

PROGRESS REPORT



Pasadena City College students working in control room. Much of the equipment has been generously donated by SMPTE sustaining members.

SMPTE Student Chapter. This can be any high school, community or technical college or university having a good television, film, or multimedia program. Discuss the concept with the course director and/or principal and advise your Section's Student Chapter Manager of their interest in the program. Alternatively, contact Head-

quarters, an EdCom member, or myself.

2. When you attend a meeting that has particularly good educational content in the form of a PowerPoint or video presentation, ask the presenter if he/she would like to have the material used for student training at approved SMPTE chapters. If so, again pass the

details on to your local Section, Headquarters, an EdCom member or myself.

Acknowledgments

The Educational Committee includes the following hardy souls: Gordon Ballantyne, Jay Ballard, Paul Beck, John Carlson, David Corley, Allan Curtis, Jim Edwards II, Herbert Farmer, Gerald Finn, Harry Foulds, Ben Homenick, Carolyn Kinzie, Fung Lam, Don McCroskey, Harold Miller, Fred Motts, Ross Mutton, Michael Pecci, Michael Pietrowski, David Prince, Milton Shefter, Winniphred Stone, Charles Swartz, Gary Vann, and John Walsh.

I am grateful to members of the Educational Committee for their efforts on our various initiatives, and would also like to thank members of the Executive and Board of Governors for their counsel and support. We would be remiss not to recognize the work of Fred Motts, Zoila, Marilyn, Carl, Jeff, Linda, et al., at Headquarters, without whose support our efforts would be in vain.

New England Section Experiments with Wide-Screen Live Telecasting

Paul R. Beck, Secretary/Treasurer, New England Section

With all the ballyhoo and hoopla about 16 x 9 and HDTV, members of the New England Section of SMPTE have been fairly well flooded with information about wide-screen telecasting and DTV and HDTV issues for several years now.

In October of 1998, two members of the New England Section undertook an educational experiment with 16 x 9 format. Seizing an opportunity to work with a mixed production crew of communications students and a public cable access all-volunteer group, they filmed a two-hour live concert with a full symphony orchestra, which was held at the Performing Arts Center at Regis College in Weston, Mass.



Paul R. Beck

The Civic Symphony Orchestra of Boston is a professional association of musicians, with ties to the famous Boston Symphony and Boston Pops

Orchestras. For several years, their full-length concerts have been televised by various broadcast and cable undertakings, with the final tapes being aired on many regional cable outlets in the New England area. Foxboro Cable Access had been involved with the video-capture of at least five of these seasonal events, each time providing rather substantial equipment and a crew roster for the project. Typically, similar past Symphony Orchestra events required six to nine cameras for effective coverage.

As the production plan for rehearsal on October 17, 1998, and taping of the full concert on October 18 went forward, the decision-makers were struck by the brainstorm.

If so much effort and time was being expended, it was too bad the project

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could not be done in HDTV, or at least in wide-screen 16 x 9 format, since we will all be living with that format in a few years, perhaps only months, from now. The SMPTE colleagues were Marc Altman, senior broadcast engineer for NCP Mobile Productions, and Paul Beck, director of engineering at Emerson College.

We were confronted with the difficult task to somehow scour up several 16 x 9 format cameras, with only about 24 hours notice. Even given several months, we felt that we would have difficulty in finding providers of six or seven cameras with 16 x 9 capability, and would certainly not be able to obtain them for one-time use without significant rental or transportation costs. The concept of doing a full-length symphonic event in modern 16 x 9 format looked doomed, even on an experimental or educational basis, as we wound up rehearsal on Saturday afternoon.

Since we were all set up with our existing 4 x 3 aspect cameras, all being decent 3-CCD modern-type cameras with studio viewfinders and rear lens controls, a marvelous thought struck us. Why not simply mask off the director's monitors in the mobile van and the camera viewfinders for creating a 16 x 9 aspect ratio format, and simply proceed with a normal video recording using NTSC 4 x 3 aspect equipment. If need be, "letterbox" masking could be performed for the top and bottom after the project had been edited to its final form.

The crew was most excited about this prospect, and voted unanimously to proceed with that plan. Our crew was a diverse assembly of high school teachers, several high school and college students, a retired police officer, and the two "professionals" in SMPTE, Altman and Beck.

The monitors and viewfinders were indeed masked off using white gaffer tape, with the simple approach of a 2:1 masked format, which assumed slight cropping to 16 x 9 in the final letterbox. To insure identical masking on all monitors and finders, a homemade 2:1 test pattern frame was created on a computer graphics program and printed out as a Word document. One camera was used to televise this special masked scene, and that signal was sent via the

"Return-video" feature of the camera viewfinder system. Thus all camera finders were masked with white tape, using the same "test" signal. A similar approach was performed with each of the director's monitors in the mobile van, albeit a bit more time-consuming, since the signal had to be fed into the rear BNC connector port of each individual 9-in. black-and-white monitor, and they were not easily accessed. The color Program and PreSet monitors were also masked in this fashion.

Thus, our mixed bag video crew of amateur, student, teacher, and "professionals" began the process of engaging in the first real taste of what things will look like in the new emerging 16 x 9 format. Our first impression was that extreme close-ups of single performers with their instruments seemed inappropriate and cumbersome. We felt that decent 2-shots, perhaps even 3-shots seemed to provide a more balanced and pleasing picture, even without the close-up of the instruments.

It seemed that the new "forced-perspective" of the wider image format demanded greater care and "majesty" when panning or tilting. This was especially true when shooting from oblique side angles where two cameras were cross-shooting from opposite wings of the main stage, shooting "down-the-line" of a row of musician with flutes, brass or wind instruments. Panning when action was occurring within the frame seemed to be disjointed and disruptive. We found ourselves tending to stay on appropriately-framed shots a bit longer than we might have in 4 x 3, and then cutting or dissolving to an alternate scene, rather than panning-on-action. Frankly, it took a bit of time to simply get acclimated to the new wider format.

The problem arose too, as it always does when covering a musical event with fast-paced action, of falling behind in getting on and *off* the right shots with appropriate timing. More than once we were caught in the embarrassing position of dwelling a moment too long on a group of musicians, having them end a musical phrase, then put down their instruments for a moments rest while another group of violins or cellos took over the action. It seemed that being "caught" in that situation with 16 x 9 format images was far more painful,

perhaps because the scene showed *several* musicians coming to a conclusion, rather than a single individual. Having a dedicated "Escape Shot" camera had been anticipated and indeed was placed in a location where it provided an adequate wide shot for protection purposes. It was used more than once, to be sure!

We feel that when we attempt such a project again, there may be merit in having at least three "escape" shots available, if budget and resources allow. Having the traditional front wide shot is always useful, but with fast-moving instruments and groups within sections on the stage, we identified at least two other areas on the stage where an "escape" group shot would have been very useful.

Another advantage we seized in this project, again for experimentation purposes, was to roster what we termed "Close-up Cam" which was operated by SMPTE member Marc Altman, himself a trained orchestral musician, well versed in video capturing of a symphonic event. Marc had the difficult task of being the single camera operator shooting from behind a tormentor curtain on stage left, and charged with the task of being the rapid response camera for decent close-ups of the various instruments which were coming up as the concert progressed. We had the enormous benefit of a score reader who sat in the mobile van and gave advanced warning of selected solo instruments or special percussion issues, usually with about a 15-second lead time before the instrument played or musical phrase actually changed.

"Close-up-Cam" thus was kept mightily on his toes for the whole two-hour event. He was tasked with the issues of knowing *where* on the stage the various instruments were, being able to jockey his camera into adequate position for a favorable viewing angle, and dealing with the newer issue of proper framing for the 16 x 9 aspect. Candidly, SMPTE member Marc Altman did a super job with his camera, and performed yeoman service in his efforts to continue feeding reliable and interesting wide-screen shots. His compatriots from Foxboro High School, Sharon High School, and Foxboro Cable Access also performed wonderful service and deserve high praise for

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their accomplishments.

Members of SMPTE's New England Section will engage in several other similar efforts with the Civic Symphony Orchestra of Boston in the coming year.

It is planned that the Student Section at Mashpee High School and perhaps students from Stonehill College may engage in a collaborative effort with the Civic Symphony once again. It is hoped that our long-established Student Chapter at Fitchburg State College might also be able to participate in such a joint effort.

The bottom line of this report is quite simple: We discovered that 16 x 9

aspect shooting is not "Rocket Science." For educational and experimental purposes, standard 4 x 3 aspect gear can be readily "adapted" in a creative and inexpensive way. The opportunities abound out there for projects to experiment with, be they single-camera efforts or, as in our case, a 7-camera live shoot project. After all, when a 75-member professional orchestra invites you to videotape their performance, and gleefully submits to your erecting an array of seven or more cameras all around them, such is a marvelous opportunity for experimentation and education with our evolving electronic media.

We would have lost a great opportunity for development and inspiration had we not seized the moment and created the masks for 16 x 9 coverage.

The entire project is in post-production, having been mastered on U-matic SP, with S-VHS backup, using HiFi audio on the S-VHS for primary audio. The project is due for January 1999 completion, but as with many special projects, may slip a little into the early spring of 1999. Be assured that when it is completed, the SMPTE Educational Committee will have as many dubs as they require, and the tapes may enjoy wide circulation within the educational and experimental community.

HOPE REPORTS Thomas W. Hope

One of the major elements of the television and motion picture world served by the SMPTE is the production company. The largest producer segment, in terms of the number of companies, are the industrial contract producers who make up 47% of the U.S. total of 23,000. The other segments are entertainment producers, television commercial producers, captive in-house units,* documentary and proprietary—those turning out programs to sell off-the-shelf such as educational subjects.

The industrial contract producers in 1998 had a stellar year after a scary summer slowdown. Fear of a possible recession held off new programs for a few months. Industrial producers on the West Coast, and particularly Hawaii, felt the crunch of the Asian economic downturn all year.

What for years was termed the nontheatrical film industry has broadened to encompass a host of new media, both motion and still. The word "audiovisual" became a truly

unique generic term and still is used worldwide. As new technology has been pouring out of research laboratories, terminology has become a problem. Audiovisual, versus such names as media and communications, is still the best to encompass computer, digital, video, and traditional film technology.

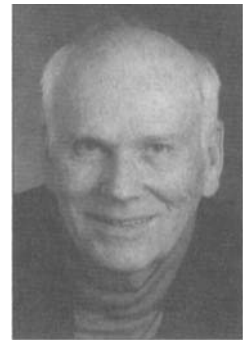
A Small Business Industry

This report pertains primarily to the 10,700 production companies best described as industrial contract producers.

Each year since 1995, *Hope Reports* has scoured the country to determine the 100 largest industrial contract production companies. The search does not encompass the 500 contract production companies specializing in producing national television commercials. By the time this report appears in the *SMPTE Journal*, the 1999 Top 100 will be well under way, based on 1998 production data. In the meantime, the basis for this 1998 review makes use of 1997 data (Table 1).

In 1997 the 100 largest industrial contract production companies in the U.S. had combined gross revenue of \$1.2 billion. That was 20.4% of the

total revenue for the 10,700 industrial producers, a respectable 21% increase from the previous year's \$1.01 billion. The largest company, in 1997, had gross revenue of \$150 million while the 100th company grossed \$2.2 million. There were more than 10,000 that did less than \$2 million in 1997.



Thomas W. Hope

Production Trend

Industrial contract production in 1997 increased 14.4% while other activities, principally meetings and staging, rose 28.4%. The production increases ranked in order from best to poorest were audio, live television, multimedia, film, Internet, and video. The strong meeting/staging reflects a healthy American economy in 1997; that same strength is expected in the 1998 results. The '90s have been remarkably good, ever since the recession that ended early in 1991.

Changing Presentation Business

In recent years a new development has swept over the contract production world—acquisitions. As they

* Television networks and stations, corporate in-house production units, government, university, and organizations.

A contribution received from Thomas W. Hope of Hope Reports, a market research organization located in Rochester, NY 14618. E-mail: hopereport@aol.com.