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I KNOW A GUY: COLLECTING TECHNICAL DOCUMENTATION—LOCALLY

STEVEN VILLERREAL

ABSTRACT

In determining which materials can be responsibly digitized in-house, open reel video formats are frequently written off as too problematic to tackle and so remain in the purview of specialized vendors. In many cases this assumption is absolutely correct—scarcity of functioning playback equipment and the technical skills to operate it are logical deterrents. Here we take an alternate tack; we focus on collecting technical knowledge and equipment, and we document period production practices, keeping an eye towards in-house reformatting. The proposed case study is a collection of 1-in. IVC (International Video Corporation) video, salvaged by a former employee of Charlottesville, Virginia's early local origination cable station. Through contact with former station staff, we have sought to document the technical and production expertise needed to understand how equipment was operated and how tapes were produced. This outreach work has helped us to acquire rare playback equipment, while also putting us in contact with video engineers conversant with this archaic 1-in. format.

INTRODUCTION

As cultural heritage institutions have recognized the urgency of migrating rare and unique analog video content from unstable carriers, many have begun to establish facilities for in-house reformatting. The Preservation Services Department

at the University of Virginia Library, Charlottesville, has in recent years targeted audiovisual preservation as a critical area in which to expand our work, establishing reformatting labs for our most commonly held audio and video formats. Our initial estimation of what was worthwhile, cost-effective, and technically feasible to transfer in our video preservation lab focused on cassette-based formats. However, in creating more granular inventories of our legacy audiovisual holdings we have begun to find some rare early video formats. Here the focus is on the 1-in. IVC content comprising the Jefferson Cable Corporation collection, which led us down the unlikely path of carrying out our own digitization work of this open reel format.

In 2002, a curator in The Albert and Shirley Small Special Collections Library at the University of Virginia was approached by former station employee Steve Ashby. He had salvaged approximately three hundred 1-in. IVC tapes from the Jefferson Cable studios in Charlottesville shortly before they were gutted and sold to another cable conglomerate. He hoped to donate these tapes to the library. The tapes were accessioned by Special Collections and moved into off-site storage, though the lack of specialized audiovisual conservation staff meant that they received minimal attention. Perhaps more critical, these tapes became divorced from the context in which they were created as very little background information about the people who produced the tapes and the equipment they used was collected at the time of acquisition.

THE JEFFERSON CABLE CORPORATION

The Jefferson Cable Corporation was founded by Robert Monroe (1915–1995) in 1963 to serve Charlottesville as well as Waynesboro, Virginia, 40 miles to the west over the Blue Ridge Mountains (Stockton 1989). Monroe had an extensive radio production background, moved into managing radio stations in North Carolina and Virginia, and became intrigued by the developing market for cable television systems. Monroe is an unusual figure in that his passion outside of broadcasting was the exploration of human consciousness—he popularized the term “out

of body experience” and experimented extensively with attempting to alter brain patterns via sound. He would go on to sell the station in 1973, founding The Monroe Institute in nearby Nelson County, Virginia to focus full time on such research.

As in other areas where topographical variation limited the ability to reliably receive broadcast television signals, this early community antenna system gained a healthy pool of subscribers. We know their customer base exceeded 3,500 subscribers at the time of the Federal Communications Commission’s (FCC) 1969 ruling that cable stations of this size would be required to provide some locally originating programming, rather than simply aggregating the content of other stations. Production of local origination content began in Charlottesville in 1970 with the launch of the station WJCC 11. It is this locally produced television content that is found on the Jefferson Cable Corporation tapes acquired by the University of Virginia’s Library.

A TRIP TO THE BASEMENT

I first became aware of this collection in 2012 during the renovation of our Library’s off-site storage facility. Shortly after I began to work with the materials I arranged to meet collection donor Steve Ashby. I was extremely intrigued to hear that, in addition to salvaging the tape library, he also had been allowed to take the station’s three IVC-800 decks that had been used to produce these tapes. This prompted an expedition to the basement of Ashby’s home, where the equipment had been stored since he had rescued it. Two of the IVC decks did not function, but one of them powered up and we were able to play tapes, albeit with some major transport and picture issues. When Ashby had originally offered the Jefferson Cable collection to the library there was no interest in the accompanying hardware. However, the prospect of the University’s own functional IVC deck, with which we could preview and hopefully digitize content, redoubled my curiosity about this collection.

1-IN. IVC AS A FORMAT

Originally launched in 1968, the International Video Corporation targeted the industrial and education market, offering a way to meet FCC broadcast standards on a budget. In terms of the type of content it engendered, 1-in. IVC can be seen as occupying a space between 2-in. quadruplex and early ½-in video. This format was introduced before the creation of the Electronic Industries Association of Japan (EIAJ) standard for ½-in video and was seen as step forward for interchangeability, as tapes were playable between IVC decks, unlike many contemporary ½-in machines.

Like its main 1-in competitor format Ampex Type-A, IVC machines used a 360° alpha wrap to provide a reasonable balance between tape speed, runtime of a reel, and the bandwidth it offered. As in Type-A recordings, this results in a small signal gap at the point where tape is entering and leaving the scanner assembly (fig. 1). During playback, the visibility of this signal gap can be minimized by adjusting a tracking knob. However, as the sync signal is adjacent to this gap, operators frequently have to strike a balance between the visibility of this gap in the picture and acceptable signal stability during playback.

The type of IVC decks used by Jefferson Cable were the first non-quadruplex format to support the direct color system, and advertised the capability of recording full NTSC color information without resorting to a color sub-carrier (Leman and Eldridge 1968). However, faithful rendering of this information was dependent on tape transport functioning perfectly—some initial playback tests with archival tapes have shown difficulties with color lock. It is debatable how successfully IVC implemented direct color, perhaps an example of the disparity between stated technical capabilities and actual performance in the field (Redlich 2001).

KEEPING IT LOCAL

Ashby was able to put me in contact with many former employees of the WJCC 11 station, and I was fortunate to attend a reunion of Jefferson Cable staff in the summer of 2012. I was also introduced to the station’s former video engineer Larry Ritchie. He had been my original contact for diagnosing the semi-functional IVC-800, and he helped me document some of the modifications that had been made to this equipment. These included the addition of an expansion board that allowed for a heterodyne system output as an alternative to direct color. Ritchie showed initial interest in carrying out the intensive work

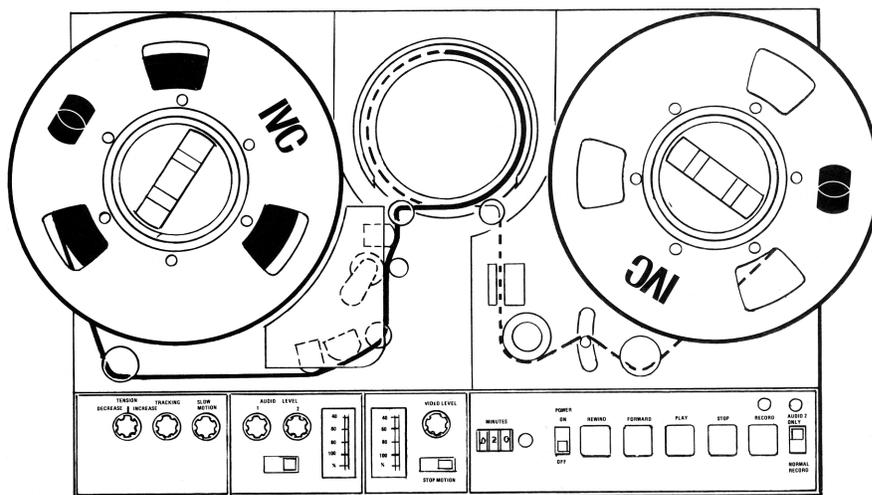


Fig. 1. An illustration of the thread path, with 360° alpha wrap, from International Video Corporation. 1970. Color video recorder service manual 800 series. Sunnyvale, Calif.

required to refurbish the IVC-800, but eventually declined. Through the invaluable advice of my colleague Erik Piil, I learned that engineer Maurice Schechter of DuArt Restoration in New York City had recently rebuilt an IVC-800. He graciously took on this project and, with spare parts from the two non-functioning machines, was able to get the deck running such that it may be used to carry out preservation transfers.

My goal in reestablishing local contacts is to begin creating quasi-ethnographic documentation of the station's production environment and technical practices. While manuals and production literature inform us about legacy technologies, they don't tell us how technology was actually implemented and deployed. My broader research on this front is ongoing, with the hope of documenting not just the technical but also some of the cultural environment of this early cable system. Local origination programming represents some of the first vernacular television, and I hope this research can help serve to supplement the existing historical record of early cable culture.

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