

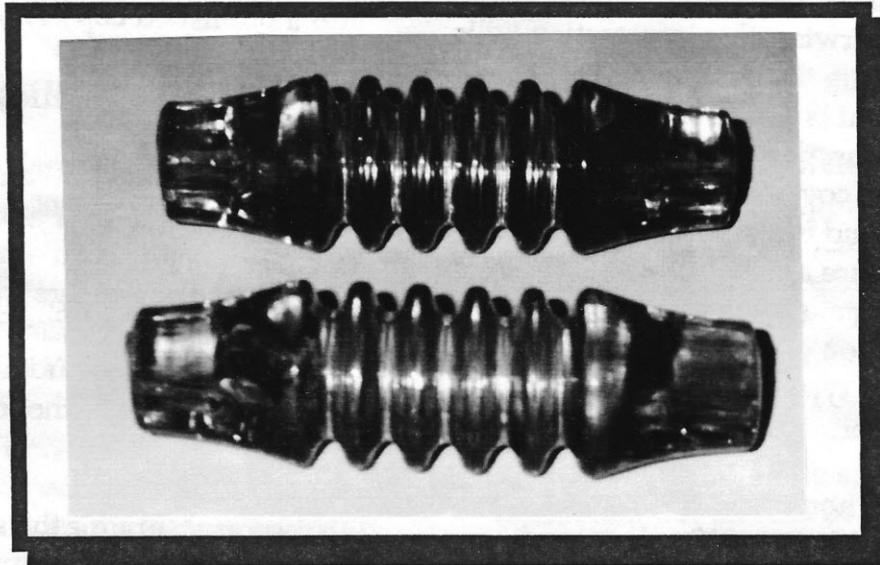
2016 PDF edition

Old Familiar Strains

A newsletter for collectors of radio strain insulators and related items
Volume 4 No. 2

April 1997

An Open Book (Newsletter) Quiz



What type of antenna insulators are these?

- a) end insulators
- b) stand off insulators
- c) center insulators
- d) all of the above

(answer on page 4)

Editorial

As you can see from the list on page 14, interest in *Old Familiar Strains* is continuing to grow. We welcome several new readers this issue.

I am still "carrying" several long-time readers. Please check your mailing label.

In This issue

The cover story on antenna balls may be an introduction to a brand new topic for some readers. Do these fall under the category of "go-withs" for our hobby?

RCA's Radio Central Station is profiled on pages 8-9. Don't miss your chance to "own a piece of history."

"Re-covering" - in More Ways Than One

I must begin by thanking my long-suffering wife for all of her hard work on *OFS*. Lisa does the final layout work and editing on each issue and is kind enough to share her computer and laser printer with me. It is through her efforts that *OFS* was "re-covered" this month with a new banner head. Thanks Lisa for the new look!

The second way that we are recovering this month has to do with my tired old

computer. Along about the end of February, my machine slipped a disk - a hard disk that is. Don't even ask - of course things weren't backed up. However, the only significant loss was to the file that had the *OFS* mailing list. Consequently, I had to re-enter everyone's address in my data base. Please double-check your mailing label for me. My computer is still on the road to recovery, but again, thanks to Lisa, and her PC, we were able to make deadline with this issue.

Coming Soon...

Several "serious" research articles are in the works and will be presented in turn as I can find time to assemble the information. Please see my "want ad" in the classified ad section. If you can offer information on any of the topics, I would appreciate it.

If you would like to do an article but are looking for an idea or need help with reference material, call or write. I would be glad to help you out.

I appreciated Jimmy Burns' question in the last issue. Let's try to make "Thanks for Asking" a regular feature. Please send your questions and I will do what I can to get the answers.

Ball Antennas

by Dan Howard

Introduction (and answer to the quiz)

In order to answer the quiz on the cover, you could have gone back to check the "What We Collect" series of articles in *OFS* from 1995. As you may recall, the series discussed the various types of antenna insulators, contrasting end insulators (strains) with center insulators and stand offs. So what type of insulators were shown on the cover? Actually, if you chose "all of the above," you were right!

The insulators on the cover were used with the Morris Collapsible Ball Antenna. In addition to functioning as stand off insulators or center insulators by supporting the antenna ball, they may have been used as strain insulators in the guy wire system. So, these strain-type insulators fit into all three categories!

What is a Ball Antenna?

In the pre-depression "hey day" of radio, dozens of companies made radio accessories such as aerial eliminators, underground antennas, and balloon aerials. Tabloid-style radio magazines of the period touted some of the most unbelievable schemes for improving

reception. First-time radio owners frustrated with weak or poor reception or who were anxious to have the "best on their block" spent freely on these gimmicks. Though many were of questionable value, one idea that did seem to have merit was the ball antenna.

The ball antenna is a hollow metal sphere mounted on, and insulated from, a pole. When properly installed above surrounding obstructions, there is no reason why such a design would not work for simple broadcast reception. And in a close-quarters situation, it might be quite a bit more practical than stringing a long-wire antenna.

In the following sections, I will profile three types of antenna balls.

1. Morris Collapsible Ball Antennas

Long before I knew what it was, I purchased a Morris Collapsible Ball Antenna at an antique radio swap meet. The proprietor thought that it might have been part of a static generator from a physics lab. Frankly, I just liked the unusual glass insulator.

MORRIS COLLAPSIBLE BALL ANTENNAS

To meet the ever increasing demand for high efficiency plus attractiveness in aerials the Morris Collapsible Ball Antenna was designed. Not only does its high efficiency recommend it; but ease in erection is a feature not to be overlooked. Being collapsible it is shipped knocked-down facilitating shipment.

COLLAPSIBLE CONSTRUCTION

No experience is required in setting up the Morris Ball Antenna. All necessary parts for its assembly are included in the carton with explicit instructions for assembling. Insulators and all necessary fittings are included except pipe. The pipe used can be secured locally and cut to proper size by the dealer. There is an ever increasing market for ball antennas and we recommend that dealers put in a stock. They are sure sellers.

LIST PRICE \$5.00
STOCK NO. A109

DISC.
40%
CASH
2%
2 94
NET



Figure 1, below left, shows an ad for the 9" diameter Morris from the 1928 Harco catalog. As the name suggests, one of the notable features of this unit was that it is made from two 1/2 spheres of aluminum. A screw-tightened band holds the two halves together, making it easy to break it down for shipping. Although this may have been a desirable feature from a manufacturing stand-point, realistically, how many end users would find it necessary to repeatedly collapse the antenna for shipping? One true benefit of the design, however, is that today, you can get inside to press out any dents that have accrued in the last 70 years. The metal is quite soft and responds well to gentle thumb pressures [sounds like I speak from experience, doesn't it?].

A red-painted steel fitting on the bottom of the ball accommodates one end of the insulator. A stove bolt passes through the fitting and the hole in the insulator. When tightened, it forms a very rigid joint. The other end of the insulator slides into a similar fitting that also holds a large nut. The purchaser of the ball would supply a pole of 3/4" threaded pipe to lift the antenna above surrounding obstructions.

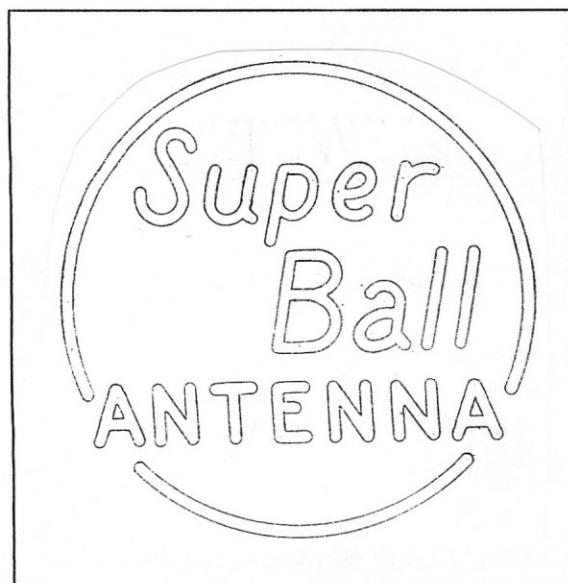
Although guy wires were not included with the kit, the lower fitting has pre-drilled tabs to accommodate them.

A lead-in wire is attached to the ball by means of a binding post.

The ball is not marked with a brand name and the insulators are unmarked as well. They are quite distinctive however. The tapering sides and flat

ends make them easy to recognize. The insulator's husky design, 1-1/2" in diameter and 5-1/4" long, may have been a concession to the application as a stand off for the ball. Although the antenna ball is not very heavy, an insulator built-for-stout would have been less prone to breaking. The size makes them among the largest non-Pyrex glass strains in my collection.

Although one would expect these special insulators to be fairly rare, (Morris Balls don't seem to have been big sellers judging by the numbers that don't show up today) the insulators aren't terribly hard to find. I have a theory that, in addition to being sold with the Morris balls, they were probably sold separately to be used as guy wire and antenna insulators. They certainly function well for all three purposes.

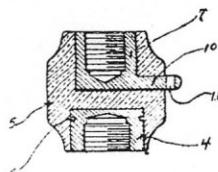


2. The Super Ball Antenna

You can't miss the 10" Super Ball Antenna. The trademark in Figure 2, above, is boldly embossed right on top. Although this antenna doesn't

incorporate a glass insulator like the Morris, its large size and polished finish make it a real stunner. The ball is made of two halves of pressed 80/20 aluminum-copper alloy which are permanently crimped together. [Yes, the permanent closure of the sphere would make repairs a real challenge.]

1,655,892. INSULATOR. BEARL ELMER COLBURN, Green Bay, Wis. Filed June 30, 1928. Serial No. 119,583
1 Claim. (Cl. 173—365.)



An insulator for radio antennae, comprising a body portion of an insulating material, a lower metal insert having a threaded aperture for the reception of a support, an upper metal insert having a threaded aperture through its upper end, said upper metal insert having a plurality of integral arms projecting outwardly through the said body portion and having apertured extremities, said upper metal insert being completely insulated from said lower metal insert.

In lieu of the glass stand off insulator, the Super Ball uses a patented "condenser." (shown above in Figure 3). In practice, the condenser looks nothing like the patent drawing but they are functionally similar. The condenser is a Bakelite molding. The lower end is designed to attach to a length of 3/4" water pipe like the Morris. The upper portion of the condenser fits into a steel "guy wire collar" which is riveted to the ball itself. Although the condenser patent seems to indicate a means of attachment for a lead-in wire, the actual ball was sold with a binding post for direct attachment to the sphere.

Amazing Reception! "Super Ball" Antenna

Thousands of users are getting marvelous reception with the SUPER BALL ANTENNA, the "all directional" aerial, which brings out the hidden powers of all A. C. radio sets.

SUPER BALL ANTENNA features a patented condenser which acts as a neutralizer for the entire system and greatly clarifies tone.

SUPER BALL ANTENNA gives greater selectivity, volume and distance due to its conductive surface of 364 sq. inches.

SUPER BALL ANTENNA is easily installed in a few minutes and gives a lifetime of satisfaction.

Over 1,000,000 in Use

Super Ball with Condenser	\$4 75	Complete Kit for Installation	\$3 50
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Get one today at your radio dealer. Write for our folder, "How the SUPER BALL ANTENNA works."

YAHR-LANGE INC.
205 E. Water St. Milwaukee Wis.

As you can see in Figure 4, the Super Ball was sold without installation hardware. In a shrewd approach to marketing, the company offered an "optional" accessory kit which included guy wires, insulators, and other essentials.

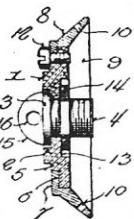
Yahr-Lange Inc. of Milwaukee, WI appears to have been the marketing agent of the Super Ball Company.

Other "Super" Products

When researching the Super Ball, I discovered that Super Ball Antenna Co., Inc., or its principles, may have been involved with the production of a number of related products, under a variety of names.

Bearle E. Colburn, assigned the patent for an improved grounding clamp to Super Ball Antenna Co. in 1928. In 1929, he assigned the patent for a cage antenna insulator (Figure 5, below) to the Aerial Insulator Co. Inc. (also of Green Bay, WI). In 1928, and 1929, Colburn and Super Ball were granted two more patents, this time for radio loud speaker designs. (A list of the company's patent numbers is included in the sources sections).

1,705,174. INSULATOR FOR RADIO ANTENNAE. BEARLE E. COLBURN, Green Bay, Wis., assignor to Aerial Insulator Co., Inc., Green Bay, Wis., a Corporation of Wisconsin. Filed Mar. 22, 1928. Serial No. 263,750. 4 Claims. (Cl. 173—28.)



1. An insulator for radio antennae comprising a plate formed of insulating material, a threaded stud secured centrally of said plate for attachment to a suitable support, a ring secured to the periphery of said plate and spaced from said stud, and an off-set apron projecting from said ring and provided with spaced wire receiving apertures.

3. An insulator for radio antennae comprising an annular plate formed of insulating material and provided with an annular shoulder, a threaded stud secured centrally of said plate, a ring surrounding said plate and provided with an inwardly projecting flange engaging said shoulder, and means engaging said flange for securing the same to said plate, said ring being provided with spaced wire receiving apertures.

Two other interesting antennas are shown in Figures 6 and 7, below. The Radio Lite-Tenna, appears to be a combination indoor antenna and reading lamp. The Arc-Aerial, sold by The Arc-Aerial Inc. (again of Green

 RADIO-LITE-TENNA Write for details AERIAL INS. CO. GREEN BAY, WIS.	the Arc-Aerial An outside aerial that can be attached in 10 minutes — without climbing on the roof. Write today for details and price. The Arc-Aerial, Inc. Green Bay, Wisconsin
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Bay), appears to be a variation on the antenna ball theme. Although I can't prove that the companies were connected to Super Ball Antenna Co., I believe that it is probable.

3. Superior Aerial

Finally, the 1928 Harco catalog includes an ad for another antenna ball, The Superior Aerial. One unusual feature of this barbecue look-alike is that it is made from copper instead of aluminum alloy like the others.

SUPERIOR AERIALS

The Superior Aerial is constructed throughout of copper and will last indefinitely. It is durably constructed and has proven its reliability under the most trying conditions. Will bring in distant stations with surprising ease. Its non-directional feature produces maximum efficiency. Has no welded, brazed or soldered joints to impair its efficiency. It gives increased selectivity and is not affected by heat or cold. It assures you of clearness and volume from every direction.

LIST \$10.00
NO. A383
DISC.
40%
CASH
2%

5 88
NET

Unfortunately, my only information on the unit is the one ad (Figure 8, above). So we are left to speculate on many of the operational aspects. In the picture, the guy wires are insulated at the bottom. This leads me to think that they may not be insulated from the ball itself and may be used to form an "umbrella" to benefit reception.

If you can share any more information on this unit, or others, please do so.

Photo Credits:

Cover Photo: Courtesy Dick Mackiewicz.

- Fig. 1: *Harco Wholesale Radio Catalog*, The Harco Co., Chicago, IL, 1928. pg. 43.
- Fig. 2: *U.S. Patent Gazette*, Vol. 348 No. 1, July 6 1926, pg. 29.
- Fig. 3: *U.S. Patent Gazette*, Vol. 380 No. 2, Jan. 10 1928, pg. 419.
- Fig. 4: "Yahr-Lange Inc. " advertisement, *Radio News*, April 1930, pg. 961.
- Fig. 5: *U.S. Patent Gazette*, Vol. 380 No. 2, Mar. 12 1929, pg. 430.
- Fig. 6: "Radio-Lite-Tenna" advertisement, *Radio News*, December 1928, pg. 584.
- Fig. 7: "The Arc-Aerial" advertisement, *Radio News*, April 1929, pg. 953.
- Fig. 8: *Harco Wholesale Radio Catalog*, The Harco Co., Chicago, IL, 1928, pg. 44

Additional Sources:

Chicago Salvage Stock Store Catalog, 1929. Courtesy of Dick Mackiewicz.

Special thanks to Frank Rasada for letting me size up his Super Ball.

Appendix 1: Super Ball Co. and related patents:

- TM No. 230, 422 7/6/26 "Super Ball"
 - Design No. 74,176 "Loud Speaker"
 - 1,655,892 1/10/28 "Insulator"
 - 1,675,163 6/26/28 "Ground Clamp"
 - 1,704,460 3/5/29 "Loud-speaker"
 - 1,705,174 3/12/29 "Insulator for Radio Antennae"
-

RCA's Radio Central Station

by Dan Howard

From 1921 to 1951, RCA's Radio Central station was operated at Rocky Point, Long Island New York. In 1928, the station was referred to as "the largest and probably most interesting radio station in the world."(1:104) Giant antennas suspended on steel towers 410 feet high stretched across some 6,000 acres!(1:104)

In his book *Wireless Communication in the United States*, Thorn Mayes says that 10 200KW alternator transmitters feeding 12 VLF antennas were originally planned but only two were built. (2:172) These two worked so well, and technology was changing so fast, that they never built the rest.

In 1922, vacuum tube transmitters were tried for the first time (3:14) and a series of smaller, 200' foot antenna towers were built.

In the mid 1920's, the station participated in trans-Atlantic exchange of radio facsimile transmissions! (4:141)

The alternators were finally removed and the station was closed in 1951. (2:176)

So, what does this have to do with collecting strain insulators? Recently, an *OFS* patron donated some Corning Pyrex 7-1/4" glass strains that he had acquired from Marshall Etter - W2ER, the chief engineer at Radio Central. According to our benefactor, the strains were used on the station's wire antenna system. It is his wish that the insulators end up in the hands of a fellow collector and that the proceeds from their sale be used to support *Old Familiar Strains*.

If you would like to own a piece of history, please submit your best offer. The high bid will have the option of acquiring one or both of the insulators. If he only wants one, the other will be available to the next highest bid. The winner will be determined from all bids received by April 30, 1997.

The insulators are standard-issue Pyrex with the round ends and saddle ways (See *OFS* April, 1995 pg. 8). They will be accompanied by a certificate of authenticity from *OFS* as to their origin, along with a high-quality photocopy of the article "A Visit to 'Radio Central'" from the August, 1928 *Radio News*. The article tells the story of Radio Central with 4 pages of text and eight clear pictures of the station and the antennas. If you would just like a copy of the article, send me \$1.00 and I'll put it in with your next copy of *Old Familiar Strains*.

Sources:

1. Hertzberg, Robert, "A Visit to 'Radio Central,'" *Radio News* Vol. 10 No. 2, August 1928, pp. 104 - 107.
2. Mayes, Thorn L, *Wireless Communication in the United States*, East Greenwich, RI: The New England Wireless and Steam Museum, Inc., 1989.
3. Anderson, John M., "Supplying Tubes, Sets, and People to RCA: The General Electric Connection" *The AWA Review* Vol. 5, Holcomb, NY: The Antique Wireless Association, Inc., 1990, pp. 1 - 20.
4. Yates, Raymond Francis, *Everyman's Guide to Radio*, Vol. 1, New York: Popular Radio Inc., 1927.

Other works consulted:

Sterling, George E., *The Radio Manual*, 1st Ed., New York: D. Van Nostrand Company Inc., 1928.

Show Notes

Rickreall, OR February 15th, 1997 reported by Dan Howard

For the third year running, my father and I shared a table at the Salem Hamfair (located in Rickreall, OR). As in prior years, a fair number of ham-oriented antenna insulators showed up. This year I brought home a hand-full of new ones including a huge (5-1/2" x 6-1/2" x 1-1/4" thick) brown porcelain center insulator that someone "brought home when the National Guard was going to throw it out." I was also pleased to pick up a pair of plastic Barker and Williamson insulators. The last time I saw some of these, they were still attached to a \$30 dipole antenna. I thought that buying the loose insulators two-for-a-dollar seemed much more reasonable. I enjoyed making the acquaintance of Jim McCracken, an *OFS* reader from the Salem area. Jim took home a nice Pyrex 7-1/4" amateur transmitting insulator among other items. All-in-all it was a very pleasant outing.

Westford, MA February 23, 1997 reported by Bob Puttre

I just returned from the Radio XXVIII swap meet at Westford, MA. Besides getting one nice item for my radio collection, I managed to find eight lightning arresters. Five of them were new to me and three were duplicates for trading [see Classified ads]. Prices ranged from \$2.00 to \$10.00 for the two best with boxes. One unusual item was a Birnbach arrester in white [generally seen in cobalt blue]. One vendor had a bunch of pin insulators. Two of them

had Mickey Mouse ears and were priced at \$20.00.

Seattle, WA March 1, 1997
reported by Gil Hedges-Blanquez
About 40 insulator collectors turned out for the annual Seattle-Area Spring Insulator swap and picnic. This year I hosted the show at my home. No blockbuster strains showed up, but I acquired a box of "nick-nacks" which included radio stand off insulators and a few common glass strains.

Puyallup, WA March 8, 1997 reported by Dan Howard

Although I rented the table for the purpose of getting rid of excess "stuff," I still managed to locate a few new insulators and lightning arresters at the 1997 Mic & Key show in Puyallup, WA. Early Saturday, the always interesting, "box full" came out from underneath a table downstairs and I had a good time going through it. Over the course of the weekend, I added a dozen new strains (all porcelain) to my collection. Very little glass of any kind was seen. A periwinkle-blue "Silvertone" lightning arrester, and a previously-unknown L.S. Brach neon tube lightning arrester were welcome additions. The Brach arrester uses an interesting three-pin tube-style mounting and was a gift from the fellow who had the table behind me last year. On the way home from the show I stopped to see Gil Hedges-Blanquez. While there I got my first in-person look at Gil's blue "rocket" - very nice. [*OFS* 6/96 pg. 12]

The Care and Feeding of Insulators

Perhaps this feature was inspired by the Spring cleaning projects that I have been doing for the last few days. Anyway, by special permission of the authors, I have excerpted two articles about cleaning and caring for collectibles.

The first, "Cleaning Your Insulators," by **Bob Stahr** and Bill Meier, was picked up off the Internet and reprinted in May, 1996 issue of *The Call Letter* where I found it. Though it was written with the pin insulator collector in mind, you may wish to try the technique if you have a hard-to-clean strain.

The second, "Cotton Balls and Water," by Mike Parker, appeared in the January, 1997 issue of *The Call Letter*. *The Call Letter* is the official publication of the Northwest Vintage Radio Society.

Cleaning Your Insulators by Bob Stahr and Bill Meier

- The Magic Potion - Oxalic Acid
- There are many different ways to clean insulators. For just plain dirt you can just wash it off with soap and a Scotch Brite or SOS pad, but the problem for most people is usually with that "train smoke." There are different techniques for different insulators, but for the most part everyone uses oxalic acid for the ease and quickness. Oxalic acid is a white crystalline powder, and is commonly called "Wood Bleach" and can be bought at local hardware or supply stores.

- Preparing the acid solution
- Mix about one pound of acid with every 2 1/2 gallons of water. Using hot water will help dissolve the crystals faster but remember to let it cool down before placing your insulators in it. **Do not add water to acid!** Remember to always add acid to water. An old high school chemistry saying goes like this "do it the way you oughta, add acid to water". Safety gloves and goggles are recommended during handling of chemicals. The solution is also relatively harmless to clothing.

I like to use 5 gallon buckets for my acid bath. Be sure you always use a plastic bucket, not a metal one. Please make sure you put a lid on it so no small children or pets will fall in or play with your insulators!

- Preparing the insulators
- The first thing you need to do is bring the insulator to room temperature. A significant temperature difference can crack an insulator. This is why you should never use a dishwasher.

Bringing an insulator in from a cold, unheated garage and putting it under hot water will probably crack it. You should clean off all the loose dirt and debris from the insulators. This will keep your solution lasting longer.

- Cleaning the insulators

Generally after a day in the bath the paint, tar, or soot should come off easily. However, you can soak the insulators for several days for stubborn deposits. If you can find a 1" diameter round brush it is helpful for cleaning the pinholes of insulators. [I found a baby bottle brush or cotton swabs work well for the holes in strains, Ed.]

Otherwise a toothbrush with the end heated and bent with the bristles out will work well. [and an unheated brush is good for cleaning between ribs, Ed.]

The Scotch Brite or SOS pads work well for taking out some of the stubborn spots and getting in between petticoats. Take care to also scrub around the embossing and the drip points. A stiff brush is useful for this, too. Again, be sure the temperature of the bath and the rinse water are the same, to avoid thermal shock and the potential for cracking.

Pieces that are sandblasted or frosted from burial can not be cleaned with this acid treatment. This will not restore their luster. There are occasional instances in which the glass will not come completely clean and will have a hazed look. Sometimes these insulators can be tumbled with a mild buffering compound to restore the luster. Several insulator people and a number of bottle people provide this service. I personally haven't tumbled any insulators, but I understand the results can be impressive. Expect to pay about \$10-\$20 per insulator for this service, plus any shipping costs.

- Cautions

Do not use oxalic acid to clean carnival glass, flashed amber, or use it on soft glass such as the Hemingray E-14B's and D-510's in opalescent milk glass. The acid will take any coatings off the insulator including carnival and flashed amber. I have heard stories of soil eating the E-14B's away to nothing so I imagine the acid would do the same; don't try it!

- Disclaimers

The authors are not responsible for failure to follow these directions, misuse of acid or any accidents with the acid, or any damage to your insulators.

Bob Stahr is a contributor to *Old Familiar Strains*. His address appears in the annual roster.

Bill Meier manages an impressive group of insulator pages on the Internet (including the *Old Familiar Strains* page). This article appears at <http://www.insulators.com/care/cleaning.htm>. Bill's address is meier@amber8.enet.dec.com

Cotton Balls and Water

by Mike Parker

[The following excerpt about cleaning Bakelite is from a much longer article about restoring a radio with Bakelite parts. Since many of us have Bakelite arresters and perhaps insulators in our collections, I thought that his advice and cautions were worth sharing. Ed.]

When I found this Halowat (radio), the panels were far from gleaming. I think that grungy was a better description. I suppose there are those that think that this condition is something gathered by time alone and any amount of cleaning would destroy the effects of something that took 70 years to make! Don't get me wrong, I like the original "patina" of these items as well as anybody and furthermore, I like this patina clean. But let's face it, dirt is nothing but dirt and something like these radios, having been on this planet for 70 years, are going to acquire dirt and grime.

So, how to get rid of this grime and still have a gleaming bakelite surface, perfectly clean with a good patina, becomes the question. Bakelite is a very strange and sensitive surface. You can scratch it with your fingernail, and actually make a mark that is almost impossible to get rid of!

I will say NO! to the following Bakelite cleaning methods and products. You will be more than sorry if you use them. Soap, (even mild), any chemical cleaner, 409 etc., grit cleanser, steel wool, plastic scrubbers, alcohol, cloth rags, paper towels, waxes, polishes, even "organic cleaners" such as Simple Green are taboo! Oil based anything, no, Windex or Glass Plus, no. You will permanently discolor, scratch, dry out and destroy the Bakelite surface and the associated Polymers with it using any of the above and others I have not mentioned, such as rubbing compound and even "Jeweler's Rouge". Use your imagination and some common sense

by avoiding all of these. Don't even wipe off loose dust with a rag.

I will say YES! to the following; Water, cotton balls or Q-tips, Kleenex, (not toilet tissue), Liquid Wrench or WD-40 in extremely stubborn cases, but wipe off with cotton or Kleenex, soon. Paint remover, such as Zip Strip will actually not harm the surface, if you rinse with water and cotton balls, after the paint is gone.

To clean Bakelite using my methods, grab some cotton balls, dip one in some water, and lightly rub away the grime. You will get a brown color on the cotton, mixed with grime, very quick, so throw the cotton away and get a clean one, do this often. Stop and let the surface dry, you will see a film on the disturbed Bakelite. Repeat the above process until you have a clean, shiny surface. Start on another section. You will have to "blend" the sections to one another creating a clean, even transition between them. You should have a Bakelite surface that is mirror-like, once the residual film goes away. Be sure and do this under a very good light so you can observe and continue to remove the film, continue to rinse with cotton and water until surface is clean and film-free.

Mike Parker, KB7RSS, is a neighbor and a friend. He has collected antique radios and telegraph insulators for a number of years. He also enjoys restoring and operating antique trolley cars here in Portland.

Recommended Reading

The January, 1997 issue of *Crown Jewels* features an article of interest by *OfS* contributor, **Elton Gish**. In his regular column, "Porcelain Insulator News", Elton discusses pin insulators which were specially-made to minimize the generation of "RFI" - radio frequency interference.

A corona effect is sometimes present where high voltage lines tie to insulators. The Locke Insulator Corp. sold special "noiseless" insulators with metal inserts which served to minimize arcing.

It would be interesting to see if the technology developed to solve this problem was factored into the design of commercial or military radio strains. At high-powered installations such as Radio Central, insulators were known to create spectacular fireworks displays under the right conditions.

If you haven't done so, you really should read Elton's article. It is excellent.

Recently a reader sent me a copy of an article from *Linn's Stamp News* entitled "Insulator Hobby Embraces Postage Stamps." In the article, insulator collector Jill Meier pictures quite a number of postage stamps which have insulator themes. I was surprised at the number of times that insulators have been shown on postage stamps.

If you would like to start or enhance your own collection of "postal go-withs," **Kevin Lawless** was in charge of the commemorative envelopes at the Long Beach convention last year. If you contact him, he may have some spares available.

If you can, get a copy of the February 24, 1997, issue of *Linn's Stamp News*. I am sure that you will enjoy the article.