

# The Television Laboratory at wnet|13 news

December, 1974 Vol. 2 No. 2

## They Found a New Guru



Alan Rucker of TVTV tapes Rocky's testimony

Betsy Ross

Those who remember *The Lord of the Universe* — a 60-minute documentary whose subject was the young guru Maharaj Ji's descent upon the Houston Astrodome in November '73 will recognize the same video verity touch applied to Top Value Television's latest venture — *Gerald Ford's America*. It's part of a year's experiment backed by WNET and The Television Laboratory to work with TVTV in developing new ways of working with low cost portable videotape technology. Five or more experimental projects are intended to be completed by the end of the year which will explore new approaches to broadcast journalism, the videotape magazine, late night information-as-entertainment shows, fast-breaking news events, and short

journalistic features. *Gerald Ford's America* is the first project to get underway (with additional support from WGBH in Boston) and it is hoped that by taking a closer look at the traditional styles of broadcast journalism to date, new and more effective ways of presenting information may be developed.

TVTV, who first gained recognition with their unconventional porta-pak coverage of the 1972 Republican and Democratic National Conventions, collaborated with the Lab last year to produce *The Lord of the Universe* — television's first nationally broadcast program recorded entirely on half-inch tape. This past August, the fifteen members of the group began to prepare for *Gerald Ford's America* by traveling to Washington to set up an

alternate news bureau which would focus its attention on America's political hub and the people within the new Ford Administration. Packing equipment into the White House, press conferences, meetings of Congress and embassy parties, TVTV is promising to furnish a glimpse of the Washington we don't ordinarily see — in a way we don't ordinarily see it.

*Gerald Ford's America* is being recorded on half-inch tape — 80 per cent black-and-white and 20 per cent color — to perhaps change the economics of broadcast journalism as well. The final 120 minutes of tape will be divided into four programs: the first will examine the public image of Gerald and Betty Ford and the intriguing process by  
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# NYSCA Gives Fourth Grant

The New York State Council on the Arts has awarded funds to the Television Laboratory for the fourth consecutive year since the Lab's formation in February, 1972. The support, which totals \$94,000, will be used primarily for the production of a first-of-its-kind 26-week series to air over WNET/13. The series, which is scheduled to begin airing in January, will showcase works by the video community, concentrating mainly on those produced by New York State-based artists.

Said Lab's Director David Loxton, "This grant from the Council for such a series enables us to explore something we've believed in for a long time — that there is a significant body of works being produced by independent video makers that warrants weekly exposure on the public television system. We feel that audiences are demonstrating an ever increasing awareness in the possibilities of television and that this series will provide a meeting place for the

growth of such awareness."

Funds were also made available for the continuation of a short-term residency program for several New York State artists (to be selected later in the year — see page 3), and for the purchase of Consolidated Video Systems' new time base corrector.

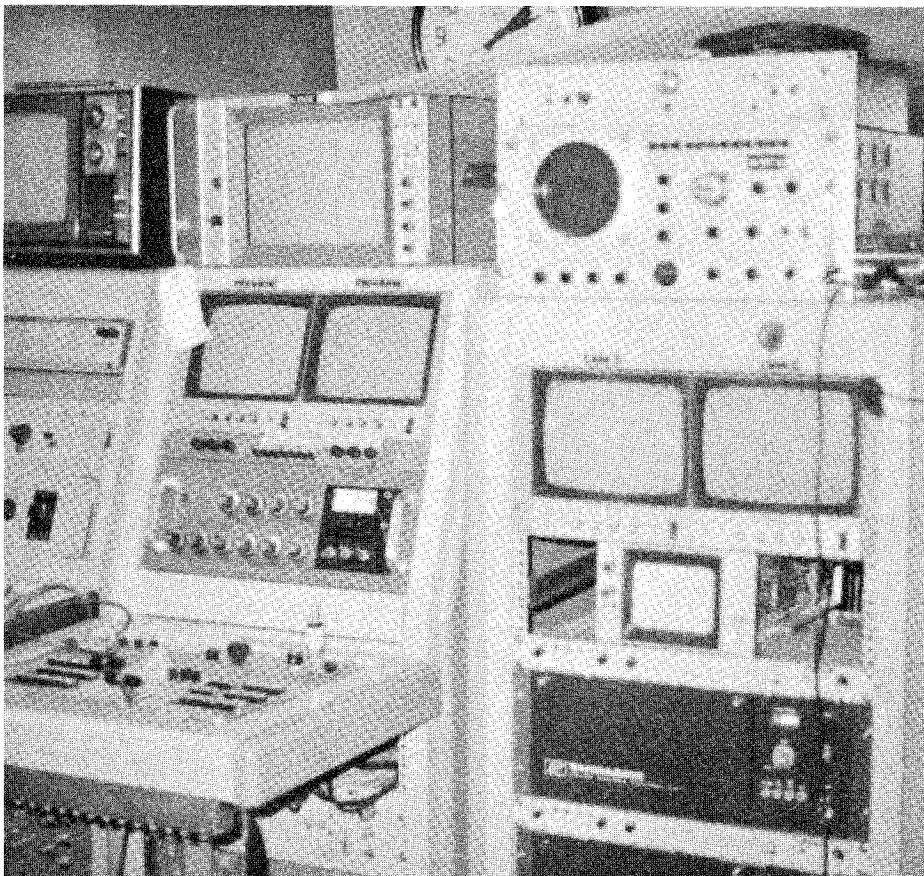
The New York State Council on the Arts has played an important role in the Lab's development as a center for experiment and technology. The first grant in 1972, made possible the purchase of equipment needed to transform Studio 46 into a working laboratory — items included cameras, monitors, recorders, editing decks, and the Paik/Abe Synthesizer. Funds were also made available for an artist-access program which enabled artists of all walks to explore the Lab's facilities on a short term basis. In 1973, a subsequent grant enabled the purchase of additional equipment, a stipend for the residency of Nam June Paik, and production funds for the Lab's con-



Lydia Silman, NYSCA

tribution to the Council-funded PBS series, *CAROUSEL*. The artist-access program continued through that year with Council support. In 1974, NYSCA supported the production of the 90-minute live special, *The Television Show* — a panoramic look at the history of television which explored new approaches to the information-as-entertainment format. It also made funds available for the purchase of the CVS-500 time base corrector — a revolutionary piece of equipment which enables the high quality transfer of half-inch black-and-white tape to two-inch broadcast tape. Under the same grant, six New York State artists were chosen to spend an extended period of time in the Lab completing innovative projects. And a PDP-8 computer was purchased in order to maximize the efficiency of studio functions while reducing and humanizing the technology — a system conceived by Nam June Paik.

Lydia Silman, the Council's Acting Director of the TV/Media Program stated, "The New York State Council on the Arts has long supported facilities such as the Lab in their encouragement of independent artists. We feel that this grant is a very timely one — artists and audiences alike are ready for the kind of exposure the Lab's weekly series will make possible." ◀▶



Early dollars from NYSCA helped build Studio 46.

# Lab Seeks Artists and Tapes

## Weekly Series . . . . .

In January, the Television Laboratory plans to begin a weekly series on WNET/13, showcasing a broad range of examples of innovative and creative utilization of video and the television medium. This series will be offered to as large an audience as possible, through the cooperation of the public television system. (See opposite page.)

We are inviting everyone who is interested in participating to send us their tapes. The TV Lab is equipped to handle most videotape formats, within the current capabilities of time base correction to broadcast quality. All tapes submitted should be original material or as high-quality dubs as possible.

Every tape submitted will be screened and considered for broadcast on the series, which will run from January to June, 1975. After screening, and, if necessary, transfer to 2" tape is completed, we will return your tapes as quickly as possible. If we decide to include your tape in the series, we will contact you. Any tape you submit must be yours or material which you have full permission to use, including all necessary rights and clearances for public television broadcast.

Please send your tapes to Carol Brandenburg, Television Laboratory at WNET/13, 304 West 58th St., New York, N.Y. 10019. Be sure to include the completed form below and please allow at least six weeks for return delivery. ◀▲

## Artists-In-Residence . . . . .

Following the successful initiation of a short-term artist-in-residency program last year, the Television Laboratory at WNET/13 wishes to offer again this season an opportunity for several artists to each spend a few weeks at the Lab working on a project of their own design. Development, rehearsal and production costs and a stipend to the artist will be covered by the Lab.

We would like to receive written descriptions of proposed projects, including estimates of equipment, amount of studio time required and other people who might be involved in a project, etc. Though we realize this will be difficult, we would appreciate the proposals being as specific as possible. In addition, please send resumes and information about any previous experience and work.

All proposals will be submitted to an advisory panel for evaluation, with final selection to be made by the Lab staff as soon as possible thereafter. This artist-in-residency program will run between now and June of 1975 and is open only to New York State residents. It is funded by the New York State Council on the Arts.

Send your proposals and accompanying material to Carol Brandenburg, Television Laboratory at WNET/13, 304 West 58th St., New York, N.Y. 10019. If you have any questions, please call the TV Lab at (212) 262-4248. ◀▲

Name \_\_\_\_\_

Address \_\_\_\_\_  
\_\_\_\_\_

Address \_\_\_\_\_

*(If tape should be returned to a different address, please note.)*

Phone Number \_\_\_\_\_

Title of Tape \_\_\_\_\_

Running Time \_\_\_\_\_

Format \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# A New Way to Rate Viewing Patterns

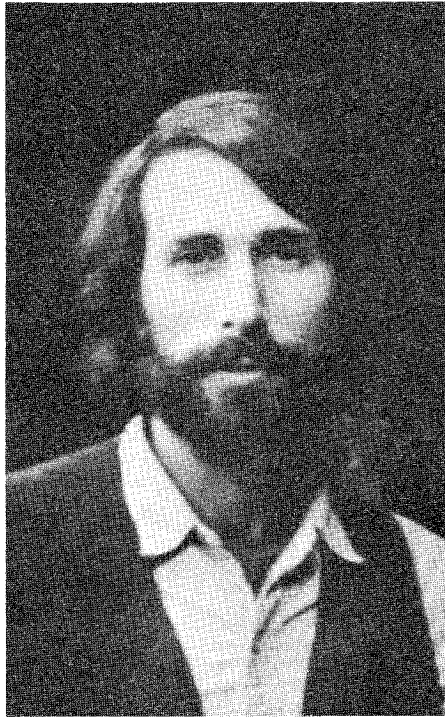
Peter Crown, Ph.D.

A vast amount of research has been done to study the effects of television program content upon audiences. A frequently employed method of study involves classifying shows according to content categories (such as Crime-Detective, Western, Comedy-Variety, Game shows, etc.), and then assessing viewing patterns as to the amount of viewing done in each category by groups of different ages, education levels, places of residence and so on.

This method implies a basic premise which states that the effects of programming on viewing habits are due to the overt content of the programming. Radically different approaches to assessing viewing patterns have recently been suggested. One of these approaches appeared in a recent article published in *Communications Research* entitled "An Information Theory Measure for Television Programming" by James H. Watt, Jr. of the University of Connecticut and Robert Krull of Rensselaer Polytechnic Institute.

Their method of approach is to consider the lower-order elements of program form, such as the frequency of occurrence of a given set location, and then to base a measure of programming on the least abstract elements that can be defined. In other words, a television program can be construed as a sequence of visual and auditory stimuli over time, an approach which does not depend on interpretation of content.

The five basic measures used are Verbal Incidence (i.e. frequency of character verbalizations), Verbal Time, Set Time, Set Constraint, and Nonverbal Dependence (i.e. visual emphasis). These measures are combined with the concept of "entropy", which is defined as the degree of *uncertainty reduction* in the receiver (viewer). The importance of the entropy concept can be illustrated by considering two identical camera shots of an empty room, one lasting twice as long as



Peter Crown

the other. After seeing the room for a given amount of time, the viewer cannot gain any additional information from the shot. Entropy, then, reflects both the form of the program in stimulus terms, and information processing by the viewer.

Putting this together, a program with a high score on Verbal Incidence Entropy would indicate "a large number of character verbalizations being randomly interspersed." From the viewer's standpoint, this would imply a greater difficulty in discriminating among characters and in keeping up with their interrelationships. Similar reasoning is involved for the other measures. Set Incidence Entropy, for example, relates to the difficulty in recognizing spatial or visual locations.

These measures of program form were applied to 168 shows from 58 series broadcast by the three commercial networks. In order to be useful, the measures should be stable for different shows within the same series. This in fact is what happened. Correlations for entropy measures of different shows were fairly high, and were statistically significant.

Using a statistical technique called factor analysis, it was found that the entropy measures boiled

down to two factors. A show which scored high on the DYNAMICS factor would have many sets, much intercutting, and a large number of characters who speak frequently, but for short periods of time. The UNFAMILIARITY factor has to do with the degree familiarity with both visual surroundings and with the character on the screen. These two measures combined are referred to as DYNUFAM.

When applied to the 58 TV series, the DYNUFAM measure gives similar scores to shows that seem to be similar on an intuitive basis. There are in addition, differences between shows in the same *a priori* category, such as situation comedies. For example, *Mary Tyler Moore* and *That Girl* are low on UNFAMILIARITY as compared with the *Beverly Hillbillies* and *Hogan's Heroes* which are higher on UNFAMILIARITY. The authors point out that it is these non-intuitive differences which can be valuable when the measure is applied to the prediction of behavior, such as viewing preferences.

As a test of DYNUFAM as a measure of program form, the authors compared DYNUFAM with two other measures of programming — one assessing violence content and the other using *a priori* categories (e.g. Westerns, Quiz shows, etc.). Actual viewing patterns for these series were related more closely to the DYNUFAM measures than to the other two measures.

The implications of this research are quite interesting. For example, if it is known that a viewer has a preference for shows with certain DYNUFAM scores, one could more accurately assess which show he would prefer from a choice of several if the DYNUFAM scores for these other shows were known. Also, the fact that viewing patterns are related to a measure which is completely non-content oriented is in itself fascinating. This does not mean that DYNUFAM characteristics are the only ones which influence a viewer's selection of shows. It does mean that on a statistical level, viewing is related to non-content variables. ◀▶

# Cuba—The People, Plus Three

On December 2nd, public television audiences viewed an intimate portrait of an intriguing country painted skillfully by the three members of New York City's Downtown Community Television Center. Cuba was the subject of the unprecedented 60-minute documentary entitled *Cuba — The People*, taped in half-inch color last spring by Keiko Tsuno, Jon Alpert, and Yoko Maruyama. They were one of the few American television crews to enter Cuba since Fidel Castro led the country to revolution in 1959. Keiko, Jon and Yoko's six week stay in the island country resulted in 45 hours of color tape which was time-base corrected at the Television Laboratory using the new CVS-504 time base corrector.

The Downtown Community Television Center, situated in the heart of New York's lower east side was founded by Keiko, Jon and Yoko in 1970 "...to provide needed services for an exploited, media starved community." Using portable videotape equipment to produce informational programs, they worked to give the community "the necessary intercommunication it has lacked for so many years." In 1972, curious about how a socialist country might handle the social problems they encountered during their work in New York's melting pot, Keiko and Jon ventured into

Cuba only for a few days. Although their visit was restricted, their interest had been piqued enough to work toward gaining full permission from the Cuban government to make an eventual prolonged stay.

After two years of correspondence and clearances, the Downtown Community Television Center was granted unrestricted access to Cuba. Shortly before official permission was granted, however, JVC had introduced the first half-inch color videotape system on the market. The group tried to obtain the model in the States for the expedition, but found that only three existed here — and were all for demonstration purposes. Determined to use the camera in Cuba, Yoko Marayama flew to Tokyo to purchase the system and arrived back just in time to make the scheduled departure from the United States. Accompanied by interpreter Carlos Diaz, they made their entry into Cuba in April 1974.

The first days in Cuba were spent test taping and experimenting with the equipment which included the JVC color camera and deck, two half-inch black-and-white cameras for back-up, a Panasonic deck, two monitors for playback, and a microphone. The Cubans, who "sincerely like Americans", treated the four and their collection of equipment with good-natured curiosity, al-

though they were surprised to see the two tiny women carrying and operating their share of the gear. "We handled that camera like a baby", says Keiko, "holding it carefully between our knees on bumpy cars and trains. We were so afraid it would break, and then how would we get parts?"

During their six week stay, they taped interviews with people from all walks of Cuban life — doctors, students, teachers, farmers, housewives, children — in hospitals, housing complexes, fields, bars, universities — asking sometimes sensitive questions. Unlike independent journalists Frank Mankiewicz and Kirby Jones who were admitted to Cuba in July to film an interview with Fidel Castro, the Downtown Community Television Center was not particularly interested in speaking with government authorities and officials. Their attention was focused more toward showing what life was like for the average person. "Had we been given a choice between an interview with Castro and an interview with a lesser government official," says Jon, "we would have chosen the latter."

The group was able to achieve remarkable rapport with the Cuban people, due in part to the subtlety of the equipment and to their own enthusiasm. "We were taping  
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The Cubans loved to entertain for the camera





## Lab Notes:

*Peter Crown, Ph.D.*, resident at the Lab whose work has focused mainly on the physiological and psychological effects of television, was invited to deliver the keynote address at *Video Expo V* held at Madison Square Garden October 1-3. Dr. Crown spoke about the psychology of television-watching and how applications of the new video technology can benefit work in that area.

*The Center for Media Study* in Buffalo, New York sponsored a conference in Albany, New York on the C.U.N.Y. Campus Center Ballroom November 21, 22. The conference theme was Educational Communication Centers and the Television Arts. Among the participants were the directors of the country's three video centers: *Fred Barzyk* of WGBH's Experimental Workshop, *Paul Kaufman* of the National Center for Experiments in Television, and *David Loxton* of The Television Laboratory at WNET/13.

*Howard Klein, Director for the Arts of The Rockefeller Foundation*, testified before the *Subcommittee on Foundations of the Senate Finance Committee*. Mr. Klein delivered his testimony on the role of private foundations in public broadcasting and summarized The Rockefeller Foundation's funding activities in public television since 1962. He stated that since the foundation did not have sufficient funds in the area to underwrite a major series such as *Sesame Street*, it made the decision to concentrate monies on the pre-production aspects of television. "Recognizing the concentration of artists in the New York area and the fact that WNET/13 at that time reached 25% of the total U.S. audience for public television, the Foundation cooperated with the station in establishing the WNET Television Laboratory — the first such major laboratory with its own facility."

*Studio 46* was closed for a period of time primarily to remove the video monitoring system from the control room, to install the new *Rutt/Etra* synthesizer and to complete the interface of the *PDP-8 computer*. The hardware aspects of the renovation are almost complete and software programming will commence shortly.

*Candi Harper* has joined the Lab staff as coordinating producer of the new 26-week video series which will begin airing in January. Candi, who was previously associated with WNET as a production assistant and then associate producer on several series' now works with *Grass Roots Video* outside of Denver, Colorado. Her knowledge of broadcast television and half-inch formats will be of valuable assistance in the preparation of the series. *Russell Connor*, Director of *The Cable Arts Foundation*, will be the series host.

*Vision News* is inviting essays and opinion pieces from readers. Contributions should be from 300 - 500 words. Include self-addressed stamped envelope. \$50 upon publication. Send to Editor, *Vision News*, 304 W. 58th Street, New York, N.Y. 10019. ◀▲

(Continued from Page 1)

which that image is maintained; the second program will turn the cameras on the press, "recording the news media as it records the event"; the workings of Congress and elections are the topics of the third program; and the last program takes an intimate look at the whirlwind social style of Washington.

Those who are looking for the conventional news reporter will not find it here. Instead, TVTV presents "impressionistic political reporting", appearing on camera almost as actors in a news drama.



TVTV's Anda Korsts and the Iranian Ambassador in "A Night at the Embassy".

Plus, the same innovative use of graphics and structure which is a distinctive mark of TVTV's work in the past will be an integral part of *Gerald Ford's America*. The goal is to present information in a more creative and interesting way.

Recently, Ron Powers of the Chicago-Sun Times said of TVTV, "...its use of porta-pak videotapes and its anticonventional blend of art, journalism, politics, and satire, is easily one of the most creative forces in American TV's mostly stagnant universe." In announcing the project, Lab Director David Loxton stated, "It is hoped that the over all demonstration of the project will help set new standards of professionalism for independent video and porta-pak users across the country who are all potential and valid sources of broadcast information." ◀▶

(Continued from Page 5)

crowds in the stands at a baseball game one day", relates Jon, "and we were using a sun gun which was apparently blinding the players on the field. The Cuban television cameras turned into the stands on us, taping *them*, and from then on, wherever we went, we were recognized from our appearance on Cuban TV."

The group feels that it has painted a true picture of the Cuban and his country, having explored just about every facet of life from government to the status of women. Had they been able to remain longer, they would have followed up on several stories. But time was short, as was the money which came from their own personal resources.

Upon returning to the States, Jon, Keiko and Yoko tried to sell their documentary to CBS, ABC and NBC news. All three network news units rejected the tape mainly because they are held responsible for what they broadcast and adhere to a policy of not accepting work by independent journalists. The Downtown Community Center then brought the rough edit to the Lab who presented the project to the WNET programming department. The Lab and WNET then co-ordinated arrangements for underwriting, tape transfer, editing facilities, and national distribution over public television.

Hopefully, the success of CUBA — THE PEOPLE will demonstrate several things to the television industry, summarized by Lab Director David Loxton: "There is no denying that half-inch tape has come of age. Out of it has grown a very new personal sort of journalism — one which must now be seriously considered by all the networks as an inexpensive and very viable means of distributing information."

The Downtown Community Television Center is supported by the New York State Council on the Arts. Funds for CUBA — THE PEOPLE were supplied by The Corporation for Public Broadcasting and Ford Foundation. ◀▶

## vision news

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# Getting Technical: Living Color

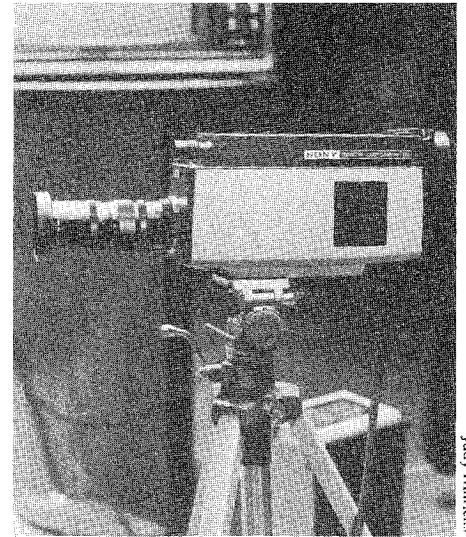
By John Godfrey,  
Supervising Engineer

The technology of television is changing with amazing speed. It was only a year ago that the Lab had put its CVS-500 black-and-white time base corrector to the test with *The Lord of the Universe* — the first nationally broadcast program recorded entirely on half-inch tape. In the past few months, color has appeared on the half-inch scene and the Lab has acquired a CVS-504 color time base corrector — this time having not one, but two opportunities to test the system. Top Value Television (TVT), with *Gerald Ford's America*, and The Downtown Community Television Center with *Cuba — The People*, have both chosen to use two separate half-inch color cameras, the Sony and the JVC respectively, for their individual programs, providing us with a unique opportunity to comment on the performances of these pioneer systems. Although both are a breakthrough in technology, there are advantages and disadvantages to the Sony and the JVC.

The JVC model, GC-4800-U, used by The Downtown Community Television Center for six weeks in Cuba was the first JVC color

camera to be used for such extensive purposes. Its main advantage is that it's about half the weight of the standard porta-pak, making it really ideal for mobility. It consists of two 3/4-inch tubes, making it capable of excellent definition and of a 400 line resolution under the right conditions. However, there were some serious drawbacks to the JVC which became apparent during usage. The first is that it gives maximum quality image under only the most ideal lighting conditions. The automatic gain control (AGC), appears to be too sensitive to handle brightness and shadow in the same image, or color temperature change — causing sometimes a 7 line video bounce and a definite swing to blue. This can sometimes be corrected by the right monitor, but is not correctable during transfer to two-inch without color correction. The second difficulty is the JVC's loose-wrap deck which just about rules out any walking or such movement while taping. This is quite paradoxical because of the camera's ideal walking weight.

TVT has been using the Sony DXC 1600 color porta-pak with a Sony 8400 deck for about six weeks. This camera is the standard weight, yet it does have a tight wrap deck making it easily more



Judy Hinrichs

mobile. Unfortunately, this deck employs a B-wind system which is somewhat of an annoyance to wind and rewind. Although the Sony has a single one-inch tube which sometimes causes a "ground glass" look to the image, it is more efficient in compensating for light levels and therefore gives a better over all texture to the image. It has a softer AGC and so far we have encountered no violent video bounce. TVT has found no real problems with the camera or the deck so far, but has packed along a black-and-white Tivicon to compensate for low light levels that the Sony might not be able to handle. So far this hasn't been necessary.

Both cameras need a certain warming up time to break them in and "unstuck" the new tubes — but the Sony tube needs careful handling and could burn out easily.

Readers should take into consideration that both these systems were used for the first time by TVT and The Downtown Community Television Center, and that these criticisms are intended only as an impetus to improve the technology early on.

The appearance of workable low-cost portable color systems is a real boon to the medium. Aside from effecting eventual change on the economics of the television industry, it lends new life to the many groups of people who are working with half-inch formats for valuable experimentation. ◀▶



Jon Alpert and Keiko Tsuno with the JVC.