right and try to be ready for them. Then, as they say in *My Fair Lady*, "with a little bit of luck" things will turn out fine. Maybe.

Up to this point the emphasis, for the most part, has been on the documentary in general. But the subject can be somewhat more specific: filming conventions, assemblies and special events. Where do we begin?

First, we should decide on a point of view. Basically, this narrows down to a choice between subjective and objective — involved participant or detached observer, although it is sometimes possible to combine the two. It is to some extent a matter of opinion, but we believe the objective viewpoint is most effective when treating a complex and sometimes controversial subject like an assembly or a convention. It is in the special event — an automobile race, a fishing derby or even a selling contest — that the subjective approach seems to work out best, because it tends to evoke audience participation. Thus, through the familiar device of mounting a camera on a racing car or boat, the film audience can experience the event from the driver's-eye point of view, which is certainly more exciting than seeing it from the grandstand. Couple that with a first-person narration — the driver thinking out loud — and the illusion is quite complete. Old ladies in the audience will faint, in their excitement — young men will exhaust themselves holding tight on the turns and giving 'er the gun on the straightaway — and a fine time will be had by all.

The illusion of reality — that is really what we are after here. Else why go to the expense of using the film medium to tell the story of an event, or a convention? Much cheaper to read about it in the newspaper — or get hold of the minutes — or study the official reports. But somehow words on paper never quite bring an event to life the way a film does. Reports are dull stuff, but a film — well, that's the next best thing to being there. In fact, sometimes, if it's properly made a film is better than being there, because the camera eye far surpasses the human eye in its ability as a keen and critical observer. Film has the ability to synthesize a complex series of events into something meaningful and easier to comprehend.

(At the Convention film clips were shown to illustrate factors and techniques involved in the production of two documentary films, one of the Lutheran World Federation Assembly and one of a National Aircraft Show.)

Low-Cost Movies for Business

By FRED A. DENZ

The advent of high-quality 16mm cameras and magnetic-optical projectors, coupled with the new, faster film emulsions, provides increased opportunities for business and industry to use low-cost, internally produced training films. As an illustration of such possibilities, the author describes the production and use of films in connection with his company's Employee Suggestion System.

THE low-cost movie has a very definite place in many businesses today; and although the maker of these films is necessarily limited by the equipment he uses and his own lack of professional experience, these do-it-yourself movies will ultimately create more business for the professional producers.

The wise beginner, making a picture for his firm, will recognize his own limitations and will not attempt more than the basic fundamentals to achieve the initial mission. He will keep his movies as simple as possible. He will use no special sound effects, voices or trick photography. He will try to work as much as possible with one lens. He will avoid fades, dissolves, wipes and musical backgrounds. Although such movies are often used for special sales efforts to limited customer audiences, they turn out best when confined to an in-company audience which will hold within limits the niceties required.

The advantage of these movies to the professional who may not have been able to gain an audience with the company management are twofold: first, the movie is going to make more people in management conscious of the advantages of an audio-visual program; and second, it is going to give them a taste for movies and a desire for a more professional job. There are many companies which avoid any sort of audio-visual program using movies because of the cost involved. More important, they do not know or do not realize what such a program can do for them in training, in sales and in public relations.

Aid in Selling Heavy Equipment

An example of companies that may find the movie helpful is one selling equipment so bulky that it is impossible for the salesman to transport it from prospect to prospect. It may well be complex equipment which must be seen in operation to be appreciated. Usually it is difficult for the salesman to arrange for his prospects to visit other plants. Someone in the company decides to make a movie of company installations, and does it with amateur cameras. Movies, even first attempts, can be powerful sales tools. They sell the equipment. From then on, any commercial film organization representative will find that company a prospect for a professional motion-picture program. Obviously it will cost more money, but it will sell more goods too. The professional producer knows all the approaches to business and consumer audiences alike, and can easily prove definite results to any company which has seen an example of the effectiveness of a motion picture.

At the Remington Rand Division of Sperry Rand Corp., movies made by this writer as director of the Employee Suggestion System are being used internally to give added impetus to the program. My office also heads the suggestion system committees in 29 plants. With only a limited budget, I have found that by using motion pictures made, edited and presented by me, I can do my job better. My work is easier for me and is more effective for the company.

Making a Suggestion System Work

In suggestion work, the most important salesmen are the supervisor, the plant foreman and the office supervisor. My job includes selling the suggestion philosophy to supervisors so that they will in turn enlist employee interest and participation. Although charts, posters, pamphlets, displays and other visual aids have proved very helpful, none have been nearly as effective as movies. Wherever a suggestion is covered in one of the films, an effort is made to show both the "Before and "After" scene and the individual who made the suggestion. Five such films have been made by the Remington Rand Division. The first three were black-and-white, the last two in sound and color. Each of them cost less than five hundred collars.

The first step in making one of these films is to determine the plant where the operation of the Employee Suggestion System is to be photographed. Then the picture is produced much as some of the old-time movie directors used to do it—extemporaneously. Shooting starts by making pictures of highway markers and route signs to help identify the plant location in the titles and introduction of the

This paper is based on a talk presented on October 21, 1958, at the Society's Convention at Detroit by Fred A. Denz, Manager, Suggestion Plan, Remington Rand Division of Sperry Rand Corp., 30 Rockefeller Plaza, New York 20. (This paper was received on April 9, 1959).

film. Frequently several plants will be featured in the one film.

Once in the plant, the story is gotten under way by making pictures of the products manufactured there. Then follows a tour of the factory, starting at the raw-material and emerging at the finished-product end. Presenting the suggestions which have been put into practice at their respective locations in the plant's manufacturing process tells the story in simple continuity.

In addition to illustrating the value of the employee suggestion system, this format is more interesting than one in which the film hops from one suggestion to another for the sake of the suggestions themselves. This type of movie also serves to increase viewer knowledge of the products manufactured by the entire Remington Rand organization.

Employees as Actors

Plant personnel are used as actors, dressed the way they are on the job. The entire project is handled by one man: direction, photography, cutting, timing, script writing, sound recording and eventually showing the films in supervisory sessions. One of the vital points is to be extremely careful not to disrupt plant production too much when shooting. By operating this way the photographer is far more popular in the plant than if he came in with a crew and started rearranging production lines and equipment.

This hit-and-run technique has other advantages. These films are shown to plant supervisors, a highly critical, informed and vocal audience. If the job were too polished, the photographer could be accused of frosting the cake.

To avoid the drabness of showing one improvement idea after another, an attempt is made to weave the suggestions story into a yarn by telling something about the location, the people, the products and the production processes of each plant, plus anything else that helps to create audience interest. Then, in the course of a thirty-minute meeting of plant supervisors, they may be shown films of three or four of the company's distant plants. Thus they may see the final assembly of products for which they have been making parts for years. They see people they have written to and talked with over the phone for years but whom they have never met. They get a better picture of the company and its size. They see the benefits of the Employee Suggestion System and pass their enthusiasm along to the employees.

Here as in many other companies the maker of low-cost movies in business is doing an indirect selling job for the professional. He is getting people is his company conscious of the benefits of audio-visual programs, he is whetting their appetites. The high-quality 16mm cameras, magnetic-optical projectors and the new, faster film emulsions now available have increased the possibilities for business and industry to use low-cost, internally produced training films. Many of these films will be produced by plant photographers and employee camera "experts" who will be opening the door for the professional cameraman to take over later.

Filming for Educational Television

By DAVID W. JOHNSON

The varied subject matter of educational TV programming dictates a flexible approach to filming. The techniques differ from those used in commercial TV filming in that they must meet individual situations as they arise, with no sacrifice in quality. Further, the budget for an educational program is frequently less than one-twentieth that of a commercially filmed program of the same length produced by comparable techniques. The Staff Production Unit of the University of Southern California, Department of Cinema, has produced four series, totaling 44 half-hour programs for educational TV. Some of the unique production problems presented by each of these series are discussed, together with their solutions.

In the production of program material for educational television, the producer is faced with two basic problems. First, he should create a product which is of the highest possible quality in both content and technical considerations. Secondly, he must do this within a budget which is ridiculously inadequate for the purpose.

The *content* of an educational program must be presented in such a way that it will first attract, and second, hold the viewer's attention. Historically, television is primarily an entertainment medium, but there is no reason why an educational program cannot also be entertaining, providing the entertainment values do not overshadow or confuse the educational content.

Many educational programs (too many, perhaps) are set in the "lecture" format. Here the burden of success or failure falls upon a single personality. It is not enough to take an "expert" on a particular subject, put him in front of a camera, let him expound in the same way that he has been doing for years in front of a captive audience in his classroom.

The TV audience is anything but captive — one little flick of the wrist and it is gone. The TV lecturer, therefore, must not only be thoroughly acquainted with his subject, but he must also be a performer. He must have the talent to communicate his knowledge and ideas in a manner which will interest and excite the viewer.

The success of Dr. Frank Baxter's many series seems to bear out this premise. On many subjects Baxter is no scholar, nor even an "expert," and he is the first to admit it. But he is a performer. He has a personality which can attract and hold an audience.

It is, then, the responsibility of the producers to inject those elements of showmanship which can make an educational program both an exciting and an enlightening experience.

All this must be done within a budget which is frequently less than 5% of what the "competition" is spending for a product of comparable length produced by comparable techniques. The 15 half-hour Baxter programs produced at the University of Southern California, for example, cost less than one *I Love Lucy* show.

Educational vs. Commercial Techniques

From the *technical* standpoint, an educational program must be, at the very minimum, as good as the poorest commercial TV film recording and preferably as good as the best filmed program. The advent of video-tape recording has improved the average picture quality of *commercial* television, but in all likelihood it will be some time before every educational TV station can afford this equipment. Educational stations, therefore, must rely on 16mm film for their recorded program material — either as TV film recordings or as direct film productions. It is generally conceded that an image recorded directly on film is superior to that of an image recorded secondhand from the face of a

Presented on October 22, 1958, at the Society's Convention at Detroit by Herbert E. Farmer for the author, David W. Johnson, Dept. of Cinema, University of Southern California, University Park, Los Angeles 7.
(This paper was received on May 19, 1959.)