

How a Shooting Script Becomes a Motion Picture

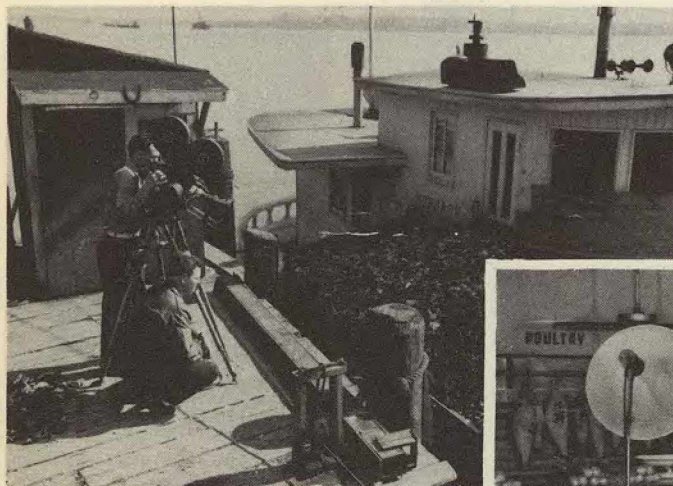
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STORY DEVELOPMENT BRANCH

A shooting script is like a detailed map that guides the traveler on his way. A script tells much, but by no means all, of what is to be done and how to do it. It calls for locations which have to be found and for which arrangements have to be made: for sets which have to be built and furnished with the necessary properties. It calls for action in which people and equipment are needed. It calls for the expenditure of money which must be accurately estimated and a budget made and adhered to in the production of the film. Above all, it calls for the close coordination of the skill of many people --- photographers, editors, laboratory technicians, sound engineers, artists, actors, project supervisors, and others.

The project supervisor follows through with the production from this point as the coordinator of the production activities and as director of the film. A camera crew is assigned to work with the project supervisor on the production. It is their job to put on film the scenes that the project supervisor has written into the script.

The first step in production is what is called "a script break-down." The project supervisor and cameraman analyze the script from a shooting standpoint. They group together all the scenes that can be made from a specific camera location. This is very important because it generally takes longer to set up the camera and arrange the lights than it does to shoot the scene. The object is to organize the shooting



Lighting is a problem on interior location sets such as this one.

It was necessary to travel to Norfolk, Va., to get this exterior location shot.



so that there will be as few changes of location as possible.

The script break-down is accomplished by means of continuity sheets. Each scene of the script is copied on a separate sheet. This not only makes it easier to group scenes together for shooting convenience; it makes it possible to make a record of all the details of the scene as it is shot, so that if a retake of the scene is necessary all the information will be available to set up identical shooting conditions. These sheets are used also by the film editor in cutting the film.

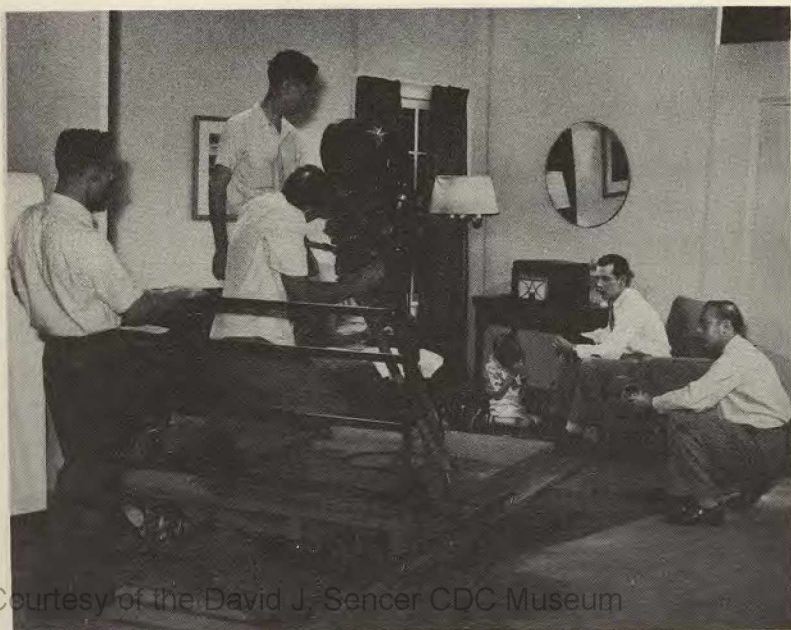
As soon as the script break-down is completed, the cameraman requisitions all the film he needs for shooting the picture. He generally asks for about three hundred feet for every hundred feet which will be in the finished film. This allows film for retakes or for scenes which were not included in the script but which may prove to be necessary as the shooting progresses. In the meantime, the project supervisor selects locations and arranges shooting schedules. Generally, the cameraman and project supervisor inspect the locations to check on production problems such as availability of electric current, the number of lights, and other equipment needed for shooting the scenes at this location.

If the film is to be shot on a studio set, shooting dates are scheduled at the studio. Sets are built and all the properties and equipment are obtained and arranged on the set as required by the script.

Certain scenes may require graphs, charts, maps, or animated sequences which are to be done in the Graphics Department. The project supervisor discusses these scenes with the artist who has been assigned to the job so that the art work required for the production can be in progress while the live action in the film is being shot. Titles are generally ordered at this time also.

After all these arrangements have been made, the camera crew is ready to shoot the picture. On the set, the camera crew consists of the cameraman, assistant cameraman, script clerk, and the project supervisor. Frequently a sound technician is required and, if the scene is complex, other helpers are often needed. The cameraman and project supervisor together plan the shooting. The project supervisor explains the exact action and effect that he wants to get on the film. The cameraman and his assistant set up their lights and locate their cameras to achieve this effect.

The scene is then photographed. If any error appears in the action, the scene is repeated



Raw film stock is requisitioned from the stockroom to cover the needs of each film.

Many types of interior sets can be built at the studio.

until the cameraman and the supervisor agree that the scene is right. During the shooting, the script clerk makes notes of what takes place. Each scene is slated with the scene number for identification in editing. If the scene was not good, an "N.G." slate is inserted at the end of the scene so that the editor will know this "take" is not to be used. If any action is photographed which does not appear in the script, a record of it is made on the continuity sheet. The time it takes to shoot a scene depends entirely upon the kind of scene it is. It might take a full day to shoot a scene that runs a few seconds on the screen; but on the average, a camera crew can shoot about 20 scenes a day.

At the end of the day's shooting, all of the exposed film is sent to the laboratory for processing. Because the entire expense for actors, crews, and materials is represented by this exposed film, as is also the quality of all future prints to be made from it, the quality of processing must be insured by precise controls. Film of the same emulsion number is exposed in a sensitometer, processed in the developing machine, and then a graph of the results is plotted from readings on a densitometer. This graph, called a characteristic curve, indicates what changes, if any, should be made in the processing procedure in order to secure the

right density and contrast for the highest quality in the negative.

The negative is developed and a workprint is made. First priority is given this footage at the laboratory. This footage, which is called the "rushes," is reviewed as soon as it is available --- usually the day following the shooting. If any retakes are necessary, these scenes can be shot before the set is changed. When the shooting is completed, the cameraman, editor, and project supervisor review the rushes. Together they decide which is the best of each scene. The editor then cuts the workprint. The selected scenes are put in sequence. No effort is made at this point to cut each scene to length. With the film in sequence, the project supervisor and editor review this workprint again. (The original negative is never touched until the editor has cut this workprint exactly as it should be in the completed film.)

The average person assumes that once the picture is shot the work is almost done; but for the average film, it generally takes 2 or 3 months to do the remaining work required to make a motion picture.

The editor's job is not merely one of putting one scene after another. This, of course, is a first requirement; but each scene must carry the action forward smoothly and with the right



Motion picture film is processed in automatic developing machines.



The animation stand is used for shooting titles, charts, maps, and animation.

Most of the art work for CDC productions is done in the Graphics Department.

amount of emphasis. This requires a very keen perception of what the action means, an accurate sense of timing, and experience in blending one scene with another. The editor can make a great film out of mediocre footage or a poor film out of superlative footage so, although editing is one of the most time-consuming of operations in film production, the finished product generally proves that this time is well spent.

When the editor has the scenes in sequence and cut to length, the next step is to indicate the transitions between scenes. This is accomplished by what is known as optical effects. Optical effects serve the same purpose in a film as punctuation does in written literature. The most common transition between scenes is the simple "cut" which is roughly equivalent to the sentence. To carry the comparison further, "fading out" one scene and "fading in" another would be the equivalent of a chapter; while such things as the "lap dissolve" (blending the end of one scene with the start of the next by visible overlapping action), "wipes," and other optical effects serve to separate or blend the action in varying degrees.

When the workprint is in its final-edited form, the tentative narration of the script is very

carefully checked against the action. The commentary is revised sentence by sentence and word by word so that it exactly matches the picture to which it refers. Any commentary which is unnecessary because the picture tells the story completely, or commentary which does not refer specifically to the action on the screen is eliminated. Involved or subtle sentences are simplified.

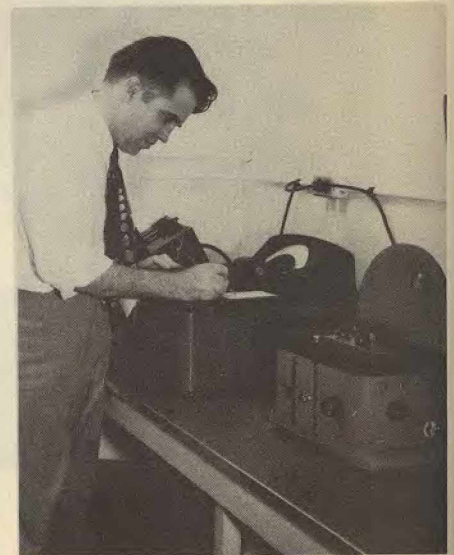
The picture is then projected and the narration read to it to be sure it achieves the desired effect. If no corrections are necessary, a recording is made by a professional commentator. The sound is recorded on a separate negative from that on which the picture appears. If music or other sound effects are included in the film, these additional effects are recorded on another negative. The editor then synchronizes the sound print with the picture print.

At this point, the film is ready for a preliminary showing to the technical advisor and others for approval. This is known as the "interlock" showing since it is necessary to run the picture on one projector and the sound track on another. At this stage minor corrections can be made without much trouble or expense. If this interlock print is approved, the editor cuts the

Each scene is slated with the scene number for identification in editing.



Precise film processing controls are maintained. The technician is using a densitometer to read densities of each step of a sensitometric strip which has been exposed on the sensitometer in the right foreground.

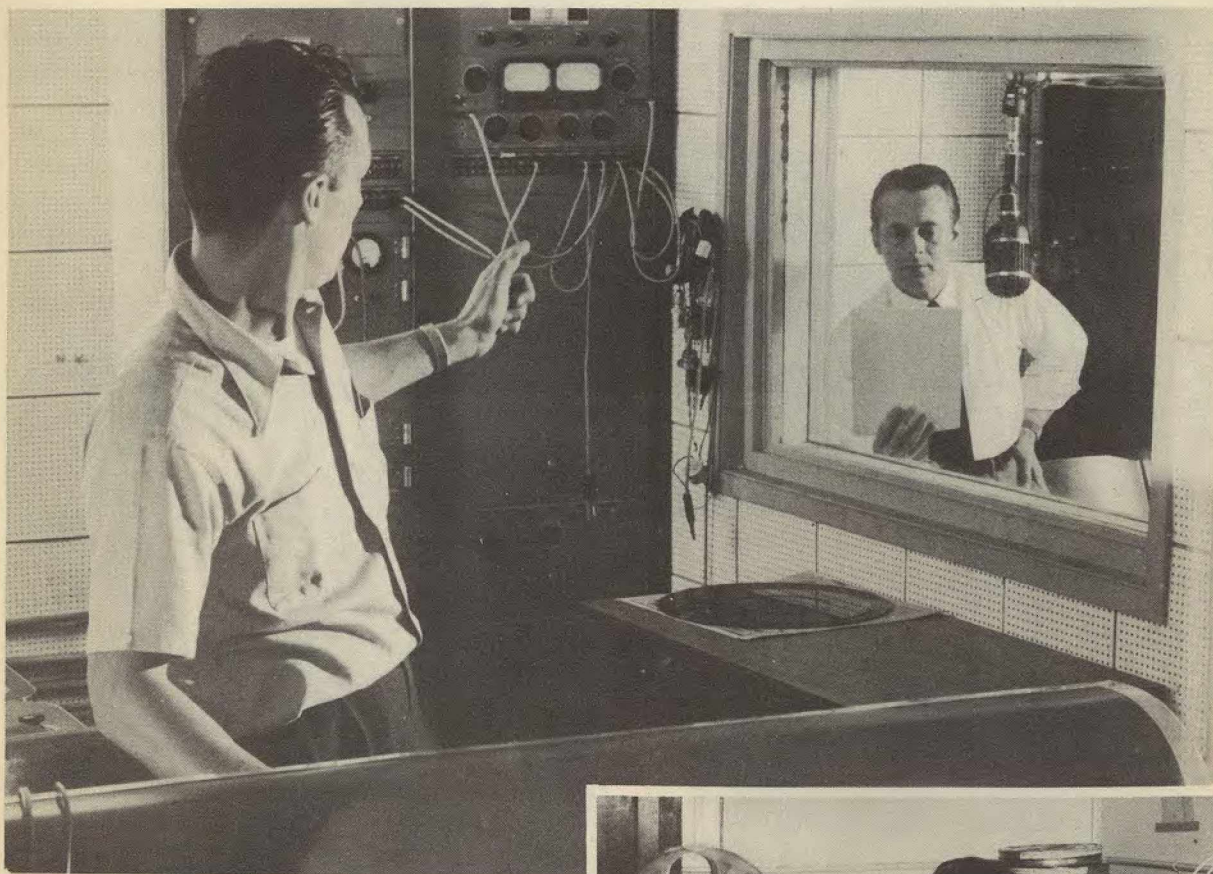




The first step in editing is to put the scenes in sequence.



The second step in editing is to cut the scenes to length and blend scenes so they have smooth continuity.



Sound is recorded in a completely equipped sound recording studio.

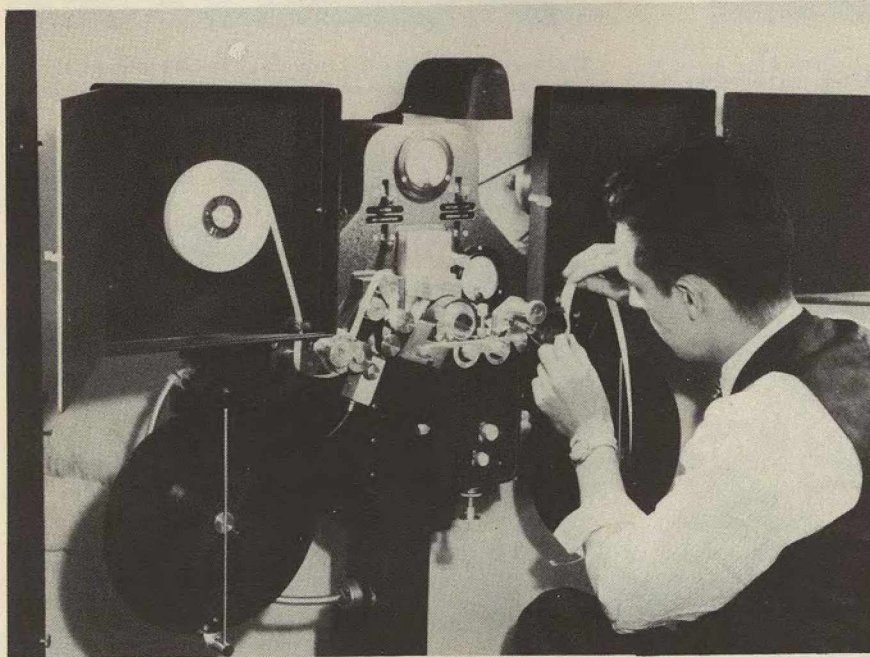
Sound and film are on separate negatives. The editor synchronizes the two negatives.



original negative to match the workprint exactly. The sound negative also is cut and matched with the picture, and composite prints are made which include both sound and pictures on a single negative. After a master positive is made for safekeeping, release prints are made from this composite negative.

The laboratory takes over at this point. Before a negative is printed, the best exposures for the different scenes are determined on a

special form of sensitometer called a motion picture timer. When the motion picture printer is set according to the readings for the best exposures as determined by the timer, it automatically corrects any unevenness of exposure in the different sequences. The same negative, of course, is used to make a large number of prints. When the release prints are finished, they are delivered to the Film Library for distribution.



This motion picture film printer makes release prints from the original negative.

Printing exposures for negatives are determined on the motion picture timer.

