

All Motion Pictures Needn't be Major Productions . . .

The USAF Film Training Aid *

A New Type of Motion Picture Solves Special Air Force Training Problems

LT. COLONEL CHRISTIAN S. BAUER

Training Films are used by the Air Force in a variety of instructional situations. A relatively new innovation in the USAF Training Film Program is the Class B Production - or Film Training Aid.

During the course of a lecture, many an Air Force instructor has encountered a point difficult to put across to the student. In spite of expensive mock-ups and lengthy oral explanations, and although the point in question may be simple, the student may have difficulty grasping the instruction. A good example of this was encountered in a radar-controllers course, where the student went from a mock-up of a radar scope to the actual scope in operation. The student experienced great difficulty in

visualizing the transition of the "sweep" and "blip" from the classroom mock-up to the real scope. A Film Training Aid solved the problem by filming a camera dissolve effect from the mock-up to the real scope. (A "dissolve" is an optical effect between two superimposed shots on the screen in which the second shot gradually begins to appear, the first shot at the same time gradually disappearing.) In this case, several short scenes solved the instructor's problem. The point was illustrated in dramatic fashion, and several hours of valuable classroom time were saved by the use of a Film Training Aid.

The same type of Film Training Aid has also helped the Air Force personnel learn short cuts in many types of work.

*Release of this material does not imply Department of Defense indorsement of factual accuracy or opinion.

LT. COLONEL CHRISTIAN S. BAUER is presently assigned to Headquarters USAF as Chief, Audio Visual Aids and Manuals Branch, Special Training Devices Division, Directorate of Personnel Procurement and Training. Prior to this assignment he commanded the Air Force Television Squadron at Orlando Air Force Base, Florida. A career officer, he served in photographic assignments during his sixteen years of service. Lt. Col. Bauer is a graduate of Temple University, Philadelphia, Penna.

For example: engine tests, engine and propeller changes, pre- and post-flight inspections of aircraft, maintenance, installation, and checking of ground and aircraft equipment.

A Film Training Aid does not take the place of an instructor or supervisor. It is *NOT* a “crutch” for the instructor to lean on, but rather an instructional tool to put over in effective “to-the-point” fashion, a specific point, or points which the student finds difficult to grasp.

For Specific Needs

To insure that the student concentrates on the point being taught, the Film Training Aid is kept short, to-the-point, and free of extraneous words and subject matter. As defined in Air Force Regulations, the Film Training Aid is a specialized Training Film made to meet a localized training need. It is primarily restricted to teaching mechanical how-to-do-it procedures and techniques. It is produced in black and white and is normally limited to picture and voice. Simple artwork and a limited amount of live sound may be used if required to clearly present the facts.

Film Training Aids are produced on the premise that the student is interested in learning the point in question, and that the film will be supplemented with oral and/or visual instruction. A Film Training Aid is not made to take the place of the instructor or supervisor. It is always supplemented with additional instruction, or other training devices.

Basic differences between the Film Training Aid and Headquarters USAF approved Class A Training Films may be summarized as follows:

a. A Film Training Aid is generally restricted to a single unit of instruction while a Training Film, because of longer running time and broader scope, may cover a large segment of the course of study. For the same reason, a Training Film may cut across an entire course of study, or “training problem,” to provide trainees with an understanding of basic concepts underlying correct procedures. A Film Training Aid has neither the scope or production flexibility to accomplish the usual objectives of a Training Film, as indicated above.

b. While USAF Class A Training Films generally reflect high level policy, Film Training Aids, by definition, are restricted to meeting the *local training need* of the requesting activity. This basic planning concept requires that Film Training Aids be confined to the “how-to-do-it” type of instructional films.

c. Film Training Aids, because of simplified production procedures in the interest of expeditious production, are not appropriate for general orientation, indoctrination or attitude conditioning of trainees.

The Training Film will normally cover an entire operation, or situation. A good example is the “Jungle Survival” film, in color, shown to all aircrew members. After a dramatic opening, complete with music and a series of spectacular air-to-air and air-to-ground shots of personnel parachuting from a crippled plane, we join various members of the crew in a variety of situations; one is dangling by his parachute lines from a tree, another lies injured on the ground and still another desperately trying to make his walkie-talkie radio work so as

to establish contact with rescue aircraft. The film then goes on in detail showing how each crew member eventually makes his way through the jungle and is finally rescued. The film covers a considerable amount of subject matter and in general is a complete production which has taken a good deal of time and money to produce.

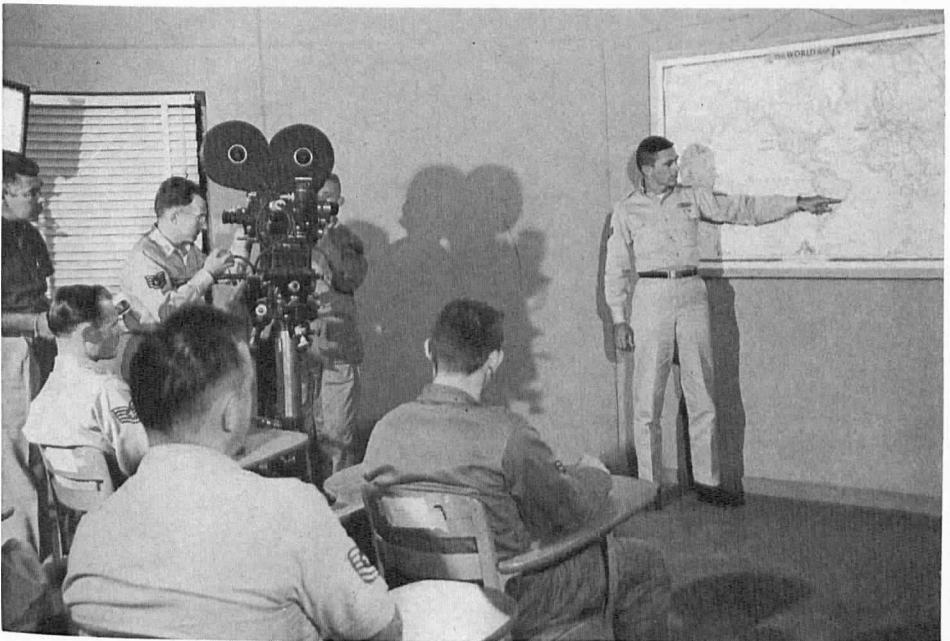
Brief - And to the Point

Now let's suppose a large number of aircrew personnel, who saw the Jungle Survival film, had difficulty in grasping the method of operating the walkie-talkie radio under these conditions. A short film of a few minutes duration, actually stressing the step-by-step method of operating the walkie-talkie would solve a serious training problem. The film would show only the exact steps

necessary to operate the instrument. This short film would be properly classed as a Film Training Aid.

Production procedures for making Film Training Aids have been developed on the concept of "more Air Force per dollar." Command policy requires the production of *no less than five Film Training Aids at a single geographical location* to assure maximum utilization of available manpower and production equipment. The average ten-minute Film Training Aid takes from 60 to 120 days to produce (from time of request to delivery of release prints). This time of production can be further reduced if the equipment to be photographed can be transported to the production facility.

Although we cannot set any hard and fast rules as to the specifications of a Film Training Aid, past experience



Courtesy of United States Air Force
Crew Shooting "Briefing Film"

prompts us to set up a so-called "yardstick" consisting of these facts:

Type of Film:

Black and white - 16mm.

Running Time:

10 minutes is the ideal length, and creates an excellent learning situation.

Number of Reels:

Should be held to one 400-foot reel, with 1½ reels a maximum.

Number of Scenes:

There is no minimum number of scenes, and in the past the MOST EFFECTIVE Film Training Aids have been from 30 to 60 scenes. In a good number of cases, up to 150 scenes were used effectively.

Sound:

Off stage narration is added to the film during the editorial stage.

Optical Effects:

Held to an absolute minimum. Used only when necessary to put across a point, i.e., a Fade, or Dissolve, to denote a lapse of time.

Art Work:

Simple art work (graphs, posters, etc.) may be employed. This is normally supplied by the requesting agency. Animation cannot be used.

Stock Footage:

Combat and other special library film footage cannot be used.

Music:

No music.

Titles:

Simple beginning and end titles in accordance with USAF Motion Picture Title Specifications.

Initially, as indicated in the above "yardstick," Film Training Aids were shot in 16mm. As the program became

more popular and requirements increased for additional release prints, certain Film Training Aids are now shot in 35mm to assure better quality when a large number of release prints are required.

Centralized Production

When the Film Training Aid was first conceived, it was envisioned that photographic crews would travel to various Air Force Bases and accomplish photography on location. As mentioned previously, in the interest of maximum utilization of man-power, a requirement for at least five Film Training Aids had to be established before a crew would be dispatched. As the Air Force production capability increased, it was recognized that, in many instances, requirements were being established for Film Training Aids on relatively small component parts of aircraft "hardware" and missile systems. As a result of this trend, it was decided to expand studio capabilities. Now many of these smaller parts are sent to the production facility and photographed there. This results in additional savings of travel and per diem costs for crews and also provides additional opportunity for on-the-job training of inexperienced personnel who normally would not be included in a crew. Many Film Training Aids of "walk around" inspections of aircraft are now accomplished by having the plane flown to the production facility rather than sending a crew across the country to do the shooting.

It was also found that in addition to meeting a "local requirement" many Film Training Aids had Air Force-wide application—as an example: a film of



Courtesy of United States Air Force

Crew on Flight Line Location during Filming of Film Training Aid

a "walk around" inspection of a Century Series Fighter Aircraft requested by Air Training Command for use in the initial phase of instruction, had equal application and value to an organization utilizing similar aircraft elsewhere in the world. Consequently, Air Force-wide distribution was made of this series of Film Training Aids.

Considerable savings in time and money resulted in the production of a series of Film Training Aids on the subject of "Pressure Suits and Helmets." Instead of personnel travelling to a particular Base to become familiar with fitting pressure suits and helmets, Film Training Aids were produced and distributed Air Force-wide showing step-by-step procedures.

Consideration is now being given to the production of some selected Film

Training Aids in color. Specialized requirements from the USAF School of Aviation Medicine necessitate color in their films. Physiological effects upon humans and animals as a result of exposure to pressure and altitude studies warrant color in many veterinary and dental subjects. Color is also becoming a "must" in teaching complicated circuitry in missiles and rockets where color coding of transistors and electrical circuits is so important.

Probably the greatest value of the Film Training Aid lies in the fact that it provides a means of satisfying a requirement for a Training Aid in motion picture form which normally could not be accomplished either time-wise or cost-wise by existing procedures established for the production of a "standard type" Training Film.