The (Painful) Way it Was

In these days of advancing digital complexity I sometimes yearn for the simpler times. But then some inner part of me knows that them “good ol’ days” are more a process of mental fermentation than fact. All of us have our tales about, “…walking X miles to school- uphill- both ways- yadayada.” (yawn) But, in earlier broadcast days most things that we mouse-click for granted today were technically complex (hard).

Most of us understand that videotape editing is (or was) essentially a time-precise copying process. You sequentially copy only the exact parts of original scenes/takes onto another tape in order to build the story in linear fashion. Most also know that film editing is a physical process of splicing- cutting and pasting strips of pictures and sound. Film editing is also nonlinear as the physical clips of film can be re-cut and re-ordered. For a brief period (about a decade) physical cutting was also true for broadcast videotape.

Looking like an industrial strength film splicing block on steroids, the Smith Block videotape splicer demanded exacting care and patience for every splice. For the video to play smoothly on-air, (no picture roll or breakup on the TV screen) you had to cut and join the splice at a very precise spot on the tape. Using this beast was like splicing film blindfolded because you couldn’t see any pictures. When you held videotape up to the light all you would see was a brightly lit ribbon of dull brown plastic.

Where on quadruplex videotape does one video frame end and the other begin? The left diagram shows how video is recorded as a modulated radio frequency in vertical stripes on the videotape. One of every 8 or 16 stripes had an edit pulse above it. This small magnetic marker along the top edge of the tape indicated a new video frame. The ‘sprocket hole per frame’ for 16mm film is similar in concept.
These magnetic patterns were made visible by lightly dabbing the videotape ends to be joined with Edivue, a solution of iron rouge dust suspended in Freon. After carefully overlapping and aligning the visible magnetic patterns on the two videotape ends through the microscope, you made a very careful razor cut at precisely 87.3° across the tape (at 15ips), and an equally careful application of thin adhesive backing tape to hold it all together... aannnd - Ta-Daaaa, one clean videotape splice. (maybe)

I started at a small TV station, WMUR Channel 9 in Manchester, NH, where I edited videotape mechanically - cut by agonizing cut - in just this manner on a routine basis. A few network shows like Laugh In were also patiently cut by hand in this way.

The last time I worked a Smith Block was circa 1976-uhh-ish at WSMW Ch 27. Newly post-Watergate. Leo D., a staff technician was preparing to make syndication copies of the nationally distributed David Susskind Show from the just completed (and only) master tape. As Leo rewound the 90 minute master reel there was a momentary power failure and a loud plastic “SNAP!” in the momentary darkness. When lights returned a second later there were bits of brown plastic confetti flapping-float in the air. Both tape reels were more or less doing their own thing, freely spinning and spewing tape all over the floor around our feet in layers like so much brown plastic lasagna. (???) - That can’t be good. Waves of confusion, agony, and that helpless, “Houston, we have a problem”, look swept over Leo. I said, “Don’t move or step on anything.”

We spent five minutes slowly cleaning and cranking tape off the floor and back onto the reels by hand. The same conspiratorial forces of nature that make open face sandwiches always land jelly-side-down also make videotapes wrinkle or snap apart at the most interesting part of the program. We all know such phenomena so I won’t dwell. Leo and I spent a sharing moment as guys do, exchanging the obligatory supportive mutterings, whimperings and epithets about stuff like job security and damage reports. Then I said I’d be back in two hours, and drove to Channel 9, hoping to borrow the old Smith Splicer. Found it where I left it some 10 years earlier under a thick blanket of dust in that closet of stuff-we’re-gonna-toss someday. Fortunately that day hadn’t arrived as yet.

Back at the debacle I dragged tape ends across audio heads as best I could to find and mark some cut points that made sense in the heated debate Susskind was having with Haldeman (or was it Erlichman?) Whatever. Alchemy! Leo watched with dummed wonder as I daubed chemistry to frayed ends and gingerly moved alignment gewgaws and vernier wheels while peering intently into the microscope. Leo sucked his cigarette. Hard.
Leo was not confident.

“IT’ll never play. It’s gonna break up all over the place. My ass is toast.”

“No, Leo. Not toast. Grass. Your ass is gra - Hey! - A little faith over here?”

Cutting videotape by hand involves hushed, delicate moves, like safecracking, punctuated by slamming and banging as you open and close the tape retainers. It’s hard to combine both actions into one smooth process and instill confidence. I never saw Leo suck on a cigarette so hard. Long ash hanging down. I loaded and laced the re-joined tape reels and rewound about 30 seconds.

“Leo, stop sucking. Stop pacing. Watch and tell me when you see the splice.”

I hit the PLAY button. We watch. We wait. We wait - I STOP the tape and announce that the splice went by about a minute earlier. Leo doesn’t believe. So I hit REW for a bit, and then I PLAY the tape again. I snap my fingers and point at the silver join tape gliding smoothly through the vacuum canoe on the video scanner.

Leo, sucking, squinting - thinking.

No breakup. No noise. No nothing. No problem. As the splice passed by, the picture switched neatly from Susskind to Erlichman (or was it Haldeman?) Whatever.

Leo sucked some more - and thought hard about what he had just seen. For him it was disquieting and calming at the same time. Some of us know this moment as falling up - where the smoke and chaos run in reverse to coalesce and spontaneously form a neat pile of building materials, a multistory office building or perhaps a pyramid of oranges.

It’s rare to see someone so still. Quietly squinting, sucking, steeped in cognitive dissonance.

Tools of the ancients had come down from the sky. Deus ex machina.

I packed up the Smith splicer and chemistry.

As we made copies of the show through the night we did the ceremonial happy dance as the splice sailed by smoothly each time. It was a nice way to end an era.


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