Hallock and William Roarty joined together at the National Center to create *Untitled* which is undoubtedly a work of great historical magnitude and intense personal experience. This time painting takes place in the multidimensional videosphere where there are as yet no charts for navigation or stars to steer by. Hallock came to the National Center in 1971 from a long list of credits which include work as a director and producer, a carpenter, and a freelance film and tape cameraman. His experience as a freelance director in New York City brought him to the attention of Center Director Bruce Howard who later brought Hallock to the Center as a production supervisor.

William Roarty, the Center's graphic artist and Hallock's partner in creating *Untitled* was graduated with a BA in Fine Art and taught in the East before joining the National Center. He did a stint at WVIA-TV in Scranton where he came to the attention of Howard who brought him to San Francisco as an intern in the National Center program. In addition to the work which Roarty and Hallock have done together, Hallock has created a number of other video time paintings which embrace the components of art skillfully transformed by the electron into flowing rhythmic movement, not just at the surface of the cathode ray tube, but within. His work is an astronomer's vision of the heavens, the tube is his telescope and through it one is able to leave the reality of spaceship earth and journey behind the looking glass to a land of gas clouds and exploding nebulae where the forces of electronic creation are held in balance by the artist's extensions of his mind.

Beck, Roarty and Hallock were joined at the National Center in their search for stellarvisions by William Gwin (Capricorn), 1/1/47. Gwin's resume reads, "1950 (age three) decided I was a writer...1966-7 decided I didn't want to write and became a sculptor. Met my wife. Married my wife...painted...sold three paintings. B.A. in English Lit from Dartmouth." In 1969 Gwin became a general assistant at the National Center and in 1971 he became an artist in residence. He is now in NYC where he is said to be painting. Gwin during his residence at the Center wrote a definitive treatise on his work and experimentation entitled Video Feedback: How To Make It: An Artist's Comments On Its Use: A Systems Approach. Excerpts of his paper cannot convey the depth of the work entirely but are of great interest. To quote:

"Video feedback is produced by aiming a camera at a monitor; the camera actually takes a picture of itself. The patterns thus engendered can be altered in several ways, by exerting various controls over the electronics, and by affecting the optical path of the picture/monitor loop.

Every slight movement affects the pattern. If the camera is moved haphazardly, it will flash by things that haven't had time to appear. Miniscule, gradual movements are absolutely necessary in order to begin to attain some kind of control over the pattern.

Changing the relationship between the camera and the monitor will alter the feedback. A camera standing upright will give a spiral pattern; when the camera is tilted slightly, a circle occurs; a camera placed at a 90° angle produces a rectangular shape. Work at the Center is done with small Sony cameras; broadcast studio cameras are obviously too heavy to juggle in this way, so under these circumstances tilt the monitor. After the camera/monitor relationship is set, the optical variables to manipulate are the f stop, zoom and focus of the camera's lens.

Combining elements—any kind of material—with feedbacks means introducing other images into the light pattern of the feedback loop, thereby changing the original feedback pattern. Using two cameras, this can be done with any sort of object, a person, or with reflective surfaces such as pieces of mirror mylar. In the latter case, feedback becomes the fixed element, with the camera set and unattended, and the changes are produced by moving lights on the mylar pieces and by moving the camera which is picking up the mylar reflections.

Use of feedback becomes more sophisticated as electronic variables are introduced into the loop—additional cameras, level control from a switching device, reversed polarity, color, "special effects" (particularly keying), and time delays.

Negative polarity allows the same possible variety of patterns that occur with positive feedback.

Feedback's primary drawback for the artist is that, because of the ease with which one can produce lovely patterns, it is tempting to get caught up in the process of discovering it to the exclusion of anything else. Several years ago, a poet visiting the Center observed: "feedback is a whore." Its prettiness can be so enticing that time and energy are destroyed without leading to any serious expression or work. In this situation, it's been fun, but may be almost counter-productive to art.

Making with feedback is just like making with any other artistic tool: it takes patience to learn the use and control of it. This is time consuming, since there are so many variables involved in each feedback pattern. Often it is difficult—or impossible—to return to a form once produced. It's advisable, therefore, to videotape an intricate kind of feedback; you may never find it again. These tapes can form an "image bank" of material to be used later by themselves, or to be fed into another combination of images.

People often deal with feedback as an interesting "effect." As an effect, it's not very interesting. What's important is what's done with it. In my own experience, I prefer carefully using the same feedback as a different element in many tapes to concentrating on finding a new feedback form for each new work. They young state of video art tends to emphasize the new. So often with feedback it's just new, but compositionally rather uninteresting.

Is feedback a whore? I'd ask, "Are you an artist?" And, "Is feedback something you can use to make art?" It can be anything you make it.