

Portable Video ENG & EFP

2nd Edition

**Norman J. Medoff
and Tom Tanquary**

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Preface

When we wrote the first edition of this book, video production was undergoing many profound changes. Cameras were becoming far more efficient, giving better images with less light. New formats of videotape were emerging and video practitioners had a growing array of choices of videotape recorders. Editing systems were being designed to allow users of portable formats to create sophisticated productions with network-quality look without having expensive equipment.

As we write the second edition, we find that many of these technological changes are still occurring. Cameras continue to shrink in price and size, but the images they produce are better. New videotape formats continue to appear and existing ones reappear in new and improved versions. Editing systems designed for portable video can do many wondrous things while still preserving the quality of the original image.

None of these changes were completely unexpected because technological changes have been proceeding so swiftly since the late 1970s. The change that is perhaps the most surprising is the pervasive use of portable video by so many different sectors of society. Broadcast and cable industry use of portable video continues to increase both in news coverage and general programming; both shoot the majority of their video outside the studio. Corporate use of video has increased dramatically with in-house video newsletters, information and motivational tapes and teleconferences common in thousands of corpo-

rations. Governmental agencies, medical facilities and educational institutions have found portable video to be indispensable in many everyday applications. Independent production houses have become abundant. The market for videotaping almost every kind of event is always expanding. Besides the bride and groom, the next most common sight at a wedding is the videographer. Home video users have voracious appetites for new equipment and continually find new and innovative uses for portable video.

This acceptance of video in our entertainment, businesses, schools and even our private lives has given video a heightened importance not only in American society but throughout the world. Not many would disagree that TV had a great deal to do with the awesome changes in Eastern Europe during 1989 and 1990. The technology and the power of video have truly made us one global village. The entire world now watches events take place in real or near real time. The power of video to communicate is being felt in every segment of society using video. The importance of video has never been greater and the importance of quality video has never been so crucial.

The convergence of video and computers is a significant factor with corporate, governmental, medical, educational and home video enthusiasts utilizing their desktop computers to provide titles, transitions and special video effects in their creations. While the camera, VCR and editing machine technology is in a second or third genera-

tion, the interface of personal computers with video is just beginning. New hardware devices and software to provide editing, character generation and special effects are appearing constantly.

All these changes present a difficult challenge to the aspiring professional. The world of portable video is a fast-paced and dynamic one that requires frequent updates about equipment, techniques and applications. This reality is the main reason for a second edition. *Portable Video: ENG and EFP* has been greatly expanded to cover more topics and techniques. By going into more depth and adding new areas, the authors have attempted to make this book a complete guide to almost any video application. Today's video-grapher should have an extensive working knowledge not only of the equipment but of the myriad techniques and styles that make up the craft. This book provides

the knowledge necessary to gain, advance or enhance an understanding of today's and tomorrow's video needs.

The second edition is written for professionals who want to know more about the trends in both equipment and techniques in professional portable video. College and university students who intend to pursue careers in video will find that the information in this book will help them get and keep the crucial first job. The basic concepts and theory presented in the book will be useful not only to professionals and students, but also to the home video maker because good video is a goal shared by all. It no longer takes a \$40,000 camera and a \$100,000 edit system to tell a story or record a once-in-a-lifetime event on video. This book is written to help any video practitioner do the job properly.

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1 Electronic News Gathering (ENG) and Electronic Field Production (EFP)

In the mid-1970s broadcast news production exited the studio to capture news events in a new way—a way that would allow the instant replay characteristic of video production. Until that time, news events were shot on 16mm film, which needed to go to the TV studio or film lab for processing before being shown on the nightly news show. “Film at eleven” was a common announcement during the six o’clock news about a late-breaking news story because the film was still being processed.

In the early 1970s, portable video cameras smaller and lighter than existing studio cameras were introduced. In addition, these cameras were battery powered and designed to give acceptable video images with less lighting than studio cameras.

By the late 1970s, the use of portable video cameras became widespread for news coverage. Many TV stations gladly gave up the use of the film-processing lab and film-editing bench for the videotape editing bay. Videotape of a news event delivered to the station before 5 p.m. could easily be edited and aired at the edited and aired on the 6 p.m. news. This new method of covering and promptly airing the news became known as electronic news gathering (ENG). News coverage became electronic because videotape creates an image by an electronic rather than chemical process.

At about the same time that news operations began using portable video cameras, hospitals,

government agencies, corporations, educational institutions and independent production houses began to use portable video as well. This became known as electronic field production (EFP). It was used for documenting and archiving healthcare procedures, disseminating information, promoting products and services, doing public relations and providing entertainment. The ease of recording images with instant playback or re-recording over previous footage was well suited to groups with less-experienced camera operators and smaller budgets.

The main thing that both ENG and EFP have in common is high-quality video production using portable equipment easily transported outside of the studio. This equipment has also become available to consumers. In fact, the largest group of users of portable video equipment is home video enthusiasts. Sales of video cameras for use in the home have grown rapidly since 1980. In fact, about 15 million **camcorders**, or combined video cameras/recorders, are currently in the hands of consumers in this country. Most home video work is personal event coverage, such as birthday parties and graduations. (See Figure 1.1.) But there is a growing segment of home video camera users who use their cameras for more sophisticated entertainment projects and electronic news gathering. Many local TV stations and even Cable News Network solicit videotapes of newsworthy events from amateurs who keep their camcorders handy

Figure 1.1: Shooting home videos

in case a big story occurs in their vicinity. Although the technical quality of the video shot by most amateurs cannot match local broadcast standards, amateur video sometimes shows events that professionals could not possibly know about in advance or could not get to soon enough after the event happened. Examples include explosions, plane crashes, fires and ship tragedies. (See Figure 1.2.)

Not only is some video shot by amateurs shown nationally, but like the police brutality video shot in the spring of 1991 in Los Angeles, some amateur video can cause changes in local government or even more far-reaching social change. An amateur video enthusiast shot some video of dolphins being slaughtered while fishing boats were attempting to catch tuna. The exhibition of this tape led to such strong sentiment against the corporations that canned and sold the fish that these corporations decided to promote “dolphin-safe tuna” to remain in the good graces of the buying public.

ENG—CAPTURING THE EVENT

ENG, or **electronic news gathering**, is just what the name implies—shooting videotape for TV news. The style of shooting evolved directly from the 16mm filming style of early TV news and the newsreel style developed since the early 1900s. The primary concern is capturing an event on film or videotape, regardless of how much quality must be sacrificed. This can mean everything from shooting from the shoulder instead of from a tripod to underexposed, off-color footage due to bad lighting conditions.

Quality is important, but the event being recorded can supersede any quality standards. To stop taping during a police shootout because the sun set and there was not enough light for a good picture would not make sense. Any image that can be recorded is better than no image at all. Sometimes the audio may save the story or even be the story if no image is visible. The sounds of gunfire and screaming over a black picture can tell a story

better than someone describing it long after it has happened. The video photographer must decide when it is better to accept lower quality and get something on tape or save the tape and get shots in a different, more quality-controlled manner. When in doubt, it is wiser to do it both ways and decide which is better when editing.

Time is also a big factor in ENG taping. It would be nice to set up three or four lights to do an interview, but if the senator only has two minutes, the news photographer must use a **sungun** (a portable light on top of the camera) on the subject's face. The lighting may be hot and flat and produce bad shadows and no background, but watching the senator live on camera responding to charges is more important than appearance. On a different day when there is a half-hour allotted for a 10-minute interview, the time can be spent making the subject look as attractive as possible.

ENG is a style in which decisions are made on a case-by-case basis and sometimes on a shot-to-

shot basis. Often the news photographer must make a split-second decision; the slightest hesitation could ruin the shot. There is little control available; action cannot be stopped or repeated. Most of the time the photographer has no idea what is going to happen next or which way participants will go. The key is to be prepared for anything at anytime.

Work in the ENG field revolves around two simple ideas: the script will be written later and everything that will visualize that script must be shot by edit time. An ENG photographer also functions as part field producer, director, reporter and writer. Many decisions need to be made so quickly that there is no time for discussion. The photographer must make these decisions without hesitation. This is, of course, only one extreme of ENG style.

For much of the daily work of a news photographer, there is a considerable amount of communication with the reporter and others regarding the

Figure 1.2: This shot was recorded by a home video enthusiast who arrived at the scene of a raging fire before the professional news crew. Dramatic shots like these are often purchased by local TV stations for use in their newscasts.



way things are done. The job and the end results are always better when several ideas are brought forth to find the best solution. The ENG photographer must be able to work as a member of a large team including reporters, a field producer, director and others. (See Figure 1.3.) At the other extreme is the ability to work completely alone with no one to help with decisions or equipment. In this situation, the entire story depends on the photographer.

EFP—STUDIO PRODUCTION ON LOCATION

EFP, or **electronic field production**, refers to moving studio production into the field, or on location. The biggest difference between ENG and EFP is the way they are scripted. In ENG the script is written after the story has been shot—scripting to the video. In EFP the script is written first and the video shot to fit the script. This difference can also be described as control; the EFP photographer has control over the subject where as the ENG photographer, in most cases, does not.

There is also a difference in the length of the story/project. ENG scripts average 1½ to 2 minutes. EFP projects (except commercials and public service announcements) are often much longer. Locations are scouted and conditions are planned for in EFP work. If the lighting is better in early morning, then the shooting is scheduled for that time. Lighting, microphones, tripods, dollies, props and any other special items can be arranged before the crew members leave the studio. They know in advance what the situation will be and what they will be required to do.

EFP work can also be done by a single person. A photographer with a basic set of gear can do many of the simpler types of jobs seen in the smaller markets. The mom-and-pop commercials, political ads, public service announcements and location shots can be done by a one-person crew. As the complexity of the spots and setups, lighting and props, for example, increases, the need for additional crew members increases. Most larger productions come from ad agencies or in-house writing staffs; they even provide a producer or

Figure 1. 3: An ENG crew shooting a standup on location during a breaking story.

