To: aeroelectric-list@matronics.com
From: "Robert L. Nuckolls, III" <nuckolls.bob@aeroelectric.com>
Subject: Re: AeroElectric-List: Secrets Techniques
Cc:
Bcc:
Attached:

At 07:53 AM 4/20/2012, you wrote:
> John and others, A tip I learned from this list was to use a hot soldering iron. As luck would have it, I had a wood burning knife in my tool kit which worked wonderfully on stripping tefzel wire. Just run the sharp edge of the hot knife around the wire, melting the tefzel and pull off the end! A bit of the pain for retrofitting under the panel but when building was a piece of cake as the top panel skin was not yet riveted in place.

The problem with hot strippers and multi-conductor shielded is that it is insufficient to simply part the outer jacket at the strip-length. When the jacket is molded over the braid which in turn is conformal to the spiral wires beneath, there is a great 'attachment' of the jacket with the braid.

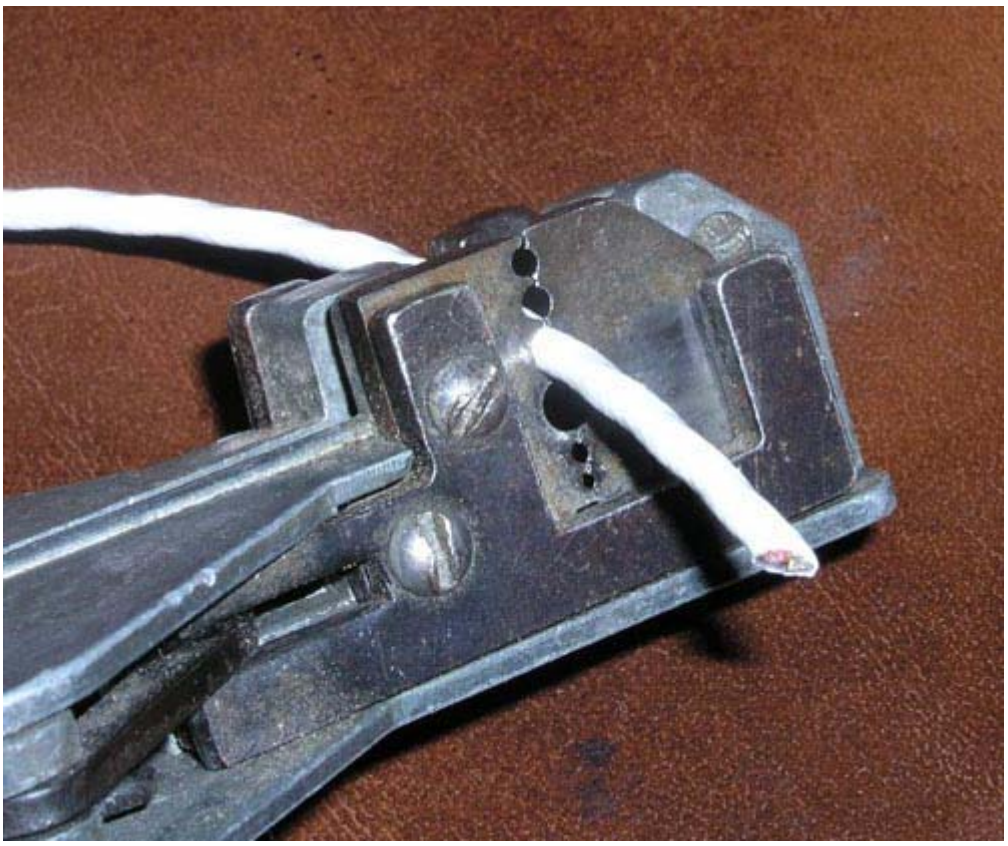
So even if you achieve a clean separation of the strip length of outer jacket, the unwanted insulation generally refuses to slide off. Here's a shot of a cleanly separated length of about 1" on the end of a shielded trio. No way is that stuff going to slide off.

Tefzel jackets are also very
thin. PVC insulation is thick enough that
'pushing' a strip-length off at the cut
tends expand the inner diameter of the
insulation lessening the grip on the wire.
Tefzel is so thin that the same push fails
the insulations column strength in compression
and it simply bunches up . . . and rips the shield
strands but still hasn't budged in the space
beyond.

My favorite process uses the generic Stripmaster
with knife-edge dies . . .

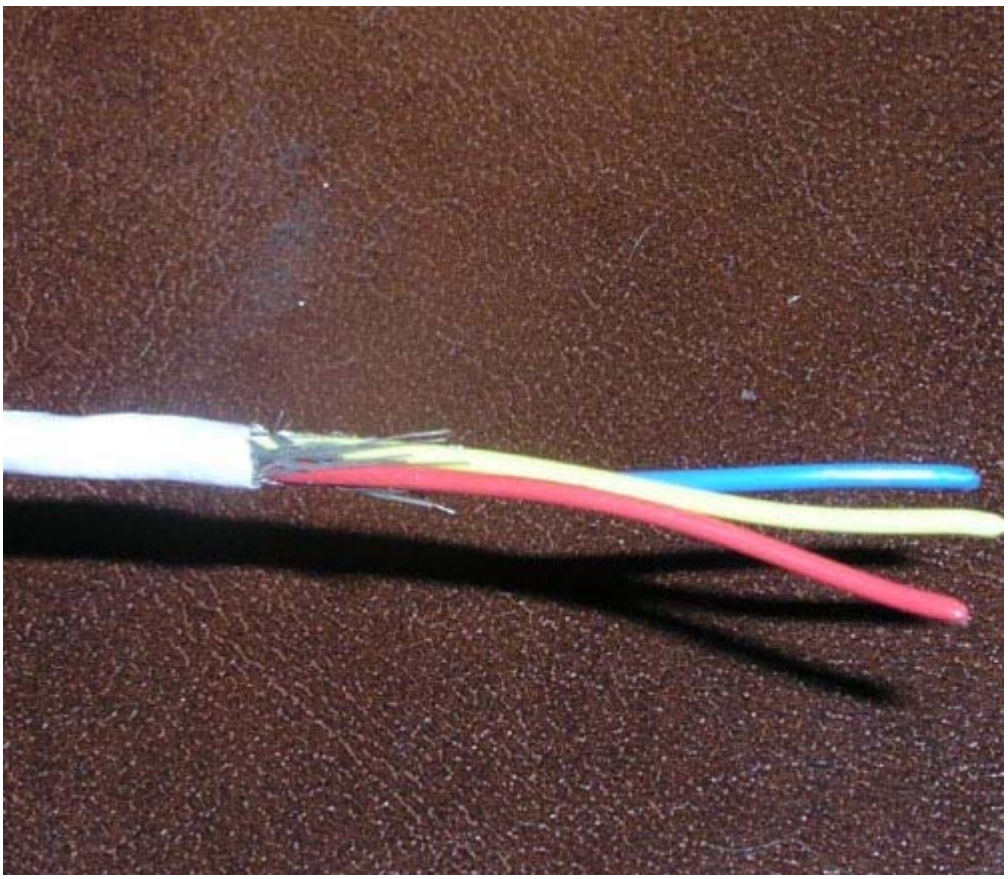
http://tinyurl.com/bol9x2n

In this case, a 22AWG trio is nicely decapitated
with the 14AWG die.



The dies just barely cut the jacket but does get a 'grip'.

The resultant strip comes out looking like this:



You wind the shield remnants tightly around the wires like this . . . keep the diameter small.

If the wire is 'old' . . . the shield strands may be less than bright. Optionally, you can prepare the strands to accept a solder sleeve by 'tinning' them but shake off all excess solder.

Then apply solder sleeve for a finished product that looks like this.

Alternatively, you can go the po' boy's solder sleeve route with techniques adapted from these pages:

http://tinyurl.com/87lea6o

http://tinyurl.com/dgg2nb

Now, if you've got a steady hand, a sharp knife and more patience than I, you can do a circle-cut and then slice the outer jacket down the side for an end result that can be processed like this:

http://tinyurl.com/7ungs6c

Bob . . .