

2016 PDF edition

Old Familiar Strains

A newsletter for Collectors of Radio Strain Insulators and related items
Volume 2 No. 3 June 1995

CATALOGING RADIO ANTENNA INSULATORS: Part III by Dan Howard

End Insulator Shapes and Styles, Part II

This installment in the End Insulator Shapes and Styles series will cover insulator ribs and rib patterns. Measuring insulator length will also be discussed.

Ribs: Who? What? Why?

One manufacturer, Hy-gain, used the term "**serrations**" to denote the ribbing along the body of its insulators.

In its QST ads, Findlay Electric Porcelain Company (Findlay, OH) describes the surface of its insulator as "**corrugated**."

In the radio section of its Fall 1925 catalog, Sears used the simple term "**ribs**." This term seems to be the one that most insulator collectors use today.

In addition to the aesthetic appeal, adding ridges or ribs to the sides of strain insulators increases the surface area. Hy-gain's 7" insulator is claimed to have a 12" leakage path thanks to the serrations. A longer path between the conductors lessens the likelihood of arcing to due surface contamination.

Findlay claimed that corrugations helped rain water drain off of its insulators more quickly.

Some insulators have numerous small ribs. Others have relatively large ribs or a combination of sizes. Besides lengthening the arc-over path, large ribs may act as a physical barrier to through-the-air arcing.

As described in OFS Vol. 1 No. 3, William Buffington added a spiral groove to the surface of his insulator specifically so that it could be wrapped with wire and do extra duty as a trap. For this insulator and others such as the Bendix MT-48C shown in Figure 1, the "ribs" could be thought of as a by-product of adding grooves to the surface of the insulator.

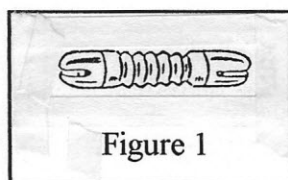


Figure 1

(continued on page 3)

Editorial

by Dan Howard

The last couple of months have been busy ones for me. In addition to attending my second insulator show, I enjoyed marching and playing my trombone in the One More Time Around Again Marching Band. Evenings and Saturdays have been spent on a building project at church.

But here we are again for the third time in 1995. In addition to continuing the cataloging project, I am please to present the first Old Familiar Strains color page. Jim Overstreet sent these and other beautiful pictures of his strain and pin insulator collection. The back cover features a black and white from Bob Dennison. Other collectors have also sent photos and I appreciate every one. Look for yours in an upcoming issue.

And a special thanks to Dick Mackiewicz who writes about twice a month to share articles and new finds with me. I appreciate the effort, Dick.

New Reader

Bob Stahr from St. John IN is our newest reader. Bob's address is 11728 Leonardo Dr, St. John IN 46373-9448. His phone is (219) 365-4171.

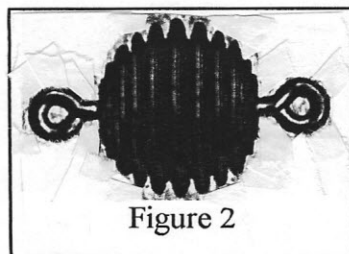
The classifieds section is absent this month due to a lack of ads.

Cataloging, continued from page 1

Obviously each manufacturer had its own considerations when designing ribs into, or leaving ribs out of, its products. We will probably never know exactly why. The fact remains they are a very common feature among tension-type radio strain insulators.

Describing Rib Patterns

Some insulators have ribs of increasing diameter toward the middle, ribs which increase toward the ends, or both. Recently, Steve Watkins and I sat down to discuss cataloging insulators. During our chat, we set about to identify common patterns which could help us in sorting insulators. After tossing out a few ideas, Steve observed that several basic rib patterns could be described using letters of the alphabet. Figure 2 shows a "V" pattern (or "inverted vee" - a little antenna humor). Figures 3 shows an "M", and Figure 4 a "U". Figure 5 shows a "straight line" pattern, and Figure 6, a "cork screw". Insulators with a "W" pattern also exist. I find Steve's methodology easy to remember and I hope to incorporate it into a broader cataloging method.



Your collection, like mine, may include corkscrew-ribbed insulators in porcelain, glass, or plastic. The clear glass corkscrews seem especially easy to come by. Last year I was going through a box at a friend's house and found 3 or 4 glass corkscrews. They were quickly laid aside with the other common insulators. A few minutes later while repacking the box, I noticed that some had ribs running clockwise and others had a counter-clockwise pattern. (I ended up buying both types as I didn't know which one I already had at home).

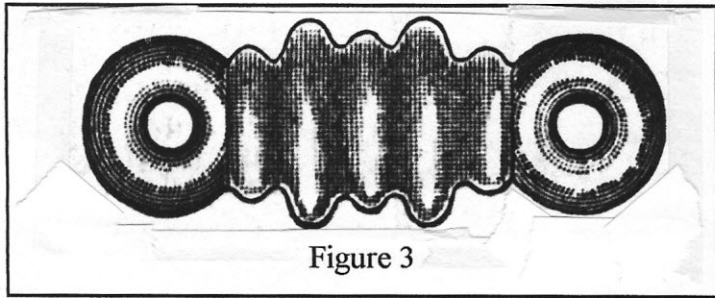


Figure 3

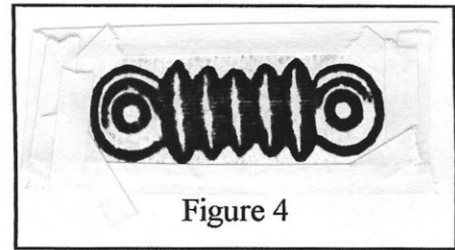


Figure 4

Measuring Ribs

Steve's alphabet method captures the general shapes of rib patterns, and that's why it's useful. However, identical patterns are shared by insulators of many sizes. In order to more specifically describe an individual item a system of measuring must be added.

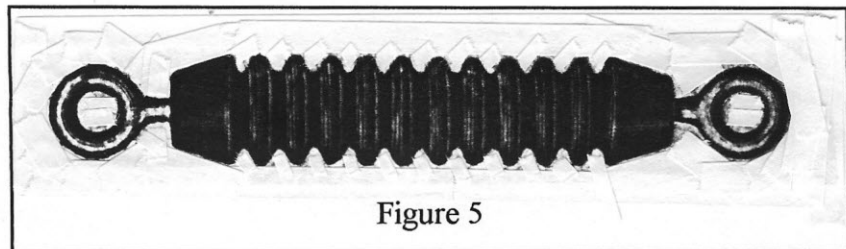


Figure 5

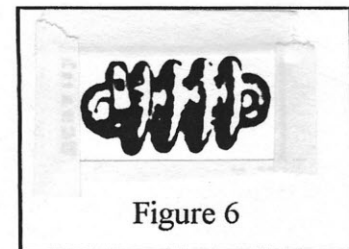


Figure 6

I developed the following "short-hand" method for noting rib sizes. For a given insulator, each size of rib is denoted by a circle. The number of ribs of this size is noted in super script and the diameter of the rib is noted inside the circle. For example, the short hand dimensions of the ribs on the Electrose 4500 in Figure 2 are shown in Figure 7. The short hand for the insulator in Figure 5 is shown in Figure 8.

When counting the ribs on an insulator, you may note that some insulators have "end ribs" which can be quite deep on the interior side but just "flow" into the wire loop on the other. For consistency sake, I would prefer to include such features in the description of the end and not count them as true ribs. The insulator in Figure 5, an Electrose 4507, is an example of this. When in doubt, a picture or drawing can answer a lot of questions.

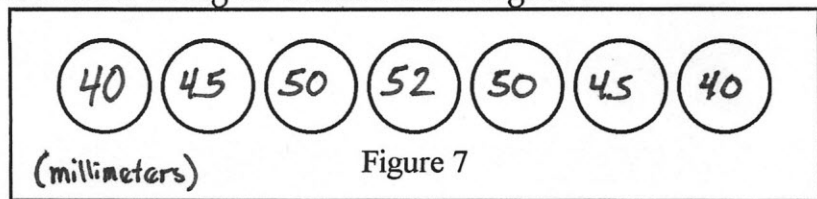


Figure 7

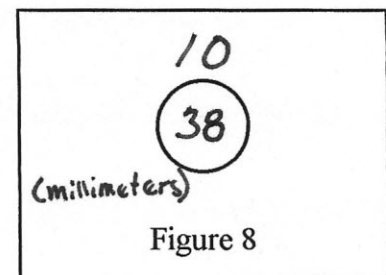
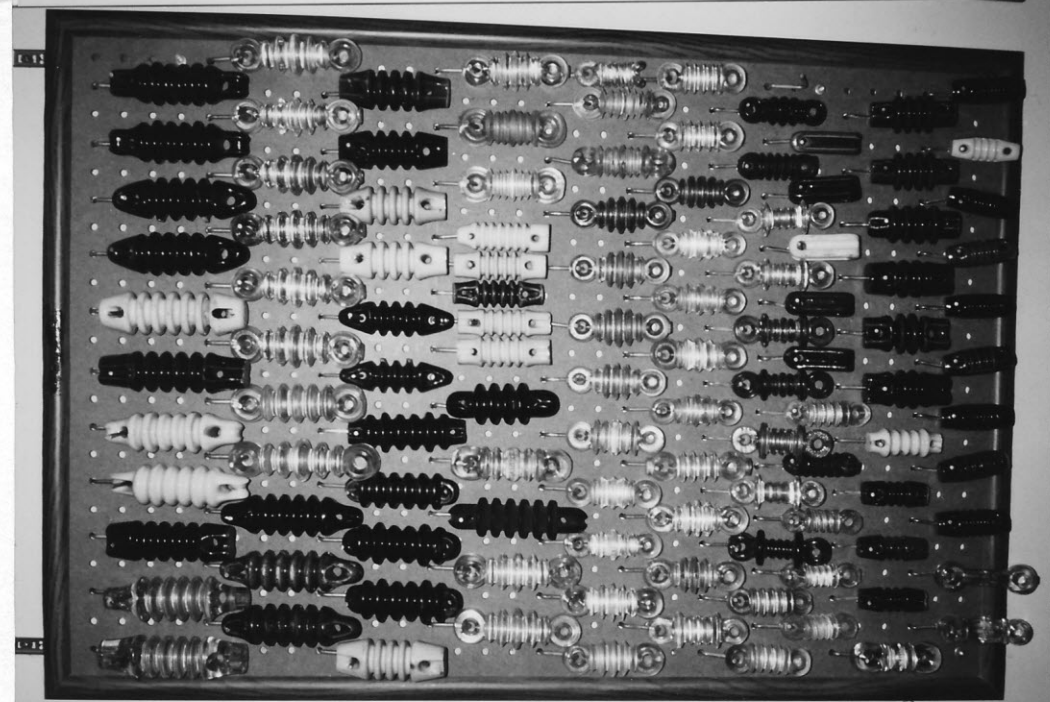
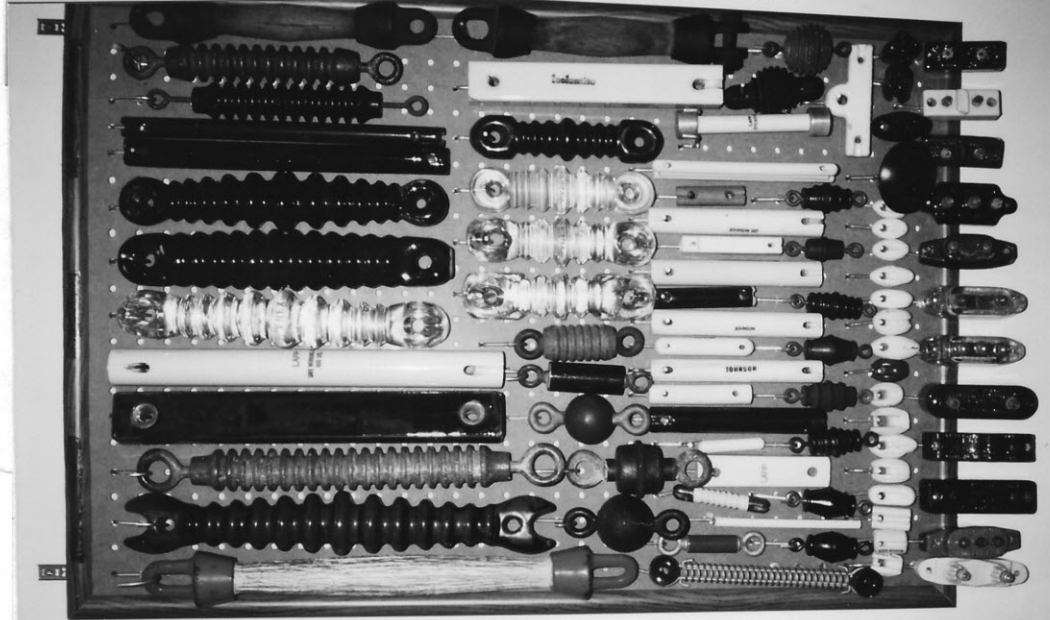
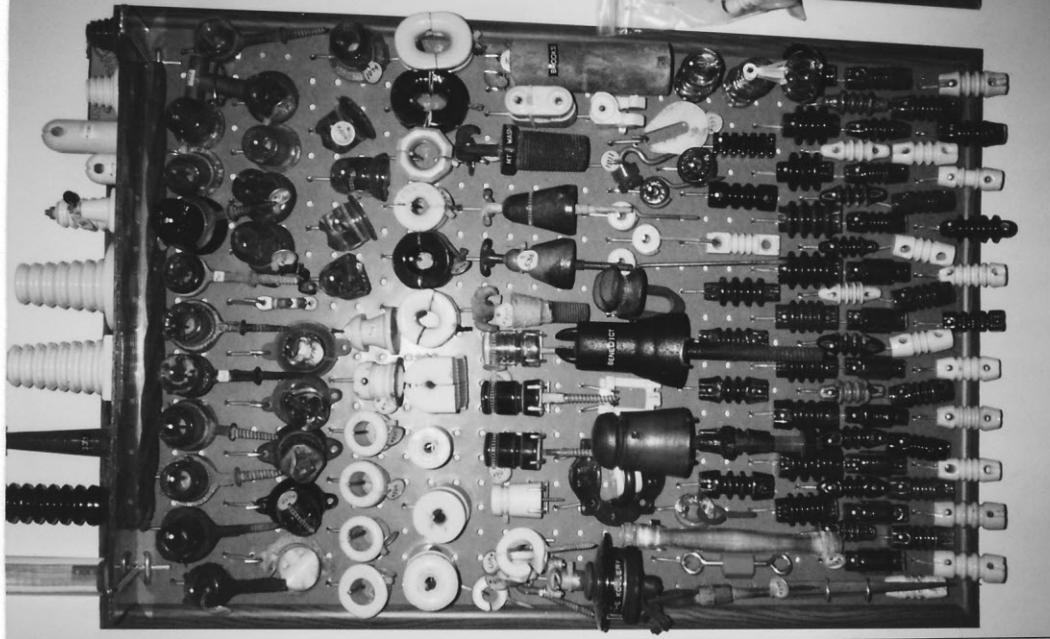


Figure 8

(continued on page 6)



On the Wall
at Jim Overstreet's house
in Atlanta, GA

Cataloguing, continued from page 4

Measuring Insulator Length

Steve Watkins also offered the idea of grouping insulators into categories by length, rounding down to the nearest inch. For example insulators 2" to 2 7/8" long would be classed as 2". For cataloging, every insulator is grouped to the "nearest inch" and its actual length is stored in a subsidiary data field.

A nearest inch system negates the effect of mold variations and minor measuring error. Further, when looking up an insulator, it can tell you "at-a-glance" whether or not you already have a remotely similar item. Then, further comparisons of individual features can be made, if necessary.

English or Metric

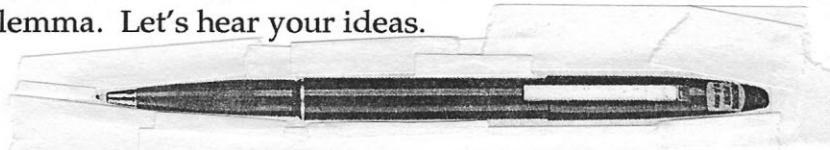
I know that when I start cataloging my collection, it is going to be within the parameters of a computer-based data base management program. I'm just too spoiled to start off with a file card system, or the like. As a consequence, I am thinking about using metric measurements.

Measuring insulators in millimeters allows me to use whole numbers to describe length rather than 1/8 inches (or decimal equivalents). My computer seems to store and retrieve whole numbers much better than fractions. A three-digit field can hold lengths up to a meter long. Similar precision using English measurements could require up to 6 digits.

Melding my preference for metric measurement with Steve's nearest inch suggestion, could yield a system of rounding down to the nearest centimeter (10 millimeters) and insulator groupings such as 20 mm, 30 mm, etc..

I have to admit that, when originally manufactured, domestic insulators lengths were often laid out in inches. However, insulator and rib diameters tend to be odd fractions of inches. Hence the dilemma. Let's hear your ideas.

Tools

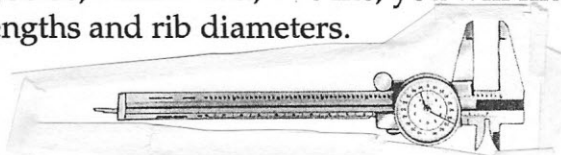


I have been relying on two tools while planning this measuring and cataloging project. First, I purchased a micro-fine point (about .5 mm) permanent marking pen. Mostly I use the pen for marking small glass insulators where using a sticker would detract from the appearance. Experience has shown that most ink is removable from non-porous surfaces with rubbing alcohol.

Rather than writing on larger glass insulators and opaque porcelain insulators, a discretely placed sticker or "Dymo" label can be used for identification. Lighter fuel can be used to remove sticker (or price tag) residue from the surface of insulators.

If an insulator needs to be identified but will not be displayed, "string tags" are available from stationers and are an affordable alternative to stickers or ink.

My other recent acquisition was 6" capacity dial calipers (that also read in millimeters). Widely available for less than \$30.00, I think that, like me, you will find calipers indispensable when measuring insulator lengths and rib diameters.



Conclusion

I hope that you have enjoyed this "main course" of ribs. Isn't it interesting, in surveying our collections, how many manufactures made successful designs that did not incorporate ribs?

I appreciated Steve Watkins's suggestions about cataloging. As Jeff Hogan also knows, my collection is displayed on pegboards in the stairwell of my parent's home. As a consequence, the best viewing position is sitting on the steps. A stiff back may have motivated Steve to offer these ideas, just so that he could get up and out of there!

I hope that these suggestions for describing insulators will be helpful to you. If you are able to use them, improve them, or whatever, please let me know. It looks like we're still along ways from truly getting a complete cataloging system in place.

I haven't officially started cataloging my collection and many issues remain to be resolved. I hope that the discussion of metric measuring won't be a deterrent to your enjoyment. I still tend to think in terms of inches myself.

To date, I haven't received any new correspondence about end descriptions for tension-type insulators. Please, if you are working on a system or can share end patterns from your collection, let me know. Since we have plenty of other topics to cover, including material types and colors, I may come back to end features in a few issues.

Sources:

World Radio Laboratories "Hy-gain Advertisement", "QST" American Radio Relay League, July, 1960 pg. 133.

Findlay Electric Porcelain Company "Findlay Stand-Off Insulators Advertisement", "QST" American Radio Relay League, January, 1925 pg. 68.

Sears, Roebuck and Company, "Sears Catalog" Chicago, IL Fall 1925, pg. 559.

Figure 1: Communications Equipment Co. Advertisement, "Radio-Craft", January 1948. Courtesy of Dick Mackiewicz.

Figure 2,5: Electrose Mfg. Co. Advertisement "Proceedings of The Institute of Radio Engineers", Vol. 10. No. 5, October, 1922 New York, NY, back cover.

Figure 3: "Harco Wholesale Radio Catalog", The Harco Co., Chicago, IL, 1928, pg. 41.

Figure 4: "Radio Catalog No. 1" 20th Century Mail Order Corp., Chicago, IL, 1930, pg. 34.

Figure 6: "Sears Catalog", Sears, Roebuck and Company, Chicago, IL, Spring 1924, pg. 774.

Northwest Collectors Show and Sale by Dan Howard

Thanks to Old Familiar Strains, I started meeting some of the West Coast collectors late last Spring. Unfortunately, I didn't hear about the annual Northwest Collectors Show and Sale until about two weeks after it was over. So, I had been looking forward to this year's show for a whole year!

My wife's family lives in Seattle so I figured that it was a natural to attend the collector's show in Enumclaw, WA, a Seattle "suburb." (It seemed like I was miles from civilization by the time I pulled into the King County fairgrounds - or maybe it was just the anticipation of the show.)

Vi Brown, a neat lady, is in charge of the show. You may have read about Vi and her husband Andy in the May, 1995 "Crown Jewels." Although Andy did not attend this year's show due to health reasons, I enjoyed getting to know Vi and her crew of family and friends that coordinate the 110+ table show each year.

The weather was beautiful for the drive up on Friday, May 5th. As planned, I arrived early in the afternoon with some strain insulator and lightning arrester display boards ready to go. Although I did not have a sales table, I had made arrangements ahead of time to have a table for my display.

When I arrived at the fairgrounds, however, my space was taken up by other displays. Never one to give up easily, I found Gill Hedges-Blanquez, one of our Seattle-area readers, and we set out to locate an unused table.

After a few minutes searching, it appeared that our best option was a very heavy looking picnic table that was sitting outside on the lawn. While looking for a door big enough to fit the picnic table through, we spotted an 8' x 4' platform freight cart. Heck with the table! With a little imagination, and a space to park the cart, I was ready to go.

I could tell that Vi was somewhat dubious when we nestled the freight cart in next to her cash box by the front door. (And especially after I backed into her table, upsetting a vase full of lilacs). Her mood picked up noticeably, however, after I pulled out a purple crushed-velvet table cover and proceeded to turn that freight cart into a display. The blue ribbon that showed up on Saturday afternoon put any remaining doubts to rest.

Passers-by were enthusiastic about the variety of strain insulators and lightning arresters on display. Some left cards, saying that they would check their junk boxes at home for me. Others expressed an interest in Old Familiar Strains and our efforts in this branch of insulator collecting.

Steve Watkins arrived Saturday morning with some of his sale items.

In addition to his sales table items, Gill brought a display of blue-glazed porcelain insulators

and go-withs. I was intrigued to see the many shades of cobalt and other blues that he had put together.

We each found a few new insulators at the show. He was pleased to take home a real prize - a deeply colored unembossed purple glass strain insulator. Between a trade with Gill and a few small purchases, I was able to add 8 new insulators to my collection.

My only regret about the show is that I am still 11 months away from the next one!

WANTED

PICTURES, ADS, AND INFORMATION
ABOUT
L.S. BRACH MANUFACTURING
OR SOLDERALL.
FOR FEATURE ARTICLE PLANNED FOR
AUGUST ISSUE.
PLEASE SEND INFORMATION TO DAN HOWARD ASAP.

The photo on the back cover is courtesy of Bob Dennison. The insulator shown is an inexpensive composition type insulator which probably dates from the 1920's.



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in the OFS archives.**