

FOURTH EDITION

VIDEO

FIELD PRODUCTION
AND EDITING

RONALD J. COMPESI

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Video Field Production and Editing

 **Fourth Edition**


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Preface

Over the past three decades, a seemingly endless stream of technological developments has made video equipment smaller, less expensive, and accessible to more people. These changes revolutionized the field of video production. The introduction of lightweight, portable video field production equipment has moved video production out of the studio and into the field, and the development and refinement of reliable, inexpensive editing systems has made postproduction editing more important than ever in the video production process.

Today, the personal computer is finding increasing use as a video production tool and as a means of displaying multimedia programs that integrate video with sound and text. The development of the new $\frac{1}{4}$ " digital video cassette recording format, aimed at both the consumer and the professional markets, promises to usher in a new age of digital media production and democratic communication.

When the first edition of this book appeared in 1985, single-camera video field production represented a relatively new approach to video production. Most college and university courses in video production were taught in the context of multicamera studio production, and even in the world of professional broadcasting, one-piece camcorders were still a relatively new and expensive form of technology.

The world of video production has changed significantly since then. Video field production is now well established as one of the three major modes of production (studio production and computer-generated imagery are the other two), and in the time that has elapsed since the publication of the first edition of this book, video has become an increasingly important part of American life. Video camcorders and VCRs have become almost ubiquitous in American homes and offices. Video is widely used in education, business, medicine, and law as well as in the traditional broadcast arena.

This new edition of *Video Field Production and Editing* reflects the changes in technology and production processes that have taken place since the publication of the third edition. However, the central purpose of this book remains the same: to provide a text for students involved in video field production concentrating on production techniques and tech-

nology appropriate to single-camera electronic field production (EFP) and electronic news gathering (ENG). The principal features of the book are:

1. A focus on the single-camera/camcorder video field production process, with an emphasis on portable video (8mm/Hi8, VHS/S-VHS, $\frac{3}{4}$ ", Betacam/Betacam SP and $\frac{1}{4}$ " digital video cassette) equipment. This new edition is illustrated with many new photographs of video field production and editing equipment and the chapters on lighting and graphics and design have been significantly revised to reflect current production equipment and practices.
2. A four-color insert of color photographs illustrates basic principles of the color video system and production techniques dependent on color signal processing (following page 48).
3. A fusion of technical and aesthetic concerns. The book discusses production strategies and processes, as well as principles of equipment operation.
4. A full discussion of the elements and techniques of video recording and postproduction editing. These chapters have been expanded and reorganized to provide separate discussions of editing aesthetics, linear cuts-only editing, and A/B roll and digital nonlinear editing. Expanded discussions of new digital videotape and disc recording formats and nonlinear editing are included.
5. The appendixes contain a series of production exercises designed to help the potential producer develop production competence as well as additional information on lighting and remote production planning.
6. As in the previous editions, key words are identified in boldface throughout the text. The book contains a comprehensive glossary of terms and a bibliography of books and periodicals of interest to the video producer.

The organization of the book reflects our concern with providing a discussion of the production techniques and organization that are commonly used in video field production as well as of the technology that makes this kind of production possible. As a result, most chapters are divided into two parts: one section deals with the technical aspects of production, the other deals with production techniques or aesthetics.

Throughout the book, we have attempted to aim the technical discussion at the general reader who has little or no technical background in video or electronics. We hope that through your experience with the text, you will let us know whether we have hit or missed the mark.

Each chapter is a self-contained unit, and the chapters may be read out of sequence without causing problems. For example, the material in Chapter 12 may serve well as an introduction to the book as it provides an overview of the major components of the field production/planning process. We have had success assigning that chapter early in the semester and then reassigning it as a refresher near the middle or end of the course.

One other comment deserves to be made here. The focus of the book is on video field production, but this needs to be qualified. We have primarily concentrated on what some writers have called "small-scale" field production because this is the type of production that most student and home video producers (as well as many independent and broadcast producers) are most often engaged in. We are concerned with productions that involve a minimum amount of field equipment and a small crew. The video producer who has access to a camcorder, a few microphones, a small lighting kit and a simple editing system will find that this is the level of production that we principally discuss. While we do provide some descriptions of larger-scale productions and production equipment, this is not the primary focus of the book. We should note, however, that small-scale production does not mean amateur production. Because the line between broadcast-quality production and equipment and nonbroadcast production is a thin one indeed, we stress professional standards of production throughout the book.

Acknowledgments

We owe a great debt of gratitude to the many people who have contributed to the making of this book. Our colleagues in the Broadcast and Electronic Communication Arts Department at San Francisco State University and the School of Journalism and Communication at the University of Oregon have provided invaluable assistance as this book has evolved through four editions. In particular, we would like to thank Larry Whitney, Pete Seel, Herb Zettl, Phil Kipper, John Hewitt, C.J. Grant, Vinay Shrivastava, Hamid Khani, and Bill Willingham. Thanks are also due to our many students at the University of Oregon and San Francisco State University.

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Bob Avery (University of Utah) and Bill Barke and Steve Hull of Allyn and Bacon contributed significantly to the first three editions. Joe Opiela and Kate Tolini helped move the fourth edition from concept into actual production. And Susan McNally and Denise Hoffman significantly raised the design standard for the book through their careful integration of text and graphics.

Special thanks are due to Cathy Sandeen for her encouragement and constructive criticism through four editions of this book, to Marisa and Cara for being cooperative models and giving up their computer games while Dad was using the computer to revise the manuscript, and to Mary Sherriffs for her patience and support. This book is dedicated to them.

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Introduction

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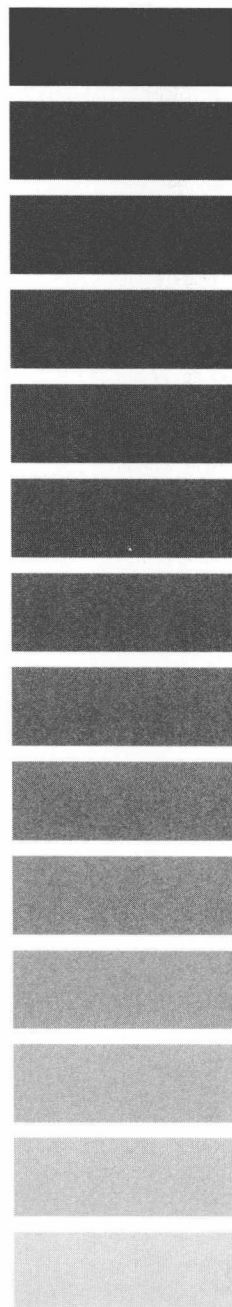
In the Field with *Evening Magazine*

The clock on the train platform reads 6:30 A.M. as I climb aboard the train and head for the city. The sun is not yet up and the usual bay fog hangs over the water as the train pulls out of the station. Today is a big day. In a few hours, I will be on the road with the crew from *Evening Magazine*, accompanying them on a remote shoot to see how things are done in the real world of video field production.

In less than 30 minutes, the train reaches the downtown station and I hop off and head for the escalator to street level. The sky has brightened considerably as I join the other morning commuters in their trek to the office. The fog has left the pavement slick, and I walk carefully as I thread my way through the downtown streets to the television station where I am scheduled to meet the field producer who has invited me along for the morning shoot. I arrive at the station at 7:30 and Mike, the producer, arrives moments later. We are not scheduled to leave until 8:30, so we duck into a restaurant across the street for a quick breakfast and some strong coffee.

Today's shoot centers on Tom K., a 24-year-old patient at a nearby medical center. Several months ago, Tom was stricken by a virus that seriously damaged his heart. Today, his heart is working at only 15 percent of its normal capacity—the damage done by the virus is severe and irreparable. He has been on the waiting list for a heart transplant for over a month.

The story being planned by *Evening Magazine* focuses on Tom and on a fund-raising effort that has been organized by some of his friends. They



plan to water-ski over 70 miles in the ocean to publicize Tom's case and to solicit funds to help pay his medical bills. The story will consist of interviews with his friends, actual footage of the open-ocean water skiing, and interviews with Tom and his doctor. The latter interviews are scheduled to be recorded today. We have a 9:30 A.M. appointment with Tom at the medical center.

Mike and I finish breakfast and walk the short block and a half back to the station and go up to the *Evening Magazine* offices. There's not much activity at this time of the morning. The office occupies one corner of the floor of the building. Sections of the office have been partitioned off into small cubicle-like offices for the staff members. Two permanent rooms off to one side house the videotape editing equipment and serve as work stations for the two videotape editors. Several other offices have been assigned to the show's producer and associate producer. Large windows face out into the city and toward the bridge across the bay.

Mike makes a few last-minute phone calls as we prepare to leave the station. Rita, the camera operator, or "shooter," has arrived. We're waiting for Don, the production assistant. It's Don's job to drive the van that will carry us to the medical center, which is about an hour's drive south. At 8:30, there's still no sign of Don, and Mike begins to get a bit agitated. It's crucial that the interview be completed today, as Tom could receive the transplant at any time and the interview must be finished before the operation. Mike is getting more anxious. Finally, Don arrives.

The van is parked in the basement garage, along with other station vehicles and the employees' cars. The sides and rear are decorated with the distinctive logo that identifies *Evening Magazine*. I notice an electrical extension cord trailing out a window into a wall socket. This connection to power is being used to charge up the extra batteries carried inside the van that will power the video equipment in the field.

We all pile into the van and head toward the freeway through the early morning traffic. Three bucket seats hold the driver and two regular passengers. I get to sit on a milk carton next to the sliding door. The interior of the van is paneled and carpeted, and shows the effects of plenty of wear.

Against one wall of the van is a metal cart. On it are various pieces of television equipment: a color monitor, a portable videocassette recorder (VCR), and a forest of cables. Next to this, against the same wall, is a shelf holding half a dozen or so batteries, all locked into the charging unit. Above them is a shelf of videocassettes. On the floor at the rear of the van, on a small rectangular piece of carpet, lies the camcorder. The body of the camcorder shows signs of wear. It's scratched and dented in the places that are not covered over with decals. The *Evening Magazine* logo is evident. One side of the camera carries a decal of Chinese ideographs—a souvenir from a recent trip to the People's Republic of China.

We arrive at the medical center at 9:30 A.M. and, after some negotiation with a traffic guard, manage to park the van in a red zone near the

main entrance to the hospital. Mike goes inside to confirm the interview arrangements with the publicity director of the hospital, and Rita and Don begin to take equipment out of the van.

While Mike is inside, Rita and Don talk about whether today will be a two-tape day. The discussion is important from a planning standpoint because Don has responsibility for bringing along enough blank tape to record the interviews. If he brings only two tapes and they need a third, he will have to return to the van. However, more important than the planning considerations is what a two-tape or three-tape day means in terms of the amount of work the crew will be required to perform. On a two-tape day, they finish work earlier than on a three-tape day.

A few minutes later, Mike returns and indicates that everything is set—the interviews can go on as planned. For the next 10 minutes or so, he gives a quick overview of the story as he sees it. He indicates that when the story is edited, it will begin with a montage sequence built out of the water-skiing shots, and then the piece will establish the main theme—that this is a benefit for Tom. Mike talks briefly about the interview segments with Tom and his doctor and mentions some specific shots he would like to have: a shot of Tom walking down a hallway to establish him and the location, shots of Tom being examined by his doctor, and so on. At 9:45, we head into the hospital. Rita carries the camcorder and a tripod. Don has a shotgun microphone and some headphones. I'm carrying a canvas bag filled with tape, cables, batteries, extra microphones, and other miscellaneous equipment, and Mike has a large soft light and stand in hand.

We set up the equipment in a hallway and Mike introduces us to Tom. He's extremely personable and jokes about his health and his role in this program. "I've never been on TV before," he deadpans. "I feel like one of Jerry's kids."

Between 10:00 and 10:45 A.M., the crew shoots at least six different situations with Tom. The establishing shot Mike called for is staged in the hallway. Two takes are recorded, since Tom looked at the camera and laughed in the first one. The camera is moved outside, and we record several takes of Tom entering and exiting the hospital. Then it's back inside the building to record him as he is weighed on a scale in the hall, as his blood pressure is taken in an examining room, and as he talks with the nurse who has been supervising this activity. The entrance of the doctor into the examining room is staged and recorded, then his actions in the room are recorded without any rehearsal or guidance from the crew.

Throughout most of the taping, the crew members ask the nurse, the doctor, and Tom to go about their normal business and not pay any special attention to the camera. Rita, the camera operator, busily focuses on different elements of the activity. I notice on several occasions that she appears to reshoot something she has just shot; for example, at one point she started a shot on a close-up of the nurse and then panned across to Tom. Apparently unhappy with the way the shot came out, she refocused on the nurse and repeated the shot.

At 10:45, Mike interviews Tom's doctor in the hall outside the examination room. The light is set up, a small microphone is pinned onto the doctor, and the interview is completed in about 10 minutes. Hospital personnel freely move through the hall as the interview takes place. Once again, Don and Rita tell the hospital personnel not to worry about interfering with the crew's work.

At 11:10, we move upstairs to the Cardiac Echo Lab, where a sonar device will be used to show what the inside of Tom's heart looks like. The output of the device is displayed on a small television monitor. It's eerie to watch Tom lying on the examination table and to see his heart beating on the nearby television screen. Rita records the image on the screen and also records the doctor as he traces over Tom's chest with the sonar device. Don uses a shotgun microphone on an extendable fishpole boom to record the sound.

We move back downstairs and out to an exterior courtyard to set up for the interview with Tom. The fog has reappeared and the day is a bit gloomy. Rita finds a bench for Tom to sit on and decides she will need to use the soft light to add some brightness to the picture. We find some exterior electrical outlets to plug in the light. A large piece of blue plastic, a conversion filter, is clipped onto the front of the lighting instrument so that its light matches the color of daylight.

Don worries about the noise being generated by air conditioners protruding from the building walls into the courtyard. He conducts an audio test and decides together with Mike that the sound is acceptable. At 11:25, Tom joins us outside and Mike conducts the interview. He has some questions written down in a reporter's notebook and asks the questions from off-camera. The interview is short—approximately 10 minutes. We thank Tom for his help and he heads back inside to wait for the day when a heart is available for transplant. We dismantle the equipment and return it to the van. Rita pops one of the videotapes into the VCR on the rack inside the van and checks the picture quality and sound on the monitor. Everything is OK. My watch reads 11:48 as we climb into the van to head back to the station. It was a two-tape day.

During the next week, two events occur that have significance to the story. First, the crew goes out in the middle of the week and shoots the ocean water-skiing footage. Unfortunately, the weather is bad and the sea is rough, and the skiers are unable to complete the planned 70-mile event. Then, one week after our interview with Tom, a compatible heart becomes available for transplantation. The operation is completed without complications. About three weeks after the interview with Tom was shot, the story is broadcast on *Evening Magazine*. It appears as a hopeful story of a young man's fight to win back the life that had hung so precariously in the balance.

The kind of production typified by *Evening Magazine* represents an approach that has become one of the dominant modes of video produc-