recognize immediately from earlier scenes in the film; friends from New York whom we have also seen earlier; and finally Cynthia herself, the same young beautiful woman whom we saw as the nun. She walks slowly into the room (slowly, to accentuate the dreamlike qualities of this particular scene as it is a fastasy) and lays a white chrysanthemum on Marty's coffin.

The last shots show Marty rising up in his casket, broadly smiling to all his friends, followed by quick flashes of everyone laughing intensely and falling into mad hysterics.

When Marty returns to his apartment, after having attended an astrological seance, he goes to bed and falls into a heavy sleep and begins to dream and hallucinate. We see him walking down Fifty-Ninth Street and going into an antique shop. He gazes at numerous things on counters and shelves but eventually comes upon a porcelain doll. He looks intensely at this object until he discovers its eyes. As he peers into its face, the image zooms into his mother's face (whom we, again, have already seen and identified earlier in the film). He leaves the shop in a burst of emotion and runs wildly down a street, crossing traffic wherever he sees an opening.

The next shot shows him hurrying but eventually walking more cautiously through a subway train. He finally reaches the very last car and looks out the window of the door which opens out upon the tracks rushing underneath. He sees coming gradually towards him the end car of a train parked upon the tracks ahead. As his train nears the other, Marty sees a woman come to the back window and gaze out towards him. There follows another quick shot of his mother. In another burst of passion, he rushes headlong out of the train, through a deserted subway tunnel, and towards what he imagines to be an exit. It is an exit, but it is locked. He frantically looks for others but they too are closed. Eventually he does find an available exit to the street, but rather than see him run up out of it onto the streets of New York, we find him running down a country road towards the home of his friends from Pennsylvania. He discovers that the house has been destroyed (for this scene I filmed a house in Maine similar to that one in Pennsylvania) and in hysteria flees into the nearby woods.

Next, we see him seated on a flatboat being ferried across a shallow river to an island by someone mysteriously wrapped in a black cloak and hood. Marty holds a lantern to his face for it is dark. Neither people speak. Once across Marty leaves the man with the cloak and walks through a wood into a large graveyard lying on a hillside above the river. He wanders directly through it to the very top and kneels down on the edge of an open grave. A light shines from within onto his face and he speaks to his mother's ghost, or spirit. (We did this in Washington with his mother at her home by using a dressing-room length mirror, rubbing vaseline over the glass, sprinkling water upon that, and finally throwing a light from underneath up onto her face. The effect is startling, to say the least. Indeed, the character's image, soft at its edges and distinctly out of focus, provokes an air of mystery and foreboding.)

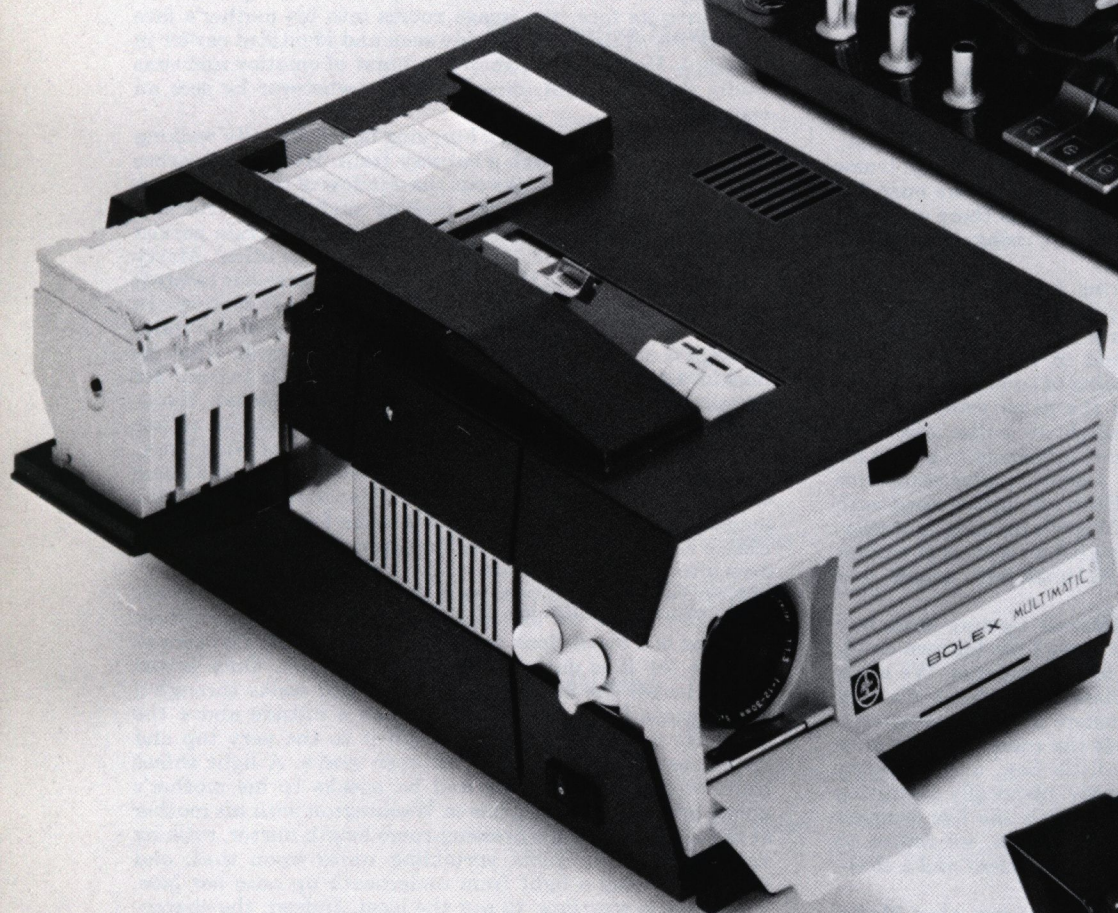
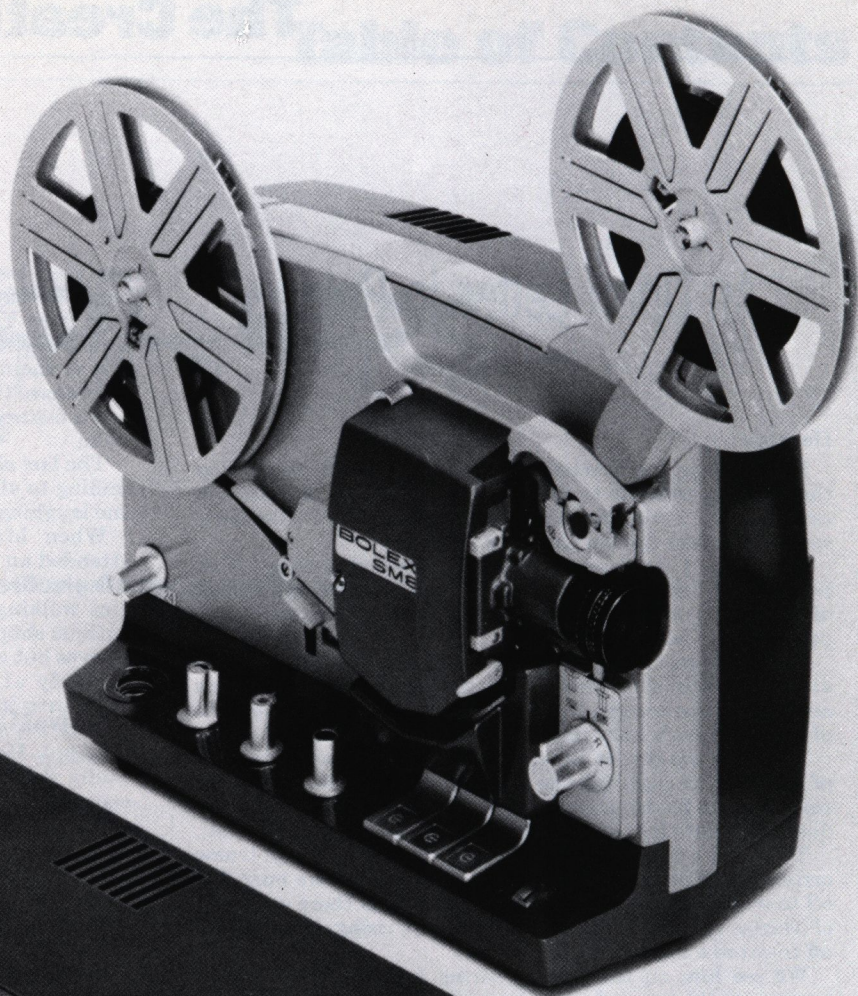
There is very little need here, I feel, to continue with the description and narration of this film presently under completion. I have had great response to my project by numerous people who were only too eager to assist us with the makings of this film. I guess the use of the funeral home in North Arlington, New Jersey, and the classroom in a Catholic school in Jersey City bear this fact out. I feel that I have learned a great deal about filmmaking, even on this

*Continued on page 6*

Right: The Bolex SM8 Magnetic Sound  
Projector for Super 8 Movies

The Bolex 18-9 DUO Projector  
for Regular 8, Super 8,  
Kodak Cartridges or Reels

The Bolex 18-5L Projector  
for Super 8 Movies



Above: The Bolex Multitmatic—  
World's Only Super 8 Projector  
with Automatic Cartridge Changer

# The Bolex Super 8 Line of Cameras and Projectors



Left: The Bolex 160 Macrozoom Camera  
Films from 1" to Infinity

The Bolex 233 Compact Camera  
Fits Any Pocket

The Bolex 280 Macrozoom Camera  
with 8 to 1 Power Zoom

first project. And although I am using Super 8 equipment and materials, the results, filmatically speaking—I think—have been more than just satisfactory.

I have plans to do another film this summer in my home state of Maine. I plan to do a story of a woman, alone and living on the coast of Maine. In complete contrast to my present undertakings, I plan to tell a story in the simplest possible manner, but one which will, hopefully, be valuable from the standpoint of social criticism and commentary.

This all brings me right back to the opening of my letter, that I am very excited working with Super 8 equipment and very delighted with the results that I got from using your Bolex Macrozoom camera.

I have every intention to go on to other projects and continue to make films. I am in love with this art and I guess I am really in love with the results of what your film has produced for me.

I write to you in hopes that you may find the time in the near future within what I would imagine to be your busy schedule to preview scenes from my film. I would like you to see the results of this project yourself, particularly from someone who has seriously tried to make a film in the pursuit of art and perhaps even, in its own way, of social contribution.

Thank you for your interests and thank you for the Bolex Super 8!

Sincerely,  
Ronald Davis

*Editor's Note: The preceding letter appears here just as it reached us a short while ago. We have seen Mr. Davis' film. What it's all about you have just read. All we can add is that the film is superb.*

## "At Ease, Charlie"— a Three-Screen Experiment

by Dr. Edward De Roo

"Repetitious in parts . . . got the point . . . sound track did much for film . . . color helped keep my attention . . . Bolex camera work very good . . . definite connection with myself . . . three-screen excellent . . . enjoyed it immensely . . . difficult to follow . . . realistic . . . girls taking off clothes not necessary . . . what was going on? . . . see a shrink! . . . INSANE! . . . very nifty! . . . excellent experiment . . . great ideas and innovation . . . thought provoking . . . chewing gum effect extremely symbolic . . . want to see more of same . . . three-screen technique confused me . . ."

Above are comments of a Nassau student audience (average age 19) on the bottom of audience-reaction sheets. Seventy-five of the hundred and fifty who applauded loudly and long at the end of the film took the trouble to fill out the check-sheets in detail. There is little doubt that "At Ease, Charlie," concerning the negative aspects of army life, is a youth-film. When the film was shown last month at a multimedia convention in Philadelphia to a mature audience (average age 31), except for "great show . . . YES, cute guy! . . . and makes one think," the "raves" were at a minimum. These audio-visualists were definitely out of draft range.

The "At Ease, Charlie" three-screen experiment, shot with a Bolex H-16 Rex-3, had been generated by \$4,000 worth of grants from the Research Foundation of the State University of New York in 1968-69. My project was to find out about the synthesis of poetic and narrative film-making. I agreed to make a forty-minute film and ran over budget. It was a forty-minute film—when shown three-screens at a time! Called "The Customs Inspector," a psychological odyssey, it received positive audience reaction on a N.C.C. student level. My own further research resulted in "Everybody's Cupid," an odyssey of the heart, and "At Ease, Charlie," a military odyssey, wherein I refined the three-screen technique and sound-image relationships.

Beyond a doubt, I was influenced by the IBM multi-screen productions shown at the 1965 New York World's Fair and those shown three years later at Montreal Expo. But these efforts were documentary in nature: explicating an event (details of a large dinner party), describing a process (how a computer works), or exploring an emotion (the joy of being alive).

My experiments were fictional in content with sets of characters involved in continuous development as found in full-length feature films. But my audiences see three aspects of the characters along with simultaneous viewing of flash-backs and flash-forwards in story-telling. A conventional feature film is strung out in a once-upon-a-time literary linear progression on one screen for at least ninety-odd minutes. The audience rarely has to work hard except at eating popcorn. This is spoon-fed cinema. On the other hand,



my audiences either tune-in and work very hard under a three-screen barrage of information or give up and turn-off.

In my opinion as shaped from the grant-research, seeing a film should not be like reading a book, a linear event beginning with page or frame 1 and progressing in literary fashion to pages 2, 3, 4 to the very literary linear end. Unfortunately, because films have been adaptations of novels and short stories, we have been conditioned to the one-screen, window-frame, literary-linear approach to, not only what a film should be like, but how it should be shown. To many film-goers, one-screen is a ritualistic convention, a rule of the game, a dogma, a be-all and end-all of feature film viewing.

When I suggest to an audience that film should spill over, be mercurial, too much for one sitting, rather than a plodding, methodical visualization of a book with talking heads and photographed radio, many look at me as if I, as one critic put it, should "see a shrink". But such reactions merely encourage me to elaborate on my three-screen theories and make more films to fit such dream-like productions. Perhaps three-screen viewing is also lifelike. In our waking life we experience several sensations at once; why not in a film, perhaps the only art form which can effortlessly give us this experience of simultaneity?

One common complaint is that no matter how hard the audience works, there is the frustrated feeling of missing things, especially the exact story, while watching three screens. The answer: one is always missing things, even with one-screen viewing. All art asks the viewer to return and see it again. Many viewers do not appreciate what three-screen viewing does to their sense of time. "It's too much like a trip," is the complaint. Why should one complain about non-addictive trips? The distortions of time swim through our memories daily. If so in life, why not in film? In one-screen features the audience is asked to study time, not experience the swim of it. To study time can often be tedious. According to audience-reaction sheets, "At Ease, Charlie" was hardly that. Only six out of seventy-five admitted to boredom.

Many complain that they lose the "message" in a three-screen exhibition. Perhaps it is a back-handed compliment that I have not made simple-minded message pictures. Other media thrive on messages from newspaper headlines and editorials to the Book of Proverbs. In the case of three-screen productions, I will hide behind Marshall McLuhan—my "medium is the message." Are not feelings and emotional reactions to the interplay of images also messages? Is not the poetry of a film as important as the prose? Perhaps more important.

Why should the three-screen exhibition be considered "poetic," or even the answer to a synthesis of poetic and narrative film-making, which was what the original grant was all about? At first I tried all kinds of special effects and found them wanting. Our sophisticated audiences are no longer camera shy. Tricky techniques of a single or split screen are not enough. Television has made such trifles quite ordinary, used routinely in any baseball or football telecast. Then what is left in terms of "poetry"?

One day I found John Ciardi's definition of poetry—"language under pressure". My concept of poetic film follows closely from Ciardi's definition. Seeing "At Ease, Charlie" on three screens at once puts film under pressure and the audience under pressure. Hence, if it is not more poetic than the prosaic one-screen ordeal, at least it seems more poetic. And what "seems" in seeing a film is often more important to the dreaming viewer in terms of multi-image experience than what "is".

Before checking into some final tabulations of the audience reaction sheets, it is time to give credit for the making of "At Ease, Charlie". The U.S. Navy gave permission to use the dilapidated military compound at Mitchell Field adjacent to the Nassau Community College campus, without which—nothing. And my kind landlord, Mr. Franz Woller of Forest Hills, gave permission to use the basement of the apartment building, another key set, without which—next to nothing. Then there was Forest Park in Kew Gardens, Queens, for the battle scenes for which I did not ask permission but should have since the film was made in 16mm. My office became the post library, and the horse belonged to Pauline Valenti, an N.C.C. student who played the underground librarian.

I emphasize these blessings which fell into place before a foot of film was Bolexed. Such pre-production planning is vital to a 3,000 foot film budget at \$1500. If one had to build a military base (it costs more to make it dilapidated) and rent an apartment basement and horse—there goes the budget. Quite frankly, without the charity listed above, "At Ease, Charlie" would not have been made.

Speaking of charity, consider the other "free" contributions: the acting talents of my wife, Deborah De Roo, and Pat Burns, Barbie Butcher, Maria O'Byrne, Rosemary Joyce, Pauline Valenti, the sharp eyes and steady hands of 16-year old cameraman Steve Fay, the sound-editing ability of Don Silverman and the acting, writing, directing, producing and editing contributions of myself. "Above the



lines" expenses were nil. "Below the line," shooting less than 2 to 1 with Ektachrome reversal and Kodachrome II in a Bolex H-16 Rex-3 with a Vario Switar 86 zoom lens, kept the production on budget with a few pennies to spare.

Thirty-two per cent of the audience rated the color excellent while sixty-four per cent rated the color good. That is a tribute, not only to Kodak's Ektachrome reversal and Kodachrome II, DuArt Color Corp. Laboratories, Gava-chrome print stock, but also to the Bolex Vario Switar's electric eye, which Steve Fay never had to lie to, in other words readjust manually as if the light-reading were not so.

The second item on the questionnaire also is a tribute to the Bolex. Cameraman Steve Fay is sixteen years old. He has had the minimum of experience. Shooting a couple of shorts, I trained him on a Super 8, also with reflex viewing. The reflex-viewing of the Bolex, when he learned to touch the release-plunger for a clear, accurate picture, gave him confidence in his work from the start. At first he had to be constantly reminded to check the distance from the scene to the film-plane, but within two hours even that vital move became second nature to him.

Thirty-three per cent rated the camera work excellent. Forty-eight percent rated the camera work good. I have used many makes of cameras with beginners in our N.C.C. Film Club and in our film production classes, but beginners learn exceptionally well and get good results immediately on the Bolex. This is also true of loading and unloading the camera. Steve Fay did all his own work in that line. The automatic load of the Bolex gives a beginner that added confidence he needs to do good work.

What about the three-screen experiment per se as reflected in the questionnaire? Thirty-four per cent said it was excellent. Thirty-five per cent said it was good. Twenty per cent said it was fair. Deduct those figures from one hundred per cent, and it is evident that eleven per cent were unhappy with it. But the important factor is that the three-screen effect pleased in various degrees a healthy and not-very-silent majority.

The film, by the way, is concerned with the personal discomposures of Charlie and his family, living in a nation in which all too often the leader points a finger and says, "I WANT YOU!" Expect for these words in the film, the rest of the sound consists of effects and music. The people talk in animal language. The wife sounds like a lioness, the sergeant like an ape. Charlie is too busy reacting to what is happening to him to talk at all.

Other colleges and professional organizations have written to Dan Davila, Director of Media Resources at Nassau Community College, and to me, requesting a three-screen screening of their own. I have been asked to lecture with some of the showings. We try to grant as many of these requests as possible. In this way of sharing the film with others, "At Ease, Charlie" has a future.

I have been asked, "If you had to do it again would you change anything?" Nothing special, except, for one addition. In the credits I would include the following: "Shot by an amateur sixteen-year old cameraman without sweat using a Bolex H-16 Rex-3."

# The Film in the Back-up Camera

by Bob Lehmann

Question: What can you say about a floppy-eared, perpetually forlorn-looking mongrel who is about to be deserted by his playmate for the thrill of romping in some cooling surf?

Answer: Since you're not a leading Yale scholar, you can't write a best selling novel about it that can later be turned into one of the most successful films ever made. No, instead you film it with the left-over film in the back-up Bolex you used when you shot that shampoo commercial on the beach in Puerto Rico.

Our client, an ad agency handling a big line of womens' cosmetics, called and told us about his client who had a new shampoo especially made for summer use to beat that dried-out, dull, lifeless—you know the rest. They wanted a 60-second commercial and a short testimonial, demonstration-type film to show at their upcoming sales meeting. Deadline: 2 weeks. Could we deliver?

In June we could have shot at Jones Beach, but this was February and we had no alternative but to fly to Puerto Rico for the job. So we assembled a crew and, since rental equipment in Puerto Rico is extremely limited, we decided to rent in New York and take the equipment with us. Our choice was a Bolex H-16 Rex-5 equipped with two 400' magazines and the Vario Switar 100 POE zoom lens. As a back-up camera, we took another Rex-5, but with a Vario Switar 86EE, the only other Switar zoom lens available at the time. We chose 16mm equipment since we would be able to have the film processed in nearby Atlanta the same night and would know the next morning if the scheduled shooting had worked out all right, or if we would have to re-shoot. 16mm also made it possible for us to get a quick work print and edit the demo film quickly, so that our client would have it in time for the sales meeting.

The Bolex performed perfectly and, as usual, we didn't need the back-up camera. Incidentally, that extra-long sun shade on the POE lens gives terrific protection from blowing sand and surf.

Our man was off to Atlanta, where the film would be processed that night and would call to let us know in the morning if we could head back to New York. So we packed up.

Being an inveterate beach bum (and finding it hard to acclimate myself to the thought of possibly returning to a New York February in the morning), I decided to take the long way back to the hotel, with, for some reason or other, the back-up Bolex with the unused back-up film. The sun was starting to set, the time when the sand and broken, wind-swept branches on the beach take on that peculiar golden hue. Children were getting their last digs in and adults were starting early evening jobs on the cooling sand. I'd filmed more trivial scenes before, and I automatically started shooting.

It was then that I saw him. I guess he was about ten years old and he was having a great time on the beach with his floppy-eared, awkward, happy dog. I'm a sucker for the old boy and his dog bit, so I shot some more footage.

Suddenly, there were some shouts—some of my young friend's companions were calling the boy from the water. He leaped and ran like a gentle gazelle—quite a contrast to the floppy-eared friend on his heels. At the water's edge they stopped and ole floppy ears was sternly told to wait on the beach while the ten-year old gazelle joined his friends in the surf. And the saddened, ever-obedient, ever-faithful, floppy-eared mongrel took up guard duty, never letting his gaze stray from his young master as the film in the back-up Bolex ran out.

I sent the film out for processing when I got back to New York. The commercial and demo film worked out perfectly—we even met the deadline—and somehow or other the processed roll of film from the back-up camera got tossed in my desk drawer and didn't surface until the summer business



doldrums set in. Well, we projected the original footage not realizing what a gem the Bolex and Vario Switar had captured (not to mention the talent behind the camera). After ordering a work print, and going over it several times, we realized that the film was complete in itself—no editing, no color correction (100% attributed to the built-in exposure system in the Vario Switar). We tacked the last 80 feet as a 2½ minute trailer on several films we sent out.

The reactions varied, but mostly they were in the "what was that?" category, with the accent on the *was*.

And then I realized all the room that was left in the world for lots of sloppy sentiment. Guess what friends and clients are getting for Christmas this year?

Question: What can you say about a floppy-eared, perpetually forlorn-looking mongrel who is about to be deserted by his playmate for the thrill of romping in some cooling surf?

Answer: You don't say anything, stupid. You shoot it with your Bolex and make your own personal love story.

## "Condensed" Films: New Movie Inspiration

by Walter Braun, Editor

*Editor's Note: Sometimes a film maker, an idea, and a Bolex camera combine to become a catalyst of inspiration. We've had the pleasure of reporting these occurrences frequently in past publications as they have come to our attention. In the last few issues we've had stories on many of the results of condensed films produced using the single-frame technique of filming, and because of the continuing far-reaching effects, we thought the story of the original idea would be of interest—and perhaps would even sow more seeds of inspiration.*

"The thought just occurred to me one day—combining the world's greatest art with the world's greatest music, I've got to end up with a great film." As simply as that, Dan McLaughlin, independent filmmaker and UCLA Motion Picture Division staff member, began a project that has had unceasing repercussions in the film making world since its first showing in 1967.

The project was the multi-award winning short, "God is Dog Spelled Backwards," or, "3000 Years of Art in 3½ Minutes," an experiment to find out how much information could be put onto a film in the shortest amount of time. The

color sound film took five first awards in one year of showings, including the important New York and London film festivals.

Almost more important, though, is the impact it has had on other filmmakers—from neophyte to professional. While playing the competition circuits, the art film caught the eye of the Smothers Brothers' Show producers. The film appeared on that show as "Classical Gas," the name of the musical piece written by Mason Williams which replaced the film's original background, a Beethoven symphony.

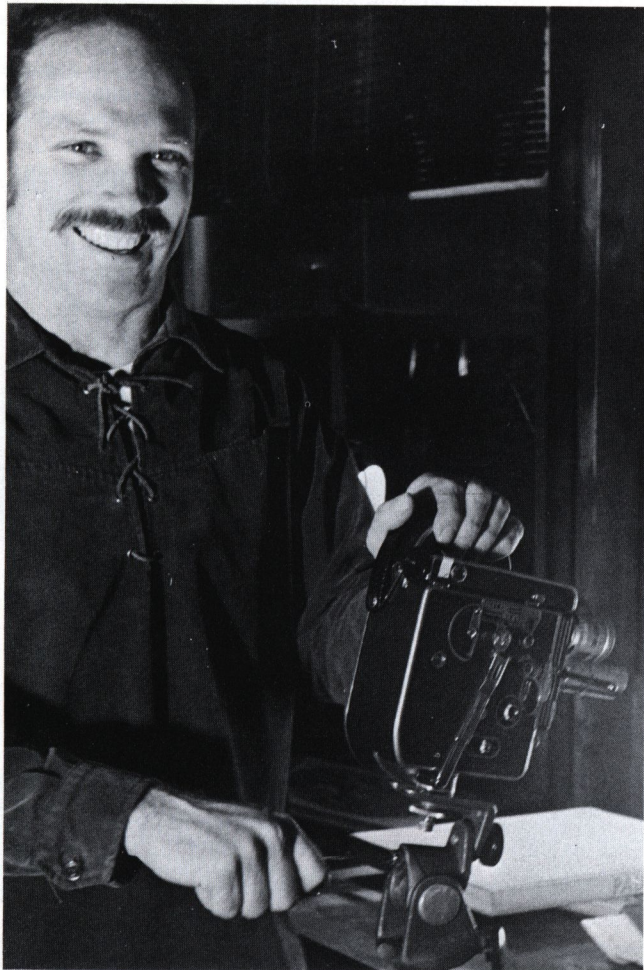
So well-acclaimed after its first airing, it inspired two more films for the CBS-TV weekly show. These were produced by the show's film maker, Chuck Braverman. The first, "American Time Capsule," is undoubtedly the shortest film version of our country's history ever, yet the essence is captured so well you become thoroughly acquainted with the subject.

The second was an equally well done short, "The World of '68," a fast, thorough look at that year.

All of the films had subsequent national TV network airings, and "An American Time Capsule" was blown-up from its original 16mm size to 35mm for commercial theatre showings. This has been done successfully often in the past—the "Endless Summer" by Bruce Brown, well-remembered as an outstanding film, and, more recently, "The Outdoorsman" by W. A. Bryant are two examples that immediately come to mind. The fine sharp resolution of films made with Bolex 16mm cameras produce enlargements of excellent quality for commercial use.

Additional network television showings brought the single-frame films into the view of just about anyone who had handled a movie camera or who might be thinking about handling one. Despite their minute size (maximum 10 minutes), inspiration from the capsule films ran rampant through the filming public, cutting through proficiency

*Dan McLaughlin with his Bolex 16mm camera.*



barriers with ease. At the same time, agencies producing commercials were calling the filmmakers for consultations and ideas were brewing in the minds of thoughtful teachers (from elementary school to college) and imaginative amateur moviemakers.

Readers of the Bolex Reporter will remember some of the stories of successful attempts to work with this original technique using the Bolex 155 Macrozoom Super 8 camera. Articles by Peter Zakroff (Vol. 19, No. 1) and Portia Meares (Vol. 19, No. 2) point up the adaptability of camera and technique, especially for student-made films.

Consistently, commercials using the technique are seen more frequently, there is more "how to" talk about applying it successfully in the audio-visual fields, and testimonials indicate the home movie maker has found a simple way to erase the stigma of boredom from his cherished films.

Just as there is a difference in the variations of the translation of the technique among filmmakers, there is a difference in how they film. Dan's art film, a simple idea (as most good ones seem to be), was filmed simply, according to his own description of the concept and production.

All he did, he says, was to set up his Bolex Rex-4 16mm camera on a tripod in his garage, adjust the lighting for the Ektachrome commercial (Stock #7255) film, change the subjects standing on the table in front of the camera and shoot the film whenever he had the chance. He makes it sound almost too easy by emphasizing that the greatest amount of work was in carting the suitable art books from the library. "I never thought they would be so heavy!" he jokes.

For lighting Dan used two tungsten baby juniors, 750 watts each. He recommends the Color-tran system which gives a light between tungsten and quartz. Another recommendation is to use a reflex camera, indispensable he says, and come in as tight as possible on the subject. With conceptual editing done beforehand (i.e. how much of what subject you will show), Dan says he was free to work with specific parts of the film. The reflex viewing allowed him to edit in the camera by carefully choosing each frame. "There were no technical problems at all with my Bolex," he reports, "so I could concentrate on making my film to the best of my ability."

Each of Dan's subjects was filmed at two frames, with the exception of the Mona Lisa, which was given the honor, since it is considered one of the world's greatest works of art, of remaining on the screen for 12 frames. Titling and editing were done at the same time, and Dan admits to practically no editing, which he credits mainly to his equipment's performance. The resolution from the 25mm Switar lens was so sharp, he attests, it enhanced the film considerably. Of course, image sharpness helps in any film, but Dan maintains it is much more critical in one made with the kinestasis technique. "Imagine," he says, "trying to concentrate for that short a time on an image that wasn't beautifully crisp. It could ruin the impact of the film. There's too much to be seen in too short spurts and perfect images help the viewer absorb the subject."

Chuck Braverman's films were produced with some variations of the technique. In a recent article, he describes using only still photographs for "An American Time Capsule" but interlacing live action with the stills for "The World of '68," the second kinestasis film he produced. He recommends filming no less than two frames a second and varying the rate (up to twelve) to attain a visual rhythm in the film to coincide with the music, perhaps, or to emphasize segments.

Another variation he used was to animate stills by panning or zooming in on part of a photograph. Some of the latest commercials use this and more sophisticated versions of the technique to a point of excess—but still quite effectively.

The amateur, too, reports being able to extend the technique this way, working mainly in Super 8 with equipment versatile and simple enough to experiment with. Chuck cites the Bolex 155 Macrozoom because it permits filming from infinity all the way down to only one inch from the lens—with no special attachments.

Continuous focusing of the Macrozoom lens means any

photographer can simply move in ultra-close on his subject, focus, and shoot. By using the handy Multitrix, a mounting device which comes with the camera and can be snapped on in a second, the moviemaker has the added assurance that his films will be rock-steady, because whatever is mounted in the Multitrix moves with the camera.

Single-frame photographs are not limited to subject matter in books only. Bolex Macrozoom cameras (all three: the 155, 160, and the new 280, described elsewhere in this issue) focus ultra-close up on any subject: slide transparencies, postcards, snapshots, matchbook covers, postage stamps, to name just a few. Sometimes what seems to be an insignificant detail may turn out to have unusual meaning in a single-frame film.

An ingenious modular tripod, the Bolex Minipod, seems to be the choice for table-top set-ups. It easily props the camera right over the subject and has great versatility. Professionals can take a cue from the amateur and experiment with an idea in Super 8 before investing in the costlier 16 or 35mm filming.

One of the points agreed on by all filmmakers and stressed by professionals is the careful selection and organization of material. Subject matter is the first choice, of course, but single-frame filming lends a new vitality to any subject. The sound, too, seems to suggest itself and can range from a drumbeat accompaniment, as in Chuck's first film, to the great classics. Like subjects, sound is found everywhere and choosing both can be spontaneous or at least a pleasant chore.

But planning the arrangement of subject and background is how to keep this simple way of filming simple. The advantages of using kinestasis are the ease with which it is produced and the effective results. Unorganized material, affirm the filmmakers, defeats the simplicity of the technique and could hinder effectiveness. Without planning, the film could turn into a nightmare of editing with such short stretches of film. Just start with the title and work through to the end, filmmakers advise, and there will be little editing in most cases.

The only other common denominator of the filmmakers investigated was the catalyst that inspired them—a simple technique, a capable camera, and an imaginative idea. Now it's anybody's game—and many are playing it.

To begin with, there's the home moviemaker who can make a most charming family film by using stills from the

past with live action from the present. Subjects are all around him for the choosing; the other necessary element is equipment with reflex viewing, zooming, and close-up capabilities like those found on all Bolex Super 8 cameras. Regardless of the hobby or interest—stamp or tropical fish collecting, flower growing, historic fact-gathering, world travels, local dramatics or politics—the equipment will let him film it all.

And once he has the equipment, his imagination is the only boundary. Take, for example, the high school teacher who found inspiration for a truly charming single-frame film in a pile of snapshots of her daughter. Organizing the pictures chronologically and weaving them together with single-frame views of slides, mementos, maps, along with simple titles and transitions, she created a documentary record of the evolution of a young lady. Beginning with a birth announcement and winding through some twenty years of family memorabilia, the woman succeeded in bringing a shoebox full of old black and white snapshots to life in a film of exceptional personality and character.

Educators now have a perfect way of revitalizing any subject or, perhaps, any class. Learning by doing is still one of the most effective ways of teaching and the simple process of making a film is as interesting to an elementary student as it is to a high school student. The research, planning and production of a film are reported to be most rewarding activities—akin to painless learning!

Making a film becomes a class project that has a meaningful end result. Whether it is a scientific investigation in chemistry, a simple nature study, or an original fantasy, enthusiasm by the students reportedly runs high. Not the least of reasons, of course, is that their efforts can be used repeatedly to teach others.

How simple or complicated the film is becomes a matter of choice largely influenced by the subject and the experience of the filmer. But as Dan emphasized in our interview, good equipment that can be used easily will allow concentration on filming resulting in better films. Or, in other words, you can make more complicated looking films easily using the right camera.

Good, simple-to-operate equipment can also give you the freedom to experiment. It's even possible that your idea and a Bolex will develop into a new way of filming, and in turn become a catalyst of inspiration for others.



# The Pro—Travelogues and Nature Films

## Our Bolex Has Wings

by Matilda Metcalf

*Editor's Note: Matilda Metcalf is the wife of nationally known film lecturer James Metcalf. Together, the Metcalfs form one of the most successful film lecturing teams in the business. Their experiences have carried them (and their Bolex cameras) to innumerable fascinating spots all over the Western hemisphere. The remarks that follow constitute a valuable insight into film lecturing careers as well as an affectionate reminiscence.*

It has been said by someone that, "... all one really needs is a Bolex, a tripod and film," and one may break into the lecture field, "... which pays handsomely, offers unlimited travel, requires little investment, has short working hours, and is artistically as well as financially rewarding."

We have been in the live travelogue lecture business for over 20 years, and while we find our work artistically rewarding inasmuch as we bring pleasure to millions of people each season, ... somewhere we must have taken a wrong turn, or missed the boat! We find it necessary to invest a great deal of money and devote many long, hard hours of work to produce a comprehensive motion picture on the geographical location we select to present to our audiences.

We also find ourselves without rich relatives, inheritance, or outside source of income and have started from what our daughter calls the "bottom bottom" and have struggled slowly toward the top of the platform lecture heap.

While it is true that basically one needs "a Bolex, a tripod and film," we would go a step farther and say that it is important for the travelogue lecturer to have at least two Bolexes. And three would be better yet; for to go into the far-distant field unprepared and without extra cameras, lenses and exposure meters would be sheer folly. A single camera and suitable lenses might suffice for the amateur filmer, but the professional must have back-up equipment in case of accident. While filming, someone may knock over the tripod, or have an ancient temple wall collapse beneath one's feet, as happened to my husband while working in Yucatan, all of which could spell "finis" to a filming trip unless the cameraman anticipates such possibilities. And here is where an investment becomes necessary.

It is true that film is another basic necessity and one can get by on a minimum of 6,500 or 7,000 feet for the average travelogue, but it is well to carry an over-supply, for in the field it will prove to be your cheapest commodity. Taking as much as 15,000 or 20,000 feet on a foreign trip will turn out to be less expensive in the long run than returning home without required scenes and perhaps having to make a second trip. Also, duplicate footage is always saleable for commercial productions, or to buyers of stock footage.

The last item mentioned at the beginning of this article, the tripod, is indeed vital for any cameraman: still or motion picture, amateur or professional. We much prefer the new Bolex professional tripod fitted with a ball joint, which makes for velvet-smooth pans and quick leveling of the camera. Of aluminum construction, this tripod is ideal for weight-watchers who carry their own equipment, or must pay air freight charges to foreign locations.

In our 20 years in the travelogue lecture field, we have seen only scant improvement in wage scales, no lessening of travel mileage driven between dates, and little improvement of relations and understanding of problems affecting speaker and sponsor alike. On the other hand, equipment costs, film

processing, travel expenses, motel and food costs are steadily gaining on the travelogue lecturer's net income. Soon travel-lecture buffs and sponsors alike will have to face the fact that this particular field, encompassing the lowest paid of all personal appearance entertainers, must soon be adequately compensated or it will lose many artists to less strenuous and more lucrative professions.

The life of the film lecturer is a rugged one requiring above all else excellent health. In our own particular case, approximately 200 lectures a year are presented and they are spread over North America from Ottawa, Canada to Florida; and from Maine to California. The lecturer is expected to travel great distances, by whatever means necessary, to reach each date; then lecture for 2 hours, after which he is often asked out to social affairs that keep him up until the wee hours. The next morning (or even yet the same night) he leaves for his next appearance, where he is expected to arrive fresh, charming, and ready to give a polished performance and go through the same routine of the previous evening, which often adds up to an eighteen or nineteen-hour day.

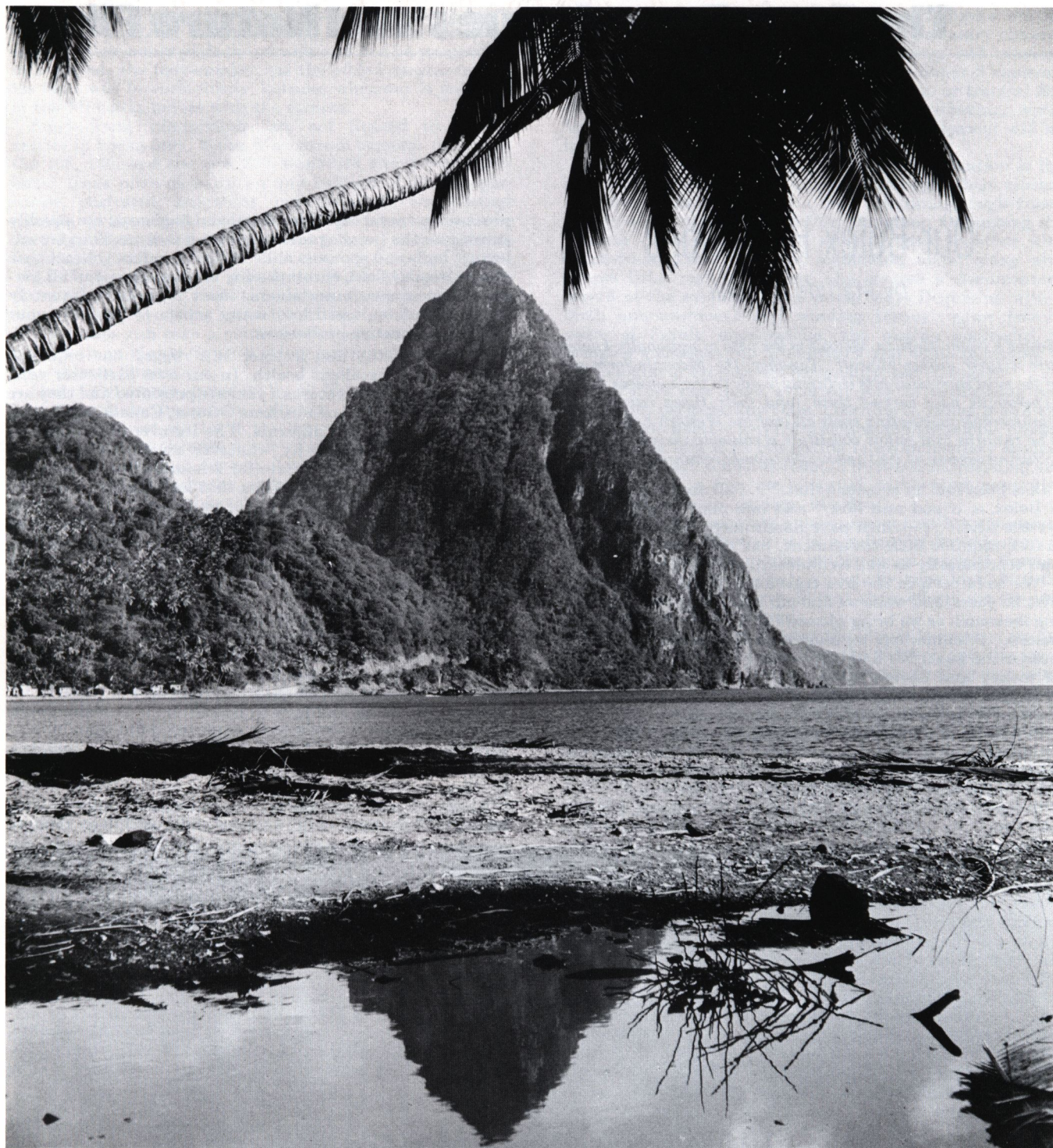
Other qualities it is absolutely necessary for a lecturer to have are as follows. He must:

- a. Be an excellent public speaker.
- b. Be a fine photo technician.
- c. Be a diplomat no less than the Secretary of State.
- d. Love his work, and love to travel.
- e. Like people.
- f. Have an understanding mate. (Preferably one who is a photographer!)
- g. Have holes in his head!

About 10 years ago getting around the country became such a problem time-wise, expense and health-wise that we gave very serious thought to what might be done to ease our situation. We were spending great amounts of money with the airlines for commercial fares involving long jumps on our tours. The same held true for our filming trips. Since we have always felt that there is a great deal of material here in the Western hemisphere, we have specialized in filming locations in South America, Central America, the West Indies and North America. Consequently Surinam, Venezuela, Columbia, the Lesser Antilles, Puerto Rico, the Bahamas, Guatemala, Yucatan, British Honduras, Nova Scotia, the Mississippi River, our National Parks, and now Washington, D.C. have been subjects of our research and film recording. They will form an integral part of our past and future filming projects.

As we criss-crossed the country driving to dates, Jim began watching small airplanes flying overhead and often remarked that he'd certainly like to learn to fly some day. He had been up once or twice doing filming for a few air shots for our "Mississippi" and "Nova Scotia" films. So it was with a great air of mystery that I drove him to a nearby airport Christmas eve afternoon 1960, where I said, "Merry Christmas," and presented him with 10 flying lessons as a Christmas present. He took his first instruction on the spot, and when he again placed a foot on solid ground I could see that I had just borne a pilot!

This move was one of the best things that ever happened to us. After two months we invested in a used Cessna 172 airplane and by April of 1961 Jim's instructor was letting him fly to lecture dates not too far from home. Each month saw greater flexibility in his reaching dates and by October, 1962 he flew his lecture tour through the West, to California, and return. After more than five years and 2,300 hours of flying the U.S., Canada, the West Indies, Mexico and the Bahamas, Jim became "Instrument Rated."



*Piton — St. Lucia*

This ability to fly to both lecture dates and filming locations is a terrific asset in time and health. Jim can be home more hours, get more rest and accomplish additional work. And since there were more people killed in bathtub accidents last year than there were in all airplane accidents in the U.S.A., I am personally relieved of the worry of his driving on crowded highways.

We do not say that the airplane as such is cheaper than keeping up or driving a car, but since we do not fly for pleasure, our plane expenses are totally tax deductible. From another consideration, all of our time is totally absorbed by filming, research, editing, scripting, writing and business management, leaving us little time for a change of pace, or hobbies. Since we both enjoy flying, navigation, and the thrill of seeing this great world from a few thousand feet

up, we let our flying business and filming trips substitute as a hobby. Thus we get twofold use of our aircraft.

From the beginning the purchase of an aircraft offered a completely new format for the production of motion picture films. Before flying days, our film of travel down the Mississippi River by houseboat had been highly popular because there seems to be a bit of Tom Sawyer and Huck Finn tucked away in the soul of every man, woman or child. We found that viewers by the dozens, from ages 6 to 85, wrote to us or personally came back stage to tell us that they too had always dreamed of floating down Ol' Man River. It seems that Americans love to be on the move!

We found that although the national statistics show the great majority of the American public has never flown, there still are a lot of wistful, would-be Wilbur and Orville Wrights



*Isla Margarita, Venezuela*

coming to see travelogue lecturers! They love the beautiful scenes they see from the air, and they can sit back and pretend for a little while that they too are flying. For the most part even sponsors were so delighted with a lecturer with wings that we often ended a visit to this or that city by taking the sponsor, his children, or his wife for an air tour . . . sometimes their very first, which we enjoyed the privilege of giving.

On very rare occasions a sponsor may be hesitant that a "flying film" may prove monotonous to a non-flying audience. But he or she has only to see our "National Parks," our "Puerto Rico," or our "Golden Bahamas" to realize such is not the case.

Our films are not strictly travelogues, but rather an interesting armchair travel-documentary to present the people

of our chosen location in their interesting habitat. The fact that we arrive at a filming location via our own personal wings, instead of a commercial airliner, adds adventure and zest to the audience's trip!

Since we have made commercial films for the Cessna Aircraft Company of Wichita, Kansas, they have been more than interested in our flying film successes. Each time we have acquired a new plane, careful attention has been given to details of color of the aircraft, location of filming, and ease of working from the plane. All planes we have owned are high wing to afford better camera visibility. Each plane has had adjustments made to allow the opening of the left side window in flight, and the lift of the air flow under the wing holds the window up. This allows the pilot-photographer free use of hands and a large opening to shoot through.

When we film I usually take over the flying and maneuvering chores while Jim handles the cameras. There is considerable draft, in our otherwise snug and heated plane, when the window is open, but it is necessary to put up with for the sake of good films. We never film through the windscreen, or windshield (except on rare occasions to illustrate approaching an airport) because of reflection and distortion. While filming out the left window is highly successful, it has its limitations on occasion.



*James W. and Matilda Metcalf, husband and wife production team.*

To obtain a more unrestricted viewpoint, a Cessna distributor designed and constructed an inexpensive camera mount for us which can be installed on the right strut, where it joins the wing. A Bolex Rex fitted with a 10mm lens and a Unimotor is installed in the mount and the necessary fine control wires are then temporarily fastened with plastic tape every 8 inches along the trailing edge of the strut, where they are out of the wind. The control wires lead under the right cabin door and into a switch, which can be triggered when the aerial scene is wanted.

By shooting at high speeds from our special wing camera mount, we have obtained some very unusual scenes. One of special beauty was shot from an altitude of about 10 feet, sweeping along the beaches of Stocking Island, Exuma, in the Bahamas. The pilot on that occasion was an experienced commercial pilot, Captain John Lee of Bahama Airways, to whom we are greatly indebted for much flying assistance while flying in the islands.

Probably the two major problems in aerial filming are turbulence and visibility. It is useless to waste time and film on a windy day. No doubt the best time during any day for filming is 9 or 10 a.m., before the heat of the sun creates bumpy updrafts. If the atmosphere is hazy, devote your time to other projects and wait for more perfect weather . . . unless of course you are making a film illustrating smog conditions!

There are very definite rules and regulations under which we, or anyone can do aerial flying. Low flying or unusual maneuvering in the United States is out, except by special permission from the FAA or local control in nearby airports. Plane to plane camera work is interesting and exciting, but

requires skilled pilots at the controls as well as constant plane to plane radio contact. Such work should never be attempted at low altitudes or over congested areas. No photographing or low altitude flying of any kind can be done over our National Parks (except by advance special permission) and *never* for any reason over the White House in Washington, D.C.

We also do a great deal of underwater filming and for this use the Bolex underwater case, a beautifully engineered piece of equipment which allows a diver to photograph at depths down to 330 feet. Since we fly ourselves to filming locations, the weight of our equipment must be considered, so all underwater filming is done with existing daylight to eliminate having to tote underwater lighting units. Our audiences seem to be most interested in the beautiful fishes and plant life found in the warm seas of our Western hemisphere. They can be found in abundance in depths of one to twenty feet, and since natural light becomes deep blue-green in color as you go deeper, our average underwater filming depth is confined to fairly shallow water. Thus on one hand we eliminate deep dives and time for decompression, and on the other save carrying about heavy lighting equipment, while still giving our audiences fascinating glimpses of the underwater world.

Several summers ago we added a new dimension to our work. Before leaving for a summer of filming in the Bahama islands, we purchased a new Bolex Vario Switar automatic electric eye zoom lens. The experience recalled the remark by the woman who had just obtained her first automatic washing machine, "I never knew what I'd been missing until I had one!" And so it was with Jim! While he has always had, and still has, a full compliment of Switar lenses for his Bolex cameras, he just hadn't lived until he received his Vario Switar. For the professional it is a wonderful time saver in everything but underwater work, because, of course, it will not fit into the case.

For 15 years we have used Paillard and Bolex products, and it has seemed that with each new acquisition there could never be any finer. But each new year brings more improvements and more refinements, helping the professional travel-documentary producer to do a better job of bringing to his audiences an all-encompassing understanding of the subject.

So it would seem that it takes many things to become a successful travel-lecture photographer. Money, hard work, long hours, disappointments, successes, technical knowledge, artistry, patience, a good agent, good public relations and a generous sprinkling of luck are some of the many other things required.

"A Bolex, film, and a tripod" are but a beginning!

## Winter and Desert Wildlife Filming

*by Richard and Rochelle Wright*

Two half-hour films in six weeks. This was our objective as we started on our 7,000 mile journey. The first film was to be on Bighorn Sheep, their behavior and their ecology, and would be used as an educational film, with certain segments duplicated for 'items' on television. The second was entitled "The Bajada" and would tell the story of that particular area of the southwestern desert. We were shooting it for a C.B.C. Television program and later would rework it into a half-hour educational film with sound track.

Our previous films had consisted of shorts, which we showed and lectured on at various club meetings. In addition, we had produced three half-hour television programs and covered a couple of assignments. All with a Bolex 16mm, but a non-reflex model. During this time I had been employed as a firefighter, but now having turned professional we decided, with mixed emotions, to trade in our old, faithful, reliable Bolex for a Rex-5 with a Vario Switar OE 18-86mm zoom. To this we added an adapter, so that we could use our longer

35mm still camera lenses for extreme telephotos, and a new tripod with a fluid head. We kept our 150mm Yvar for a medium telephoto. Our choice when purchasing this new equipment was made in favor of Bolex for two reasons. Number one, any camera even comparable was twice the cost; number two, our previous experience with Bolex had been excellent. A new model and lens could surely only improve our opinion. By the end of our project we would know for sure, as we were to be filming in below zero weather and desert heats of up to 90 degrees.

The Bighorns came first, so accompanied by wildlife biologist James Morgan, who was working with us as adviser on this particular film, we headed into the Idaho primitive area, a remote region accessible only by bush-plane. This particular day was one of those beautiful days with the sun shining brightly, perfect for color film. But, as the day progressed, clouds began obscuring the sun for brief periods, often in the middle of a film sequence. With anything other than the Vario Switar, we would have been troubled with constantly changing apertures, but here it was no problem. The resulting film shows hardly a trace of the corrections in light levels.

One sequence we had planned called for an interior night shot of Jim discussing his problems with a cattleman. We wanted the camera to be as unobtrusive as possible, and did not have room to bring a lot of lighting equipment, so settled on switching from KII film to EFB 7242 with an ASA of 125 for tungsten and using two blue 250 watt photofloods. We decided not to use an 85 filter as there were additional lights in the room and we needed the higher ASA rating of 125 instead of 80. With the 2.5 aperture on the OE we had sufficient light for the filming.

From Idaho we swung over to Grand Teton Park for some additional winter footage. The temperature hovered around zero to 20 degrees all the time we were there and gave the camera a good test for cold weather. On one typical day we were filming the Teton Elk herd with the temperature just below 20 degrees and a stiff wind blowing. Before remembering to keep them close to our bodies, we had both reflex mirrors on our still cameras freeze up, but no problems with our Bolex; and, although changing film was cold on the hands and a bit awkward, it was made much easier with the automatic threading.

In gathering some film on Moose, we discovered that an effective way to simulate moonlight on snow is to position your subject or camera so that the sun is causing good shadow detail and then insert a neutral-density filter into the filter slot provided, but not compensate for it. This results in an underexposing of 2 f stops and is quite effective when the subject is on snow and therefore somewhat silhouetted.

In Teton park it was relatively easy to stalk within range of the 86mm lens, and it was here that we found the zoom most convenient. Often we did not have time to choose, say, a 50mm or 75mm lens, but with the OE we could quickly choose the exact framing we wanted, often while still filming. If the animal moved closer, we pulled back; if it walked away, we zoomed in. By using the lens for what it was designed, variable focal length lens filming, we were able to keep the subject the same size in the frame at all times.

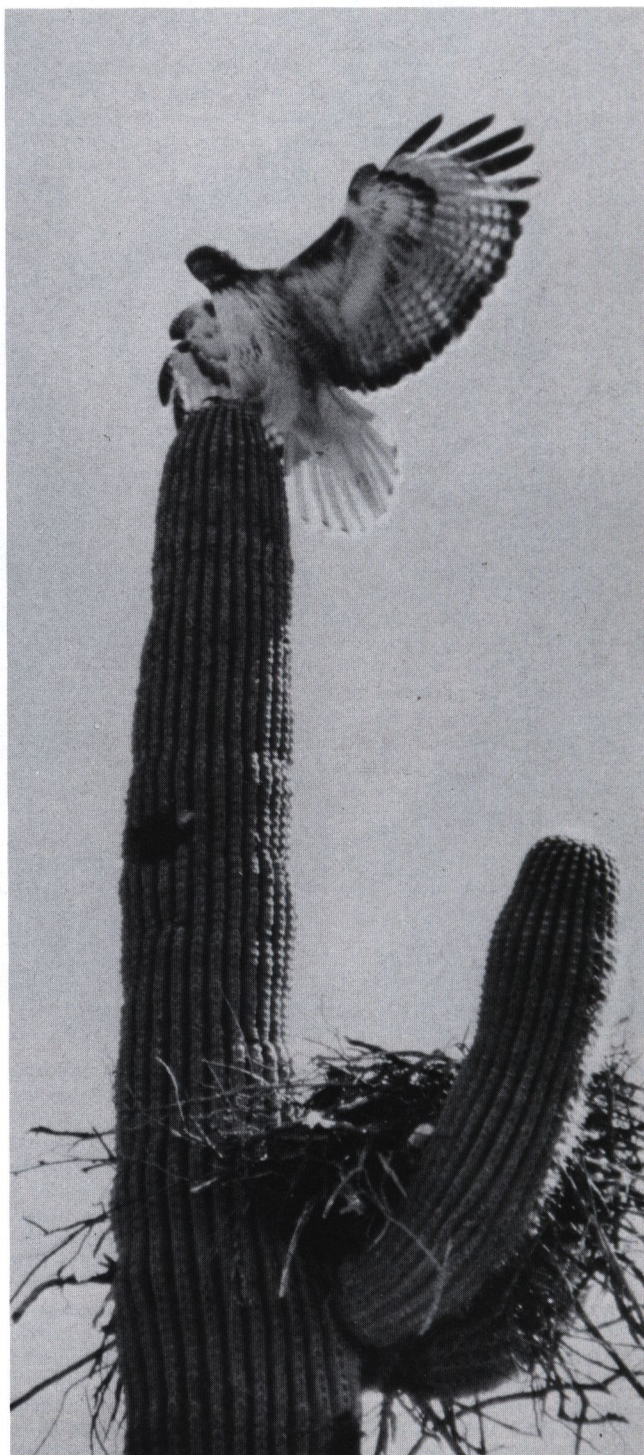
But now it was time to head south, out of the cold and snow, into the spring warmth of the desert. We awoke on our third day of travelling south to four inches of snow, and that night made camp in an area that would be 85 degrees by noon the following day.

Unlike the Bighorn film, which we were pretty well shooting from our head as we went, we had a fairly explicit script of what we wanted to shoot here in the desert. It included shots of the indigenous birds and animals, the plants, geology and history and whatever material was needed to tie the story together.

On previous visits we had learned to believe our lightmeter when it read what we assumed was too high for the existing light, and to wait for the sun to cast just the right light. Early morning and evening were the times we chose for most scenic shots, leaving the noon hours, with the high, direct sun angles, for closeup work around camp in what shade we could find.

With patience and occasional use of our 300mm still camera lens, adapted to a C mount, we were able to expose footage on most of the animals we desired. The only ones we missed were those whose nocturnal habits kept them invisible except to our car headlights. Two of these animals will probably serve to illustrate best some of the difficult, yet interesting, problems we faced.

Because it was early March, we were reasonably sure, and the Park Ranger confirmed, that rattlesnakes would not yet be out. It was still a little chilly for cold-blooded types. However, they would be an important part of the animal life we were portraying, so we were both surprised and pleased to find one stretched across one of the primitive backroads. In approaching I assumed by its position it was dead. Fortunately, in passing I drove around it and in doing so Rochelle saw it move. We quickly jumped out of our camper, grabbed the camera, which was already mounted on the tripod, and





began shooting. As we moved, so did the snake, heading across the road and then parallel to it, about 10 feet from the camera. With the camera still running, I zoomed in and focused down until only his eyes were sharp. He travelled parallel for about 12 feet and then coiled up under a creosote bush, hissing, darting his forked tongue and rattling at us. I zoomed a little tighter, refocused and continued shooting. Had I needed to take an exposure reading or estimate the distance while using a non-reflex camera, we would have lost the resulting exciting footage.

In the second instance we were trying to show the habits of the Yuma Antelope Squirrel, a cute little ground squirrel who frequents the softer soil regions. We had sprinkled and buried a little oatmeal on the ground, in a position where I could get a nice framing in a prickly pear cactus and yet still follow-focus a few feet either way. The squirrel moved from light to dark, back and forth, but still I could keep up with

him. During this shooting I noticed a slight breeze start up while I was rewinding and immediately started the camera. Just as I did a dust-devil, or whirlwind, hit the small area in which we were working. The film shows this wind hitting the squirrel, his cowering, the sand flying and his scampering off. A chance shot, made more effective the next day when we were able to shoot a medium shot of a dust-devil racing across the desert. And although the exterior of the camera body needed a good cleaning the interior was clean and dust-free.

Our film, "The Bajada," was completed in 10 days, a saving on our estimated time of 14 days, which we put down mainly to the ease of operation with the new Bolex combination of the Rex-5 and the Vario Switar OE. Do I think there is room for improvement? Definitely! Now I want to add the Bolex motor and 400 foot magazine so that we will be sure to capture every single movement or action.

## The Making of "Easy Reader"

by Chris Lydle

A long-haired young man in a fringed buckskin jacket gets into his car. To the roar of a jet taking off, he drives down a residential street. Screen-filling closeups show his hand tuning the radio to a news program. As his car pulls past the camera position, the camera zooms in to the title: "Easy Reader: A Day at the Livingston Library".

From the quality of the image, it could be any thousand-dollar-a-minute 16mm production. It's not. "Easy Reader" is the work of a few young filmmakers with little experience and next to no budget.

"Make a fast-paced sound movie, show everything that goes on at a modern library, and bring it in on a shoestring." That's the challenge the Livingston, New Jersey library director, Ruth Rockwood, threw at junior library aide, Roger Mocenigo, last year. Hundreds of feet of film and months later, "Easy Reader" is drawing reviews such as "a New Wave movie, funny and dramatic" (*Newark Evening News*) and "fast-moving and interesting" (*West Essex Tribune*).

Most of the credit goes to Roger and production manager Carol Zbuska, but the team of Bolex 155 Macrozoom camera and Bolex SM-8 sound projector let the young filmmakers translate their concepts to acetate.

Mrs. Rockwood had seen films about libraries before, but none showed how exciting a place a library—especially a public library—could be. The Board of Trustees gave her the go-ahead on the film as long as it didn't "cost too much or interfere with the operation of the library". One more proviso—the production equipment, where possible, should be rented in case the project didn't pan out. Minimal disruption, minimal cost—parameters calling for a small format, top-quality camera such as the Bolex 155 Macrozoom. The Bolex's facility for close-ups, to within an inch, effectively combats the limited picture area of Super 8. Automatic exposure control and electric drive free the cameraman from trivia. "Easy Reader" has a twenty-five second continuous tracking shot, in and out of shadow. Reflex viewing and focusing made possible some of the tightly composed shots with focus-dissolves that add so much to the film.

The Friends of the Livingston Library donated a Bolex SM-8 magnetic sound projector to the library. To complete the outfit, a Bolex splicer, Bolex Minipod, and assorted tape recorders and lights were bought or borrowed.

The film was shot entirely out of sequence: first filmed were scenes of the Youth Council programs, followed by a children's story hour. The children's story hour is imaginative and effective: it begins with an establishing shot of slicker-clad kids walking to the library. Inside, as Carol threads and starts up a 16mm projector, the room is darkened and the camera pulls in to the projection lens. Then the Bolex Multitrix is called into play. Roger filmed action through a black cut-out, giving excellent representation of the film program. Moving in within a few inches of storybook pages let Roger follow the adventures of Jeremiah the Octopus from page to page, mixing the effect of storybook and movie in progress. Judicious cutting from page to page, mixed with live action in a fish bowl, all cut to the tune of the Beatles' "In an Octopus' Garden," make this one of the warmest scenes in the movie.

The next sequence of shots included scenes from the paper-

back collection, adult reading room, and main desk procedure, scenes which in the final cut appeared at the very beginning of the film. Filming ran from May 5 through April 7.

Almost all indoor scenes were filmed on Sundays so that lights and equipment would not disrupt library business. Talent was unpaid and appeared voluntarily, so by the end of the film Roger had to beg people to show up. That was no surprise, of course—they'd filmed the big crowd scenes, with their "casts of tens," early in the schedule. For the sake of continuity, actors appearing in scenes filmed several days apart would take careful note of their clothes. There were few slip-ups here, but one character managed to double the length of his sideburns between shots!

Like any part-time producers, Roger and Carol encountered snags—such as filming in bits and pieces when they weren't needed elsewhere. Chief among the physical problems was that of lighting. Kodachrome II, the standard for Super 8, is a slow film—but virtually grainless. Kodak's SO-105, an ASA 125 cartridge of the Ektachrome EF popular with newsmen, gives more than three times the speed—at the cost of high granularity. Indoor scenes were filmed using as many as ten floods, and even though perfect exposure often seemed impossible, very little footage was badly underexposed. One more thing about the SO-105 film—developing normally takes a few days. When you've just finished a major scene in questionable light, and you have to wait three days to know if it took—your nerves can go overnight!

The Bolex made easy shots that could take a pro team hours to prepare. Macro shots like a key turning in a Yale lock. Shots in the microfilm room, where dates on microfilm files are rapidly intercut with news photos of the day—be the photographer Matthew Brady or Robert Capa. Focus dissolves, from a tight shot of library assistant Nancy Monk's face to the approaching figure of Mark Walker. Follow-focus shots, rapid pans, and camera inversions—all became easier with the Bolex 155's electric eye, electric drive, and unlimited focus range. With the aid of a Bolex Minipod, the camera was held steady for sudden appearances and disappearances caused by stopping the camera.

Visual effects can hold an audience just so long. "Easy Reader's" sound track proved just as important. Roger and



John Mocenigo and Carol Zbuska editing "Easy Reader"

Carol chose the Bolex SM-8 sound projector primarily because of the convenience of recording and mixing sound-on-sound. They even shot lip-synchronized scenes, one of the biggest challenges to a moviemaker.

Currently there are no professional quality components for shooting synchronous sound in any size smaller than

16mm, so John Mocenigo had to record the sound wild (without sync marks or track) and post-sync it. That meant hours of timing and cueing. On playback, the film ran slower than the tape—so the recorder was stopped between sentences to let the picture catch up. Since background noise level also dropped to zero between sentences, “mumbling” was dubbed in to cover the gap. Children’s voices in the background, fragmentary conversations overheard (“I think I’ve lost my library card.” . . . “Did you look in your dresser drawer, under the white socks?”), and piano playing during the Youth Council play rehearsal were all added to cover gaps in synchronization. The SM-8, with its multiple sound inputs, let John add sounds from any source—live narration, records, even an occasional television program. The mysterious noises emanating from a book checkout machine came from an episode of “Star Trek!” On one occasion, the knock on a door was replaced by the chime of a gong.

Musical gags abound. The portentous, pretentious opening of “2001—A Space Odyssey” is echoed with a sunrise to the opening chords of “Also Sprach Zarathustra” to set the tongue-in-cheek mood of the film. Fragments of a Beatles’ album make up a news broadcast, others convey the frenetic pace of the day. Some are subtle, some are blatant. But all are paced to the film.

And the film is cut to the music. And on balance, the film is good—an example of a low budget, tell-a-story movie that’s as much fun to watch as it was to make.

## Filming Childbirth for Police Training

by Walter T. Leamy, Jr.

When we speak of law enforcement photography, immediately we think of photographing crime scenes and evidence, and taking criminal mug pictures. In the past few years, the scope of police photography has broadened to the point where not only are these types of crime photography used, but police authorities are realizing that other types of visual aids are needed for their personnel, especially a public relations program to educate the public.

At a Police First Aid Seminar conducted by the obstetrical staff of Memorial General Hospital in Union, New Jersey, I was commissioned to do a 16mm motion picture of a live childbirth. Two prints would be made, one for the hospital staff and one for the Police Department to be used as a training film on emergency childbirth procedures.

First a meeting was set up with the hospital to work out all problems concerning the film. The legal staff was con-

tacted for the proper releases to be signed by an expectant mother. The selection of a subject was quite important, because when the delivery of the baby was to be filmed, it was important that no difficulties occur. Of course, there wasn’t any guarantee that difficulties would not occur, but the selection of a patient by the attending physician was entirely his professional decision.

I decided to use a two-camera system. The main camera would be a Bolex H-16 Rex-5 with an f/2.5 Vario Switar EE lens with automatic exposure control. A four hundred foot film magazine was used along with an MST motor and power pack so there would be no interruption during the actual birth. The second camera, a Bolex H-16 Rex-3 with Pan Cinor f/2 zoom lens, was used to photograph the saddle block, or caudal treatment, in preparation for the birth. This camera had a 100 foot capacity, sufficient for this segment of the film.

The film selected was 16mm Ektachrome 7242 because of its speed (125 ASA Tungsten). It was to be sound striped at a later date. The main light was a 3200 K Acme quartz 1000 watt to be set at the 400 foot magazine camera. The second light was a 600 watt Acme quartz set at 90 degrees from the main light to shoot the caudal block. All lights had explosive proof shields to protect the patient in the delivery room.

The sterilization problem was solved by keeping the cameras and lights behind a given line in the delivery room, therefore keeping contamination at a complete minimum. Trying to sterilize all the equipment was out of the question. Both cameras were kept at least 10 feet from the patient at all times. The versatility of both zoom lenses, with all of their variable focal lengths, proved invaluable.

It should be noted that once an actual birth has begun, the filming sequence should not be interrupted in order that none of the procedure be left out. This is where the 400 foot magazine and MST motor are extremely advantageous.

This film and others like it, such as training films, public relations films, and safety films, are now being taken and shown by thousands of police and law enforcement agencies throughout the country in the hope that the films will give people a better understanding of what authorities are trying to do to improve their communities and to promote a better relationship between citizens and law enforcement agencies.

*Editor’s Note: The author is a detective with the Union, New Jersey, Police Department. He has been actively engaged in law enforcement photography for nearly 20 years and has made numerous films relating to safety and police procedure.*

*Among his movie productions are films on narcotics surveillance (in support of an actual police raid); automobile safety (including on-the-spot filming of accidents and accident victims); home security and burglary prevention; and a variety of training films used for showings with civic associations and driver education classes.*

*Further information regarding law enforcement moviemaking can be obtained from the author c/o the Union, New Jersey, Police Department.*



*The happy scene concluding Detective Leamy’s 16mm production, “Filming Childbirth for Police Training”.*

## The Bolex in Ice—Cube Alley

by Kip Taylor

It could be the final question on a quiz program: Name a winter sport that uses a forty-four pound wood and metal sled that was in existence before the wheel, is steered only by reins, body movement and prayer, and often exceeds sixty miles per hour. The answer is a four-letter word: luge.

Up until the late 1960's, only a handful of Americans had even heard of it. But a dream came true for those who had. Lake Placid, the winter sports capital of the world, built a luge run. Although extremely popular in Europe, this unique sport encountered tough sledding at its conception in the Northeast. Overshadowed by the glamorous state-owned bobsled run a few miles down the road, and getting little front-page publicity in the land of skiing, skating, and snowmobiles, luge drew few spectators. Many stayed away, thinking that it was nothing more than a bunch of overgrown kids sliding down a hill on sleds.

Thus, with little fanfare, the North American Luge Championships were held that first year. Who cared? The crowds were flocking to the bobsled races. My brother Ted and I were also aimed in that direction, when fate held up its hand. A hitchhiker, carrying a strange-looking sled, flagged us down and begged a ride to the luge run. Out of curiosity, we accepted the sled-bearing passenger's invitation to watch the races. Noting Ted's Super 8 camera, the sled-bearer suggested we bring it along, as luge sometimes offers excitement.

After our arrival at the run, we followed our new-found friend's advice and headed down to the tricky and dangerous finish curve. Crouched in the snow, loading the camera, we didn't see or hear the first sled until it was nearly upon us. Leaping back, we watched transfixed as sled and its rider suddenly lost control, veered sharply, climbed a nearly vertical wall, became airborne, and finally crashed headlong into a pile of ice blocks strewn carelessly on the outer edge of the run. A weight hung at the end of my arm. It was the camera!

Regaining our senses, we instinctively ran toward the injured figure lying in the snow. Flecks of blood mingled with the frozen white. A wrist cast on the victim, probably the proof of a previous mishap, hung in tatters. Expecting the worst, I ripped my coat off to keep the man warm until professional help arrived. I needn't have bothered. Suddenly the rider sat upright, erased a trail of blood flowing from his nose with a flick of his sleeve, and said, as if commenting on the weather, "Doggone that curve, I always come into it too low!"

For the remainder of the day, sharing the camera, Ted and I covered the run like vultures. The first sled and its battered rider only set a precedent for more to come. Few made it down the twisting and turning icy chute unscathed. If it was a cameraman's delight, it was also a doctor's dilemma. Injuries were painfully common. Knee pads, elbow bands, and crash helmets didn't prevent wrenched backs, torn ligaments, or deep ice cuts. Ted and I had our hands full. While one of us filmed, the other served as stretcher-bearer. A luge racer is supposed to pit his speed and control against the clock. In Lake Placid, it was evident that any luger who made it down the course and was able to tell about it was acknowledged a champion in the eyes and hearts of the bewildered spectators.

That was the last race of the season. On the way home, Ted and I verbally kicked ourselves for not discovering luge sooner. If my brother was impressed with the sport, I was hooked! Those brave and foolish lugers, laying first on a gnat-sized sled, and pitting their souls against hard ice and centrifugal force, were a breed all their own. The motto of a dedicated luger seemed to be: limp back up the hill and try again. The bobrun would see me no more!

During the next few months, I did some research on the sport. Historians tell us that the luge sled has been used by man for over 15,000 years, placing its origin within the Neolithic Period. The Romans modified its design and are credited with introducing it to the Alpine regions of Europe. It was used for centuries as a delivery vehicle, bringing milk and cheese down from the high country. Then, during the late nineteenth century, it was transformed to a sporting sled. In 1885 the first luge races were held in St. Moritz. Still outclassed, however, by its big brother the bobsled, it wasn't until 1964 that luge finally became an Olympic event.

The year following our introduction to the sport, Lake Placid was selected to host the Kennedy Memorial International Winter Games. Lo and behold, luge was included on the program.

Preparations for the games were hectic. The old luge course, called a fiasco by many, was used only as a base for the new run. With help from the Europeans and the U.S. Air Force, the new course was designed and constructed. Nearly half a mile long, it apparently met all the qualifications a luge run must meet. But it was deceiving! Starting from the top, graceful curves and gentle grades prevailed, and even as the course emerged onto a long sweeping straightaway, little hint of what lay ahead was given. Then it happened! The designer must have had a marital spat at that point. The run suddenly lost its temper. Dropping abruptly, the icy chute hurtled its way toward the hungry jaws of "hell-hole".

Every race course in the world, be its sports car, bicycle, or luge, has a hell-hole. It is the trouble spot: the nemesis that separates men from boys. At Lake Placid, it bordered on the impossible. If the designer had had a marital spat on the upper course, his divorce was decreed when he slashed hell-hole into the frozen hillside. The serpentine trench, with reverse English, tore through a series of short switchbacks that would stump a geometry professor. Unraveling itself, the run streaked toward the finish curve and finally the finish line. The course was ready! Where were the lugers?

They arrived on little cat feet. From Alaska and Austria, from Minnesota and Montreal, from Poland and Italy they came. Some had their fares paid and came by air. Others arrived by crowded car. More than a few, lugging their lugers, hitchhiked to meet their blind date with destiny.

My dreams to capture the flavor and excitement of the impending races suddenly took a tumble. It was announced that ABC's Wide World of Sports had bought up the exclusive film rights on the luge events. Any thoughts of cornering the market on fantastic sports footage went out the window. Down-hearted, but not defeated, I decided to film the races for my own collection. I'm a wildlife cinematographer by profession, so the luge coverage would be my busman's holiday.

The day before the races, like a bearded Andy Granatelli, I slowly walked the luge course, making notes and planning camera angles. A final decision on filming equipment was made. Weather, speed, and mobility required a lightweight, dependable system. My winterized Bolex Rex-5, the Vario



Switar 86 OE lens, and a sturdy tripod filled the bill.

Because of ABC's purchase of the film rights, I decided against a print film and went with Kodachrome II. Fearful of bright sky, snow, and ice glare, I planned to pre-set the electric eye to register ASA 32 instead of the customary rating of 25. I use this trick quite often in wildlife shooting, especially when filming white wildflowers or over water. Thus, with warm clothing laid out, camera gear checked, and excitement in my soul, I was ready.

The morning of the races dawned cold and bright. The nineteen below zero temperature apparently kept the anticipated large crowd of spectators away. If the lugers themselves minded, they certainly didn't show it. Clad in colorful jump suits, helmets, and lugging shoes, they trudged upward toward the starting gate, their skimpy-looking sleds on their shoulders.

Racers already at the top, after adjusting knee and elbow pads for the umpteenth time, hopped up and down to combat the cold air and their apprehensions. Upon arrival, under the glares and stares of the ABC film crew, I immediately began shooting filler footage: Shoes being tied, goggles being cleaned, sled runners being polished. Knowing that most of the lugers were keyed up, I kept on the outskirts of the starting area, shooting from a distance with the tripod. The Vario Switar, extended to full telephoto, bridged the gap and recorded some priceless close-ups.

By this time, most of the competitors in the men's single division had reached the top and were congregated in small groups or stood alone. Even in a crowd, most lugers are alone. Some of the best sliders in the world were clustered in that hilltop clearing on that cold morning. Off to my right were the two Austrians, Josef Feistmantl and Manfred Schmid. Conferring quietly in their native tongue, one or both occasionally gestured toward the icy run. Over at the starting plateau, Robin Partch, considered by many to be the best American luger, helped one of the timers pour a vial of red dye across the track to mark the starting line. Nearby, Larry Arbathnot of Montreal nervously brushed imaginary specks of snow off his upturned runners. To the left, Ken Derosier patiently spelled and respelled his name as an official wrote it down, erased it, and wrote it again. Ken's appearance as a luger was slightly marred by the fact that he wore cowboy boots instead of the regulation footnear. You can take a boy out of Montana, but . . .

The last of the competitors straggled up the worn path and joined the assemblage. One of them, Terry O'Brien, Robin's partner in the two-man competition, waved a silent greeting my way. Terry was with the Air Force team.

Using up the remaining film, I headed for a shaded spot to reload the camera. This can be tricky with chilled fingers, but if the film is clipped on an angle as directed, seldom does a film change take over half a minute. I set the camera for slow motion.

A fresh wave of activity suddenly surged through the crowd. Word had been received from down below. The track was clear. The first sled was being summoned. Gathering up my gear, I rushed back to the starting line and set up my tripod, forcing each leg into the hard-packed snow. Mounting the camera, checking for full wind, I peered through the finder and focused as the first slider, Larry Arbathnot, readied himself for the run. Seating himself carefully on the sled, he eased forward to a position between two thick handles sticking out of the icy run, much like two croquet wickets. After blessing himself, he adjusted his

goggles and, in the next movement, reached forward and placed a gloved hand on each of the two handles. Not unlike a rodeo cowboy still in the chute, he relaxed his fingers, then tightened them to get just the right grip. His feet, stretching out in front, rested against the flexible runner tips. A thick leather rein, to be grasped after the initial push off, rested in his lap. Gently rocking the sled forward and backward to keep the runners warm, he awaited the starter's signal. A hush had descended on the crowd. Only the whir of movie cameras broke the silence. The sound man from ABC was frozen in statuesque flight, the wind-screened microphone thrust out in front to capture the moment on magnetic tape. Suddenly the starter's hand began to descend, and before it completed its arc, Larry, with an expulsion of breath, heaved himself and the sled forward and down the glistening run. A good start!

If there was excitement as the first sled rounded the turn and disappeared, it couldn't be heard. As a group, all eyes turned silently toward the starter who was absently staring at the run while pressing his walkie-talkie against his ear. Moments passed. Suddenly the starter spoke into the mouthpiece, "Okay, will do!" Turning to the cluster of lugers, he barked, "Another sled on the line!"

"How did Arbathnot make out?" someone asked loudly.

"He didn't," the starter answered back. "He wiped out in hell-hole!"

Changing my camera angle, I wound the spring-motor and waited for the second sled to get ready on the line. My day of filming the luge races had begun.

## Quality Sports Films at Half the Cost

*by Ernst Wildi*

Saving money is always interesting, but usually cost cannot be lowered without sacrifice.

The cost of football, basketball, soccer, and other sport evaluation films, for instance, can be brought down by switching from the 16mm film format to Super 8. With this switch, however, you reduce not only the film cost, but also the film quality. It is obviously not possible to obtain the same sharpness and definition on a Super 8 frame less than one-third the size of a 16mm frame.

This is not to say that Super 8 is not suitable for this type of sports filming. For the schools which feel that Super 8 is the proper choice, the Bolex 280 Macrozoom camera, for instance, has an extra-long zoom range of 7mm to 56mm, which provides the necessary close-ups from the distant tower. Zooming from long shot to close-up, or vice versa, is convenient either manually by rotating a large knob on the side of the camera, or with the built-in two-speed power drive by simply pushing the powerzoom switch. Exposure is automatic, and most important, the 280 camera offers the best image quality possible on the Super 8 format, but it is Super 8 and not 16mm quality. The change of format should therefore be made only if the coach is convinced that the sharpness is satisfactory.

This is especially true now that there is the possibility of reducing filming costs by one-half while maintaining 16mm sharpness on the screen.

In football, basketball and other game evaluation films, the coach wants to see the entire formation; he wants to see how the various players move on the field, so the film must cover a wide area horizontally. This usually leaves large, completely unused areas on the top and bottom of the standard 16mm or Super 8 frame. To say it in a different way, half of the 16mm frame is unused or wasted, as anyone who has been viewing these evaluating films knows.

For this type of filming, a film format which is about twice as wide as it is high would be more logical than the 3:4 ratio of standard 16mm, and this new "wide screen" format can now be obtained through a simple modification on Bolex H-16 cameras. In a converted camera, a standard roll of 16mm is used, but when the film runs through the camera, only the bottom half of the 16mm frame is exposed.

The same roll of film then runs through the camera a second time, exposing the unused top half, and the exposed and developed film looks as illustrated with two "wide screen" scenes on each 16mm frame. The quality is identical to normal 16mm, since the scenes are taken at the same focal lengths and the players, therefore, are recorded the same size on the film.

What is normally covered on 100' of film can now be covered on 50'—instead of using 800' of film to cover a football game, only 400' is necessary. Cost for film and processing has been cut to half and becomes approximately the same or even less than Super 8, yet without any sacrifice in quality. The school can either cut the budget for filming, or, for the same amount of money, film twice as many sports activities, or film the same activities in color instead of black and white.

In addition to drastically reducing the cost of film and processing, the "half frame" filming method has other advantages and conveniences:

- Besides the modification in the camera, no changes in materials, equipment or procedure are necessary. After the film is through the camera once, the take-up spool with the film is placed on the feed reel, threaded and run through the camera again, so the film ends up on the original spool.
- Standard 16mm film is used, the same color or black and white film that has been used up to now. It must be double-perforated since it runs through the camera twice. It can be on 100' spools or larger by using the standard 400' magazine.
- The developing of the films is identical to regular 16mm films and, therefore, any laboratory can do the work and no special instructions must be provided. Instead of sending 600' or 800' of film to them after each game, you simply deliver only 300' or 400'.

- The various rolls of film can be spliced together using standard 16mm editing equipment. Naturally, scenes cannot be cut in lengths, re-arranged, or spliced into regular 16mm films.
- No special projection equipment is required. The same projectors that are used for evaluating 16mm sports films now are used for evaluating the "half frame" films. It is possible to have the projector equipped with a special aperture which blocks out the upside down half of the frame, but this is not absolutely necessary. The blocking out can be done by placing a mask (cardboard) a foot or two in front of the lens, or simply by projecting the film so that the upside down half falls below or above the screen area. Since we are still projecting 16mm, screen quality is 16mm quality, and the films can be blown up to the usual 16mm screen size. The film is even suitable for auditorium projection.
- The change in format is obtained by modifying new H-16 Bolex cameras or Bolex H-16 cameras which are already used in schools, and all models of Bolex H-16 cameras can be used for this purpose. The cost for modifying new or older Bolex cameras is small.
- There is no change in lens necessary, so you can continue using the zoom or fixed focal length lenses which are presently used for sports filming.
- The modification on the camera is not of a permanent nature, which means that the same camera can be used for full-frame and half-frame filming. After a football game, for instance, the filmmaker can change the camera back to normal 16mm so that it can be used for other purposes in the school, and the change from one format to the other can be done instantly, without tools, and even without removing lenses.

The idea discussed here is not meant as a replacement for standard 16mm filming in sports and other fields, but as an additional feature and possibility offered in Bolex H-16 cameras, making these cameras even more versatile in the field of 16mm filming.

Anyone interested in further details about this filming method and/or camera modification can obtain full details by writing to PAILLARD Incorporated, 1900 Lower Road, Linden, N.J. 07036.

*Editor's Note: The unique and interesting method of sports filming described in this article was developed by Mr. Allen Campbell of Boise, Idaho. Through his film service, Mr. Campbell is closely involved with numerous sports filmmakers, some of whom have already used the new filming method for shooting football and basketball games. Mr. Campbell is currently pursuing United States and foreign letters patents on his filming idea.*

*Complete football formation effectively captured in half a frame. Photograph reproduced from actual 16mm movie frame.*



# My Aerial World—and Bolex

by Stan Bandranke

Combine the excitement of flying airplanes with the satisfaction of shooting Bolex movies, and you have the better part of my world. I'm an aerial movie photographer.

My aerial world came into existence a few years ago. Flight instructor Bob Arnold, a close friend of mine teaching flying at Carl's Airport in South Rockwood, Michigan (soon to be located at Grosse Ile Airport, Michigan) persuaded me to take flying lessons in a beautiful Cessna 150. Much study and plenty of hours in the air eventually led to my receiving a Private Pilot's license. It wasn't really a difficult task with Bob Arnold for an instructor. In a year's time, Bob has successfully placed 115 students in the sky—skilled and responsible pilots, every one.



To fly is a great experience and to capture it on film holds that experience forever. With my Bolex single lens 8mm movie camera, I started taking movies of students learning to fly. In time, I had taken enough footage to present a show in one of the local hangars. I had expected a small crowd for my first performance, but on the contrary, well over one hundred people showed up. What stunned me even more was the applause that I received after the show. Most of the compliments centered on how needle sharp and clear my movies were.

For sound, I simply used a small tape recorder. Music and narration were taped prior to the showing. As for synchronous sound with the film, it went pretty smoothly. The trick—place the first frame of the film and white leader in the frame window of the projector—mark the recording tape with a piece of white tape and place it against the sound head of a tape recorder—then start both units together with one double-plug electric cord—play your background music and narrate. Repeat the above steps for a show and you can just about come out on the nail everytime. However, do not try to dub in sound effects such as lip synchronization. It is difficult to do without special equipment.

Well, enough for that. There were only a few things wrong with my first performance. The picture screen was just too small for my large audience. Fooling around with a tape recorder instead of having sound on film was a bother. (By the way, Bolex has a dandy SM8 magnetic sound on film Super 8 projector on the market that solves the problem.)

I needed a big picture, so I took a big step. (I'm not sorry to this day.) I purchased a new Bolex 16mm S-321 optical

and magnetic sound projector, a Bolex H-16 Rex-5 movie camera with a Vario Switar 86OE zoom lens (same type of high precision lenses that were used on the first moon expedition), Bolex splicer, Bolex deluxe titler, editor and a huge screen. True, this equipment didn't come cheaply. But when you can see on the screen the results that Bolex professional equipment produces for brilliancy and sharpness—it's out of this world—and worth it!

I produced my first 16mm movie (25 minutes) in living color, "Flying With Flight Instructor Bob Arnold". It was a smashing success! The film dealt with the humorous side of Bob's students' learning to fly. Scenes in the film such as a sixteen-year old soloing and close-ups of landing and departing aircraft would not have been possible without my Switar 86OE zoom lens. One cannot keep changing camera angles while attempting to photograph flying aircraft. It's there—then it's gone! Special highlights would surely have been missed by changing camera positions. My 86OE lens solved this problem. I could move in with ease for close-ups and distant shots without actually moving the camera. What I had seen in my viewfinder would be exactly what I would see on the movie screen. Reminds me of what the teenagers and adults are wearing nowadays in the line of T-shirts. Printed on them are: "What you see—is what you get." This stands true for the reflex viewfinder of the Bolex H-16. "What you see—is what you get"—on film.

Placing sound on the film (after sound striping had been applied) was easy. Setting my Bolex S-321 projector on magnetic sound recording with a flip of a switch—plugging my tape recorder directly into the projector—a few minor adjustments—start the projector and there it was—sound on film. Why, I could even dub in sound effects, thanks to the frame counter on the S-321 projector and the Bolex overlay unit. I made good use of the optical sound system also when presenting my "Laurel & Hardy" optical sound movies as an added attraction to the little ones. No loud clicks from spliced film passing through the film gate either, not with the precision beveled edge splices made by the Bolex splicer. Professional titles with my Bolex deluxe titler gave my film that "creative art image"—a job well done!

My next film assignment was that of a major airport, Detroit Metropolitan Airport, located in South Eastern, Michigan. One does not simply produce a good movie overnight, and the Metro Airport job was no exception. I would surmise that forty trips were taken to this fabulous airport, plenty of research and in approximately a year's time—my true documentary film, "Detroit Metro Airport," came to life on the screen. This film paints a true and vivid picture of a major airport in the U.S.A.—how it started, airplanes coming and going, people and places.

One particular scene in this movie which impressed my audience and friends was that of an airliner departing on a runway against a beautiful sunset. Without the built-in electric eye on my Bolex Rex-5 to compensate for changes in light variations while slowly panning, this scene would not have been possible. While on the subject of Detroit Metro Airport, I filmed another rather large subject—the American Airlines 747 Luxury Liner. Now, that is something to see, appreciate and photograph. With a normal taking lens, I could not have taken an overall shot of this fantastic 228-foot long airliner without moving so far back as to cause a small picture when projected on the screen. Thanks to the wide angle power of my Bolex 86OE zoom lens, I didn't have to back off very far for a full view and could still maintain plenty of detail.

After photographing the outside of this huge spectacle, my Rex and I went inside this Luxury Liner for more photographic work. Adjusting my 86OE lens in telephoto position, I filmed a close-up of a colorful meal being served—the American way! Livingroom comfort was everywhere. Plush carpeting, soft cushiony seats, eight-foot high ceilings, twelve restrooms, and of all things—a beautifully decorated coach lounge.

To gain more recognition in my aerial filmmaking, I placed an ad in an aviation newspaper and got my first break. The publisher invited me to show my films at the annual Mid-Western Aviation Conference held in Detroit. My films were shown at the conference with great interest to all the viewers.

I met many interesting personalities at the conference. One in particular was Don Wright, president of the "American Aero Club" (an educational and informative non-profit organization for pilots and people interested in aviation). His group was at the conference to gather new members. I became a member that very day. We discussed my future filming plans, which will cover such subjects as "Michigan's Sky Divers," "Air Shows Of The U.S.A." (featuring the Astronauts of Apollo 15), and "How to Fly". Universities, schools and airport hangers are a few of the places where my aerial films have been shown and will be shown in the near future. I mentioned to Don that I hoped to present my "Aerial World Series" on a national TV network—if I could find a sponsor!

Don wanted to see the camera that had taken the (in his own words) "superb" movies. So I opened up my Bolex aluminum carrying case in the center of the showroom floor to show him the camera. In doing so, a funny thing happened. Immediately, a large group gathered around to admire the H-16 Rex movie camera. In fact, so many had gathered that not everyone could see the camera clearly. So I mounted the camera on my Bolex aluminum tripod with the attached 400 foot magazine for a better view. Of all the aerial displays in the showroom, I sincerely believe the Rex-16 was the center of attraction. People would ask, "What's that gadget for?" I would say, "Oh, that's the variable shutter to fade in or fade out a scene." "What's that sprocket for?" "Oh, that's a rewind used with the variable shutter system to enable one scene to dissolve into another." On and on went the questions. One particular remark caught my ear! "Say, that's a one-man camera!" No truer words were better spoken—for Bolex.

*Editor's Note: Anyone interested in dropping the author a line is invited to write to: "The Aerial World of Stan Bandranke," P.O. Box 1068, Southgate, Michigan 48195.*

## The Bolex EBM Electric— A Compact, Cordless Professional

The Bolex H-16 EBM Electric camera brings to the professional filmmaker a solution to some of his most annoying problems:

- It "takes the load off his shoulder" by cutting necessary weight to the minimum, without sacrificing professional quality, reliable performance, versatility and convenient operation. The EBM weighs a little over 9 lbs. as a 100' unit, 12½ lbs. as a 400' version, complete with grip and power-pack. In case this does not sound impressive, it should be remembered that the battery described is not an amateur unit that is dead after a few rolls of film, but a professional 12V unit strong enough for twenty-four 100' rolls or six 400' magazines on a single charge.

- It makes handheld filming a pleasure rather than a painful affair. The specially designed and molded handgrip holds the camera in a natural fashion. The EBM Electric is perfectly balanced even when equipped with a 400' magazine. This perfect balance leaves one hand completely free for focusing, zooming, directing—and this without shoulder braces, gunstocks or other cumbersome accessories.

- It eliminates the annoyance and the frequent failures associated with camera cables, because there are no long cable connections between camera and powerpack. The battery is tucked away conveniently in the camera grip. Even sync sound filming without cable connection between camera and tape recorder is possible with the crystal sync accessory.

- The EBM makes it unnecessary to carry along and use different motor drives for different filming applications. The built-in electronically-controlled electric motor is designed both as a "wild" motor for variable speed filming from 10 to 50 f.p.s. and as a constant speed motor for sync sound work, with sync pulse generator or crystal.

- It simplifies camera operation through automation and built-in conveniences, including:

Automatic threading from 100' rolls.

Automatic slating in sync sound filming.

Automatic exposure with through-the-lens light measuring, and Automatic pre-set diaphragm with Vario Switar POE zoom lens.

Pre-set diaphragm arrangement on fixed focal length lenses.

Automatic depth-of-field scales on fixed focal length lenses.

Power zooming on Vario Switar POE zoom lens.

Light signal indication when battery needs recharging.

Use of filters in built-in filter slot behind lens.

Instant changing of lenses.

Accurate, flicker-free framing and focusing through 14X reflex finder.

All these features, combined with the camera's professional construction and registration steadiness, make the Bolex EBM Electric an ideal production camera for silent or sound films, especially when a large film capacity is desired; an ideal camera for sports and other 16mm filming where rewinding a spring motor is impractical, or too time-consuming; an ideal camera for news filming when the camera must be instantly and constantly ready to go.





**BOLEX**



**CAPITAL CAMERA EXCHANGE, INC.**

**1003 PENNSYLVANIA AVE., N.W. 627 FIFTEENTH ST., N.W.**

**National 8-8933**

**Sterling 3-3553**

**WASHINGTON, D.C. 20004**

**WASHINGTON, D.C. 20004**