



By C.J. Huss

**Chapter Sixteen  
As We Sail Into the Mystic(al) - Part 2  
~~~(Or...Cable, not Cabal. Very Different.  
Really. Truly. )~~~**

Like many folks, I spent the vast bulk of my life getting up and then going somewhere and then coming back and then going to sleep and then getting up and then going somewhere and then... oh, you too? Yeah, like I said, many folks. First school, then more school, then work, then more work, then...

...at some point, maybe even before you get to where other people start making excuses for whatever weird (to them) habits you engage in, you realize, "Now what?" You think of welcoming retirement, or dreading it, or maybe "Retire? Me? Never!! I LOVE MY WORK! (Or don't care to admit that after doing things the same way for seeming forever that said lifestyle has become hardwired into brain and body.)

Then one day, a revelation happens. Usually not planned, a matter of fate, happenstance. Your perspective alters, the hardwiring softens, or the wires make new connections, sever old ones. You look, or listen, and...

"Whoa. Cool! The guy at the stereo shop was right, this tube amp sounds way better than my old transistor gear! Worth every penny. Okay, dollar. Okay, way bunches of dollars. Dude, come over and check it out, it's awesome!"

So you do, and, you listen, and...Oh jeez. What was he listening to before? I mean, this isn't bad, it's respectable, but for three grand? My Dynacaffeine solid state amp has waaaay more detail, and it was only six hundred! I can't say anything, or it'll bum him out, and he's a bud. Besides, his ears, not mine. Oh, crap...

"Hey, dude, whaddaya think, ain't it wicked tasty? Man, my old Merange was decent, but this...why did they ever abandon tubes?"

"Well, yeah, does sound way decent, but there is good solid state stuff out there too. You can get good results from either. Only thing with tubes these days is getting good ones. It is an old technology, and a lot of the manufacturing finesse they had in the heyday has been lost. Eventually, you'll need to replace them and then...be careful, or the sound may change."

"Yeah, the stereo shop guy did say that this make only uses premium ones from some super-fussy European vendor. Said they're the best in the world. Mmm. Oh, hey, another thing I wanted to ask you about. The guy also said I should consider new cables for my rig. New interconnects and speaker cables. Cost about a grand all told for the best ones. Whaddaya think, should I spring?"

"Uhhm, no. Wire is wire. Pretty much, anyway. You might want to upgrade those speaker cables, they are a mite thin for a 200 watt amp, and the length you're running them. And I have some good interconnects I can fix you up with. Your preamp and amp have some balanced outputs and inputs. Cables for those will lower your noise floor and they're reasonably priced."

"Do they have those 99.9999% virgin mined quaternary copper conductors? I heard that's the best."

"Uhhm, no, Not necessary. The electrons don't care, really they don't. The only weak point of what you have now is that they're very old cables, and the shielding is just so-so, typical for the day. Your connections that allow you to use balanced cables, that's what the pro audio people use. Where you don't have them, like on your turntable, go for some dual-shielded, low capacitance cables."

"Oh. Uhhh, okay, dude, you are the expert, that's why I wanted you to hear this new stuff I got.. Pretty good though, huh? I really love it!"

"That's all that counts, buddy. If you're happy, happy is way good. Mm...would you be interested in some history of wire, and how it's now this big thing in some modern audio circles? I happened to be researching it recently, came across some old electronics catalogs, and wow...I had forgotten a lot over the years. It's fascinating. Or I think so, but you know me, eh?"

"Sure, dude, whataya got?" ( Dude returns at a future time, nifty pictures in hand ).

**Quick Page Reference On Popular Wire Types**

| PRODUCT SERIES                             | DEARBORN | COLUMBIA | BELDEN | ALPHA |
|--------------------------------------------|----------|----------|--------|-------|
| Service and Power Cords                    | 363      | 366      | 370    | ...   |
| Replacement Cords                          | ...      | 367      | ...    | ...   |
| Extension Cords                            | ...      | 367      | ...    | ...   |
| Test Prod Wire                             | 361      | 366      | 370    | ...   |
| Aircraft Wire                              | 360      | ...      | ...    | 376   |
| Shield. Mike Cable                         | 362      | 366      | 368    | ...   |
| Shield. Audio Cable (Spiral Wrapped)       | 362      | 367      | 370    | ...   |
| Shield. Audio Cable (Braid Shield)         | 362      | 367      | 370    | ...   |
| Audio/Data Cable                           | ...      | 367      | 369    | ...   |
| Shield. Control Cable                      | ...      | 366      | ...    | 376   |
| Flexible Copper Braid & Shield             | ...      | ...      | 372    | 376   |
| Unshield. Control Cable                    | ...      | 366      | 371    | ...   |
| RG Coaxial Cables                          | 361      | ...      | 373    | ...   |
| Machine Tool Wire                          | 363      | ...      | ...    | ...   |
| Magnet Wire                                | 361      | ...      | 370    | ...   |
| Juke Box Cable                             | 362      | ...      | 370    | ...   |
| T-Ran Cables, Shielded (Mil-W-16878 D)     | 362      | ...      | ...    | 377   |
| UL/CSA Hookup Wire                         | 363      | ...      | 372    | ...   |
| Hookup Wire (Mil-W-76B Type MW)            | 360      | ...      | 372    | 377   |
| Hookup Wire (Mil-W-16878 D Type B)         | 360      | ...      | 372    | 377   |
| Hookup Wire, Teflon (Mil-W-16878 D Type E) | 360      | ...      | 372    | 377   |
| Hookup Wire, Kynar                         | 363      | ...      | ...    | ...   |
| Bus Bar Wire (Mil-W-3861)                  | 362      | ...      | ...    | ...   |
| Heat Shrink Tubing (Irradiated Polyolefin) | 364      | ...      | ...    | 375   |
| Lacing Tape, Nylon                         | 364      | ...      | ...    | 374   |

( Scan from Allied Radio Industrial Electronics Catalog, 1971 )

"Here, look at this, this is a hoot! From 1971, and one of the biggie vendors of the day. I bought my very first volt-ohmmeter from them years before, I was maybe 12 at the time. Heh—still have it, by the way, still works! Anyway, did you ever realize just how many kinds of wire and cables there were, still nearly are? Look at this index, there's 17 pages worth!"

"All those are different kinds of wire?? Unreal... Bus Bar wire? They have wire especially for bars in bus stations? Ooo, teflon cables, those are good, right? Says they're shielded, that's good, right? Wow..."

"Uhhm, let's get to that later on, okay? Let me cover some basics first as relates directly to audio gear. Here, I've been collecting scans from the catalog that shows all the common cable types in use, and added some notes about them: The first collection is about the simplest cables, with just two wires, in some different forms:"

**"Lamp Cord"**  
Pretty much what most of us used in days of old to connect our speakers to our amplifiers or receivers. Later on there was wire sold expressly for use with speakers, although it wasn't much (if any) different from lamp cord. For the most part this was 18 gauge stranded copper wire in a brown, black, white or clear flexible plastic jacket.

**"Speaker Cable"**  
Twisted pair was one of the first "tweaks" introduced by the audiophile community. Does it work? Interestingly, it does, at least under certain specific circumstances. In a protective jacket and/or sometimes heavier gauges, it could be used for either low signal level or speaker level purposes.

**Twisted Pair Cable**

**Twisted Pair Cable w/Jacket**

**Shielded Twisted Pair Cable**  
This enhancement added even more performance improvement by rejecting even greater levels of external interference.

"And here in the second collection are coaxial cables and also two types used for connecting your FM tuner to an antenna. Have you noticed, by the way, that there don't seem to be any 'magic' cables for TV or radio antennas?"

**Coaxial Cable w/ Wrap Shield**  
The invention of coaxial cable was a big step forward in protecting tiny electrical signals from most external interference. Two popular ways of shielding the inner conductor was to either wrap the insulator around it with a metal foil, or else a flat layer of tiny wires. Later on a braided aluminum or copper wire method was found to work even better. In the stereo audio era, paired coaxial cables became a near-standard.

**Coaxial Cable w/ Braid Shield**

**Stereo Cable w/ Wrap Shields**

**"Twin Lead" RF Cable**  
While the music-based audio world deals mostly with signals in the 20 Hertz to 20,000 Hertz frequencies that our ears can hear, there is a need for cables that can transfer signals in the megahertz range, namely—AM or FM radio. Here's two early types used for that purpose.

**Shielded Twin Lead Cable**

There aren't? No, nobody ever mentioned that. Radio doesn't benefit from any special kinds of wire either?"

"No, the technology behind how radio or television signals pass through cables is very well understood, and no one has recently re-written those laws of physics. For the most part, audio cables aren't much different, and the same laws apply. Always. The key things for audio are low capacitance, low or controlled inductance, and low resistance. The latter is the main thing for speaker cables, proper shielding along with the other parameters is key for interconnects."

"Dude, you are sooo smart!"

"Nah, just been around doing the same thing over and over for a long time. But I did pay attention while I was doing that, and picked up on a few realities. Like those exercise walks I've been taking for the past few years, you know? You have any idea how cool looking a lot of the real old houses are in town? And those architects and builders did that all without any magic bricks. Gotta love it. Hey, wanna take a break, go for a walk?"

"Sure, dude, we can get on with the tech talk later. Beautiful day outside and no time like the present."

No, there isn't. Happy tunes,

-- CJ



A panel discussing the influence of the pioneer groups. From left: Charlie Horner, Jay Siegel, Harold Winley, Vito Picone and Bobby Brooks Wilson.

Ron Gaithers, (left) the last surviving member of The Majors with Tom Landis. He was attending the event.



"We had a great turnout. We had excellent performers. Excellent artists who received their due in terms of receiving their lifetime achievement awards. We are very happy."

- Billy Grieco, past president

"The East Coast Music Hall of Fame is the only organization that is taking the effort to honor these people."

- Charlie Horner, Board of Director member