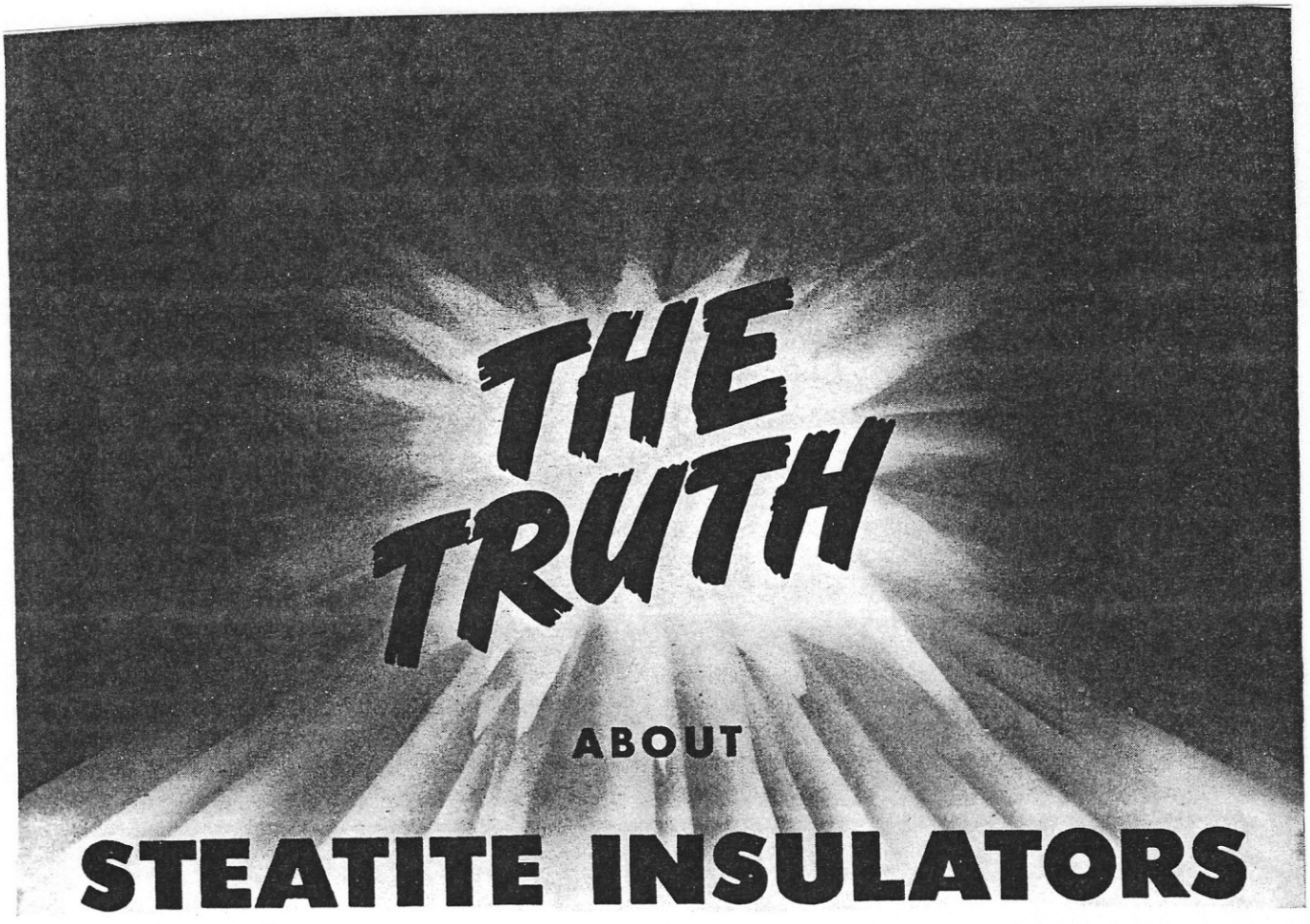
2016 PDF edition

Old Familiar Strains

a newsletter for collectors of radio strain insulators and related items
Volume 4 No. 6 December 1997



Editorial

If you have ever done battle with a cranky computer, then you will understand when I say that it's a relief to bring you the final Old Familiar Strains for 1997.

This month's lead article tells the story of steatite, a high quality ceramic that is used to make some of the best-quality antenna insulators.

The February issue will include an updated roster. **Please check your mailing label** to make sure that I have your address the way that you want it to appear. And, while you're at it, if the date code in the upper right hand corner of the label says "12/97" (or an earlier date), it's time to renew.

Finally, I would like to share the following bits of collecting philosophy:

"...all collections are mere custodianship, preservation of objects that will eventually belong to someone else. After all, he who dies with the most toys, *dies* - and his treasures are passed on to a new generation...." from "Bench Strength" by David Lincoln, *Mobilia* 9/97 pg. 50.

"Collectors with their individual motivations and pursuits come and go; a few recognize the value of building a legacy of information and sharing with other hobbyists." from "'E' is for Elusive" by David Lincoln, *Mobilia* 10/97 pg. 58.

Although Mr. Lincoln's column is dedicated to license plate collecting, I find his statements equally appropriate for our hobby. I really appreciate those collectors who are willing to contribute to the hobby by sharing news of their "finds," by offering information from old ads and catalogs, or by just jotting down observations from their collecting experiences. Thanks to all of you and **Happy Holidays,**

Dan Howard

Dan Howard

Steatite

by Dan Howard

In the last issue, I mentioned that Birnbach sold both porcelain and steatite antenna insulators. So, what is the difference between porcelain and steatite? I mean they are both white ceramics, right? Well, yes. But, as I learned earlier this year, there must be some important differences. A shortage of steatite at the beginning of World War II created a big-time crisis for manufacturers (more on that later). So, what is steatite and why should we care?

What is steatite?

The long answer: Hydrated magnesium silicate. The short answer: Talc.

Block Steatite: Some steatite occurs naturally in blocks. Steatite blocks are mined in Montana and can simply be machined into desired shapes (1:719).

Formed Steatite: Steatite, also known as "low loss porcelain" (2:16) is manufactured from ground talc which is mixed with a suitable binding material and pressed into forms by hydraulic pressure. (3:612) Both molded and extruded steatite forms are common.

Talc suitable for insulation manufacturing is found in the Appalachian region from Vermont to Georgia (1:719). After grinding, iron and other metal contaminates are removed from the talc dust by electrolytic osmosis (1:719).

Unlike porcelain, which is formed from clays, quartz, and feldspar, steatite is formed from talc, clay, and alkaline oxides (4:421). Generally, the talc forms about 85-90

percent of the mixture. Clay and "fluxes" form the other 10 to 15 percent (2:115). In its natural state, talc is very hygroscopic (it absorbs water like crazy). Since the losses resulting from moisture absorption must be prevented in applications such as high-frequency apparatus, impregnation and coating with waxes is usual. If desired, glazes can be applied, but often the material is used without glaze (2:115). After forming, the insulators are allowed to air dry. Most remaining moisture is driven out during the firing process (3:612).

A very critical and narrow firing temperature range must be maintained which contributes to the high cost of manufacture (+- 5 degrees C at a temperature of usually around 1350 degrees - high tension porcelain is usually fired at around 1200 hundred degrees) (2:115). Imperviousness is difficult to attain because of the short firing range. If the temperature is too high, the pieces soften and slump. If the temperature is kept low enough to be safe, the body will possibly be porous (2:115).

Prior to firing, talc, a cousin to asbestos, is soft and easily drilled. After firing it is exceedingly hard (3:612) and machining is difficult (5:132).

Advantages and Disadvantages of Steatite Insulation

+ ingredient materials are non-abrasive and easy to form (2:116)
+ naturally heat resistant and a good insulator (3:612)
+ lighter, and higher flexural, tensile, and compressive strength than porcelain (4:429)
+ good traverse strength (15,000 lb. per square inch) (2:116)
+ a low loss factor at high frequencies (1:719)
+ low power factor (.05 to .5 per cent) (2:116)
+ high electrical resistance at high temperatures (2:116)
+ good electrical properties at high temperatures (1:719)

- difficult to manufacture except for small parts (2:116)
- fragile prior to firing (6:65)
- made impervious to water with difficulty (2:116)
- high and critical firing temperature (2:116)
- only fair heat-shock resistance (2:116)
- dimensional tolerances are somewhat poor (5:132)

Identifying Steatite Insulators

Unless you have a laboratory at your disposal, you may not be able to tell the steatite insulators in your collection from wet-process porcelain. The material is highly vitrified (homogenous) in composition so it does not have the grainy appearance of dry-process porcelain.

The surest way to tell, of course, is by manufacturer's markings. Birnbach embosses the words "steatite porcelain" on some of its products (*OFS* 10/97). Isolantite and others used under-glaze ink markings.

If you can decode military part numbers, you may be able to identify surplus strains as being made of steatite. I hope to present a key to decoding the numbers in a feature on military insulators in a future issue.

Finally, as a resource, I have included a number of illustrations of steatite insulators from various manufacturers with this article. Unfortunately, the list is neither exhaustive, nor exclusive, as many of the same styles were also made from porcelain.

So, what about the *CRISIS*?

Early radio development favored low

frequencies. Prevailing theory held that for long distances, low frequency was a must. Today, Extremely Low Frequency (ELF) technology is used to communicate with submerged submarines. However, most other applications have been transferred to higher frequencies.

After World War I, the "useful" lower frequencies were reserved for commercial and military uses. Amateur radio operators were allowed to experiment with the "useless" higher frequencies. As they learned, materials such as glass and porcelain which provided great insulation at the low frequencies tended to be poor insulators at higher frequencies. When an insulator absorbs energy, it may heat and rupture. Steatite was found to be an excellent insulator at high frequencies. Although it is not clear when steatite insulation first became widely available, the National Company began offering steatite insulators to hams in the mid-thirties.

If it were up to hams alone to create the market, new materials such as steatite insulation might not have been developed. However, during this same period, short wave research was going on at the military research labs and Major Armstrong was doing his famous work in the area of FM.

The FCC established the first FM band (42-50 mhz.) in 1940 and, prior to the war, 25 commercial stations were operating (7:42). Although the FM receiving sets did not use steatite, the transmitting tubes and other components in the broadcast stations relied heavily on the new material.

The military appreciated the superior clarity

National

AA-3 **Net $.36**
A low-loss steatite spreader for 6 inch line spacing. (600 ohms impedance with No. 12 wire.)

AA-5 **Net $.30**
A low-loss steatite aircraft-type strain insulator.

AA-6 **Net $.54**
A general purpose strain insulator of low-loss steatite.

GS-1, 1/2" x 1 3/8" **Net $.24**
GS-2, 1/2" x 2 7/8" **Net $.30**
GS-3, 3/4" x 2 7/8" **Net $.60**
GS-4, 3/4" x 4 7/8" **Net $.75**

GS-4A, 3/4" x 6 7/8"
Net $1.05
Cylindrical low-loss steatite standoff insulators with nickel plated caps and bases.

GSJ, (not illustrated)
Net $.10
A special nickel plated jack top threaded to fit the 3/4" diameter insulators GS-3, GS-4 & GS-4A.

GS-10, 3/4" high
Net, box of ten $.90

GS-10S (not illustrated) but same as GS-10 except includes threaded stud in top end. **Net, box of ten $1.00**

GS-5, 1 1/4" high **Net $.30**
GS-6, 2" high **Net $.42**
GS-7, 3" high **Net $.75**

These cone type standoff insulators are of low loss steatite. They are molded with a tapped hole in each end for mounting as follows:

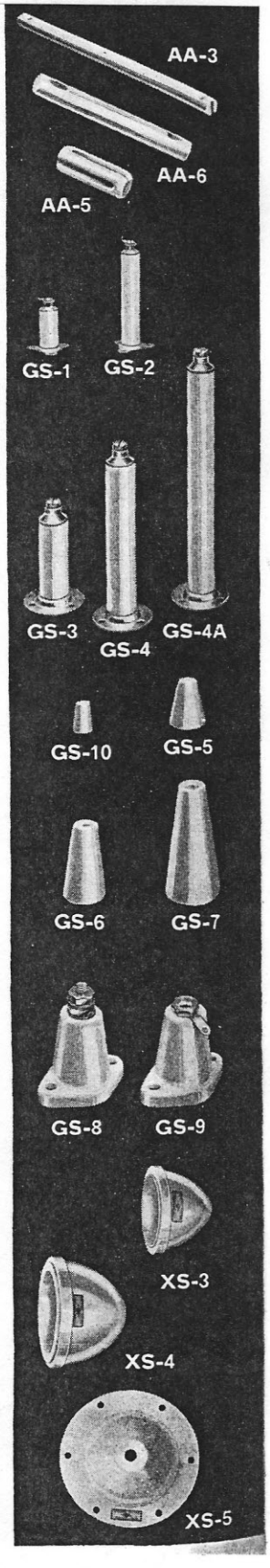
GS-5, 8-32 tap 7/16" deep; GS-6 & GS-7, 10-24 tap 11/16" deep; GS-10, 6-32 tap 1/4" deep and GS-10S as noted above.

GS-8, with terminal **Net $.54**
GS-9, with jack **Net $.75**
These low-loss steatite standoff Insulators are also useful as lead-through bushings.

XS-3, (2 3/4" hole) **Net $3.60**
XS-4, (3 3/4" hole) **Net $4.35**
Prices are per pair and include nickel plated spindles, lugs and hardware. These low-loss steatite bowls are ideal for lead-in purposes at high voltages.

XS-5, Without Fittings
Net, each $ 4.95

XS-5F, With Fittings
Net, per pair $10.20
These big low-loss bowls have an extremely long leakage path and a 5 1/4" flange for bolting in place. Insulation steatite. Fittings include nickel plated brass spindles, lugs, nuts and washers.



of FM communication over AM, however the nation's domestic crisis (The Great Depression), had limited the military's budget for new equipment (7:267). When the U.S. entered World War II, what radio materiel was available was generally not state-of-the-art. As contracts were written for FM communication equipment, radar components, and other gear that used steatite, an acute shortage (*CRISIS*) of steatite occurred. At one point, steatite was in such short supply that it was listed as a War Production Board (WPB) Group 1 (most critical) material (8:38).

Steatite's importance to the war effort was further emphasized when special task groups were set up to establish manufacturing specifications for steatite. In 1942, under the direction of the WPB, committees and subcommittees were established to develop guidelines for the standardization and simplification of radio parts used in military and naval radio and electronic equipment (9:33) Within the Insulating Materials subcommittee, two task groups on steatite were created. The first, "The Task Group on Steatite" was formed to consider physical and chemical specifications. The second, "The Task Group on Steatite Forms," looked into dimensional and tolerance considerations. Making up the committees were members of the Army Signal Corps and other military organizations and laboratories as well as prominent figures from industry. F. Potter (Isolantite), Lt. Glenn N. Howatt (General Ceramics and Steatite Corporation), Dr. Hans Thurnauer (American Lava), J. S. White (Stupakoff Ceramic & Mfg. Co.), and others served on the committees and task groups. (9:34)

Solving the Crisis

One obvious way to respond to the steatite

shortage was to find a replacement of equal quality. With a hint of irony, a General Ceramics ad pointed out that one ideal replacement, natural lava from Sicily, was unavailable for obvious reasons (10:19). Plastics, Mycalex, porcelain, and glass were all tried for different applications (8:39). Unfortunately, most of these uses involved some level of compromise (8:39). Patriotic-minded engineers were encouraged to apply themselves to the task of finding alternatives. And, setting aside thoughts of competition, companies were to share knowledge wherever possible. (Oh, the good old days).

Fortunately, the manufacturers weren't long in responding to the nation's need for more steatite. Happily, according to mid-1943 ads, companies such as Isolantite, Crowley, and Centralab, had found enough additional capacity that there was now "steatite aplenty" for all approved war time applications. Which explains the dramatic announcement from General Ceramics that graces this month's cover. General Ceramics wanted the country to know the truth about steatite, that there was no longer a need to compromise, there was steatite enough to go around. Crisis Averted! Whew!

As you can see from the following survey, steatite has continued in its importance as a superior insulating material. According to my findings, there are as many, or more, companies producing steatite and related materials today than ever before.

End Notes:

1. Brady, George S., and Henry R. Clauser, *Materials Handbook* 11th Ed. (New York: McGraw-Hill, 1977).
2. Miner, Douglas F., *Insulation of Electrical Apparatus* 1st Ed. (New York: McGraw-Hill, 1941)
3. Lieghou, Robert B., *Chemistry of Engineering Materials* 3rd Ed. (New York: McGraw-Hill, 1931)
4. Shugg, W. Tillar, *Handbook of Electrical and Electronic Insulating Materials* 2nd Ed. (New York: IEEE, 1995)
5. Mantell, Charles S., *Engineering Materials Handbook* 1st Ed. (New York: Mc-Graw Hill, 1958).

6: National Company advertisement, *QST*, August, 1937.

7: McMahon, Morgan E. *A Flick of the Switch 1930 - 1950* (North Highlands, CA: Vintage Radio, 1975).

8. "Substitutes for War Radio," *Electronic Industries* December, 1942, pp. 38-39 ff..
9. "War Standards for Military Radio," *Electronic Industries* December, 1942 pp. 33-35.
10. General Ceramics ad *Electronic Industries* December, 1942.

Illustrations:

Cover & pg. 3: General Ceramics ad *Electronics* June, 1943 pg. 23

Pg. 4: Centralab ad *Radio-Television Service Dealer* April, 1955 pg. 52

Pg. 6: National ad *Radio's Master* 15th ed. 1950 pg. J-10

Pg. 7: Isolantite ad *Electronics* March, 1941 pg. 69

Pg. 7: Centralab ad *Radio Handbook* 11th Ed. 1947 pg. 477

Pg. 11: Lapp illustration *Electronic Industries* December, 1942 pg. 97

Pg. 15: *Locke Insulator Catalog* 8/43 pg. 23 (courtesy of **Elton Gish)**

Who Made Steatite?

The following table presents a comparison of steatite manufacturers through the eras. Some of these companies definitely made steatite. Others most likely were included in the listings because they made or sold steatite components. I have drawn upon a variety of sources to produce this table. This is both a blessing a curse. While it does give number of perspectives, I have no control over the standards that the various authors applied for including or excluding a given company from the listings.

	1943[1]	1954[2]	1962[3]	1985[4]	1996[5]
Accumet Engineering Corp., Huston, MA				X	
Akron Porcelain and Plastics Co., Akron, OH					X
AlSiMag Technical Ceramics Inc, Laurens, SC[6]					X
American Lava Corp., Chattanooga, TN	X	X	X		
Architectural Tiling Co. Inc., Keyport, NJ	X				
Associated Ceramics, Sarver, PA				X	X
CFI Corp., Long Island, NY			X		
Centerflex Technologies Corp., Hawthorne, NJ				X	
Centralab, Milwaukee, WI	X	x	X		
Ceram-Tek, Corona, CA					X
Cook Ceramic Co., Trenton, NJ (*OFS* 12/96)	X	X			
Cotronix Corp., Brooklyn, NY				X	X
Crowley & Co. Inc., W. Orange, NJ	X	x			
Du-Co Ceramics Co., Saxonburg, PA		X	X	X	X
Elan Technology, Belleville, NJ					X
GBC Materials Corp., Latrobe, PA					X
GTE Corp., Exeter, NH				X	
Gem Clay products, Sebring, OH	X				
General Ceramic & Steatite Corp., Keasbey, NJ	X	X	X		
Edward Hines Lumber Co., Chicago, IL		X			
Hoechst Ceramic N. America Inc, Mansfield, MD					X
Iden Industries Inc., Millington, NJ				X	
Isolantite Manufacturing Co. Inc., Stirling, NJ	X	x	X	X	X
Kadco Ceramics, Easton, PA					X
M. Kirchberger & Co. Inc., Brooklyn, NJ		X	X		

	1943	1954	1962	1985	1996
Lapp Insulator Co., Leroy, NY	X	X	X		X
Lenox China Co., Trenton, NJ	X				
Locke Insulator Co., Baltimore, MD	X				
Louthan Mfg. Corp., E. Liverpool, OH	X		?		
Maryland Ceramic and Steatite Co. Inc., Bel Air, MD					X
Maryland Lava Company, Street, MD					X
Mindrum Precision Products, Rancho Cucamonga, CA					X
Mykroy / Mycalex Ceramics, Cliffton, NJ					X
National Ceramic Co., Trenton, NJ[7]		x	X	X	X
National Porcelain Co., Trenton, NJ	X				
National Tile Co., Anderson, IN	X				
Pacific Clay Products, Los Angeles, CA	X				
Pass & Seymour Inc., Solvay, NY	X				
Plastic Insulator Co., New York, NY		X			
Saxonburg Potteries, Saxonburg, PA	X	X	X		X
Semiconductor Mfg. Corp., Fairfield, NJ				X	
Southern Porcelain Inc., Marietta, GA					X
Star Porcelain Co., Trenton, NJ (*OFS* 12/96)	X	X	X	X	X
Steward DM Mfg. Co., Chattanooga, TN		x	X	X	X
Stupakoff Ceramic & Mfg. Co., Latrobe, PA	X	x			
Superior Steatite & Ceramic Corp., Englewood, NJ		x	X		
Superior Technical Ceramics Corp., St. Albans, VT					X
Thor Ceramics Inc., Bloomfield, NJ		X	X		
U.S. Stoneware Co., Akron, OH			X		
Valley Design Corp., Littleton, MA				X	
Victor-Bernard Industries Inc., Philadelphia, PA					X
Wisconsin Ceramic Products, Columbus, WI					X
Wisconsin Porcelain Co., Sun Prairie, WI	X	x	X		X

Steatite Trade Names:
"Alisimag 196" American Lava Corp.
"Crolite" Henry L. Crowley & Co.
"Isolantite" Isolantite Inc.
"Locketite" Locke Insulator Corp.

End Notes:

1. *Electronics,* June, 1943, pg. D-11.
2. *Conover-Mast Purchasing Directory*, 26th Ed., 1954, pg. 496. Supplemented with information from the 1954 IRE Directory (small x's).
3. *1962 IRE Directory*, pp. 675-680. The directory does not segregate steatite manufacturers from manufacturers of other types of insulating ceramics. No companies were added based solely on this source. However, some resellers may have been inadvertantly listed.
4. *Electronics Design's Gold Book,* 12th Ed., Vol. 1, 1985/1986, pg. 416. Although all of these companies are listed specifically as steatite manufacturers, I suspect that at least some of them are resellers or suppliers of steatite products.
5. *Thomas Register of American Manufacturers,* 1996, pg. 33553-33556.
6. AlSiMag is probably a successor company to American Lava.
7. According to Jack Tod in *A History of the Electrical Porcelain Industry in the United States*, National Porcelain was sold to receivers in 1963 and renamed National Ceramic.

Lapp Execs Get Pennant for "Excellence"

At LeRoy(N. Y., on November 16, the Army-Navy "E" was awarded to the Lapp Insulator Co., Inc., and its employees. Above, left to right, are seen John S. Lapp, president of the company; Major H. D. Newton, U. S. Army Signal Corps; and Grover W. Lapp, company treasurer. The Lapp company is a large producer of condensers, porcelain water coils, insulators, and numerous special parts of porcelain and steatite, used in the electronic industries

Greene Insulators

by Dan Howard

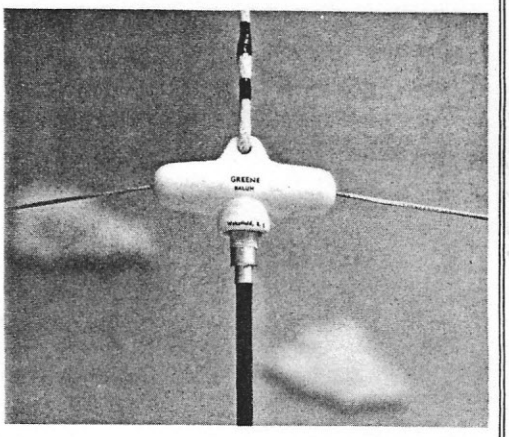
I love to find green insulators. Apple green or emerald green glass insulators are always a welcome site. Green-glazed porcelains are a treat as well. But this article isn't about green insulators. It is all about Mr. GREENE and his patented insulator (which is actually white).

Mr. Oliver Watson Greene, a resident of Wakefield, Rhode Island, manufactured and sold insulators from 1969 to 1973. A licensed amateur radio operator, (W1CPI), Mr. Greene developed and patented a submarine-shaped plastic center insulator which could be used by amateurs or shortwave listeners.

I have a hunch that Mr. Greene was a dedicated innovator and tinkerer. In the 18 months between the time that he applied for the patent (see Figure 3) and the time that it was granted in 1970, the insulator underwent three significant design modifications!

The Greene center insulator is designed with a cast-in coaxial cable connector. On non-balun units, the center conductor goes to one leg of the dipole antenna; the shield conductor, goes to the other.

The antenna wires were soldered to copper pigtails on the ends of the insulator in the first versions (see Figures 1 & 2). Of course, this design placed all of the tension on the pigtail leads. Years earlier, other manufacturers had abandoned this design in favor of more robust approaches. Even so, Greene's ads say that the leads can support up to 500 pounds. While this may be true, I suspect that when the insulator was in use, wind motion would take its toll, eventually resulting in failure.



GREENE — Center insulator assembly, absolutely water tight, for inverted V . . . dipoles . . . yagis . . . quads. The 52 ohm impedance point in a quarter wave line, feeding an extended double zepp or two half waves in phase.
With . . . or . . . without built-in balun, one to one ratio, unbalanced feed line to balanced feed . . . 52 ohms impedance, rated at full legal limit input of 1 KW continuous operation. Broad banded, 3 - 30 Mc.

SPECIFICATIONS

HOUSING: — High impact, high dielectric strength moulded plastics material, gloss finish, beads water.

HOIST RING: — Tensile strength 360 pounds continuous pull.

CORROSION PROOF: — No nuts . . . no bolts . . . no rivets.

TYPE 83-875: — Coaxial connector . . . sealed in plastic and protected by a rain drip plastic boot.

ANTENNA CONNECTORS: — Flexible pigtails, one quarter inch copper, tinned braid, sealed in plastic, tensile strength 500 pounds.

Color . . . white . . . length 4.75 inches diameter 1.60 inches

GWB with balun $10.00

GNB no balun $6.00

Post paid cont. U.S.A.

Design Registered

O. WATSON GREENE

Wakefield, R. I. 02880

Tel. (401) 783-2702

Apparently this shortcoming was quickly recognized. Shortly after the insulator was introduced, ads show an improved design which incorporated attachment loops to take the strain off of the leads, a more traditional approach (see Figure 4).

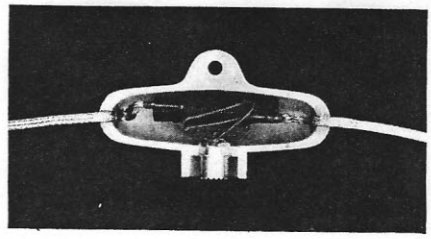
Later, the insulator was modified further. While the second version still incorporated pigtail leads, a third version was introduced in 1970 which replaced the pigtails with external terminals for attaching the antenna wires directly (see Figure 5). This third version finally eliminated the moving parts from the insulator, making it much more durable.

Each of the three versions was available with or without a 1:1 impedance matching balun. Models with balun were termed "GWB" - (Greene-With-Balun?). Models without baluns were "GNB" (Greene-No-Balun?) By my count, that means that there are at least six versions to collect.

Since the insulator was made from injection molded polystyrene, it should have been possible to produce it in any number of colors (including green). However, only a white version is mentioned in the ads. Oh well.

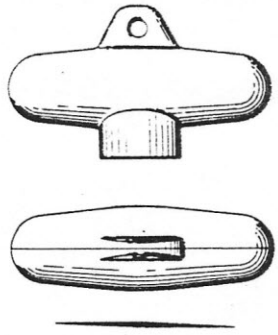
By 1973, Mr. Greene had sold his insulator to Kaufman Industries from Reeds Ferry, New Hampshire. Kaufman's ads continued running in ham radio magazines until 1975. The insulator pictured in the ads continued to say "Greene" on it. I don't know if the mold was ever modified to reflect the name of the new company. If it was, there would be additional varieties to collect. I understand that the insulator was later sold to parties unknown.

dipole center insulator



O. Watson Greene, W1CPI, has just introduced a new dipole center insulator that is available with or without a broadband balun. The housing for the Greene insulator is a precision molding of hard-flow polystyrene material. When the two halves are cemented together, they are practically impossible to separate. Rain and moisture are kept out of the insulator and feedlines by the rain drip collar that is formed around the type-UHF coaxial connector on the bottom of the insulator. The hoist ring at top center makes the unit adaptable for either inverted-vees or horizontal dipoles. The antenna connectors are quarter-inch copper braid, six inches long with tensile strength of 500 pounds. The 1:1 52-ohm balun is wound on a ferrite rod and covers the range from 2.8 to 32 MHz. The manufacturer reports that this balun will take the full legal amateur power input without core saturation. The model GWB with balun is priced at $10.00; the GNB without balun is $6.00. Order from O. Watson Greene, Wakefield, Rhode Island 02880.

219,106
ANTENNA BALUN
Oliver Watson Greene, Box 423, Wakefield, R.I. 02880
Filed Mar. 18, 1969, Ser. No. 16,312
Term of patent 7 years
Int. Cl. D14—99
U.S. Cl. D26—14



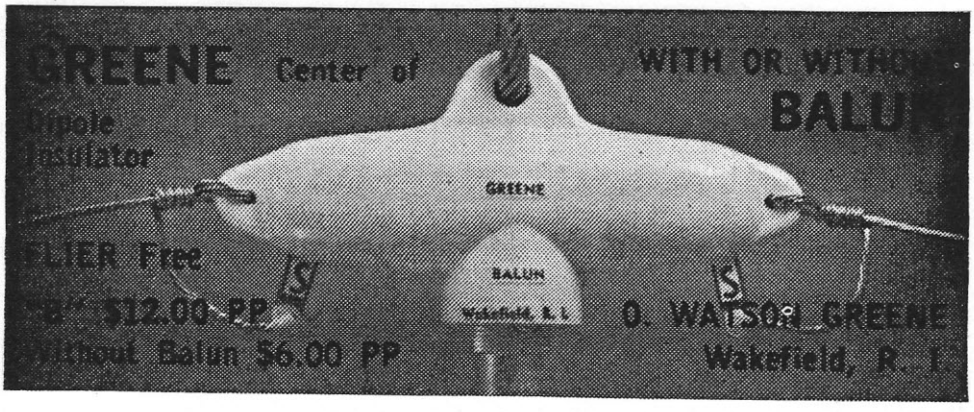
When I wrote in 1995, I was sad to learn that Mr. Greene had passed away two years earlier.

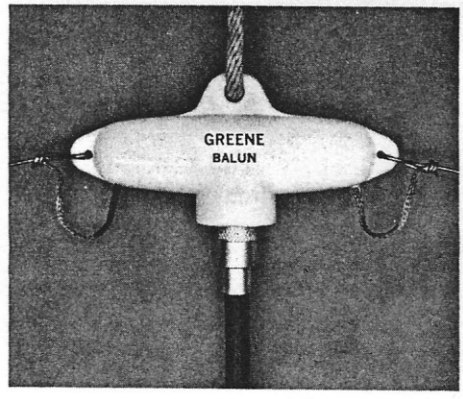
Once again I find myself again writing about an insulator that I would like to have, rather than one that is already in the collection. I know that a white plastic insulator may not seem like much of a collectable to some of the readers, but, in my mind, its snappy "mini sub" design makes the Greene insulator an interesting and desirable addition to any collection.

Sources:

Fig. 1: O. Watson Greene ad *Ham Radio* June, 1969 pg. 82.
Fig. 2: "New Products" *Ham Radio* August, 1969 pg. 74.
Fig. 3: *U.S. Patent Gazette* 11/3/70 pg. 333.
Fig. 4: O. Watson Greene ad *Ham Radio* September, 1969 pg. 96.
Fig. 5: O. Watson Greene ad *Ham Radio* August, 1970 pg. 87.

Special thanks to Mrs. Esther Greene





GREENE CENTER INSULATOR SPEAKS for ITSELF

WITH or WITHOUT built-in BALUN

An absolutely water tight, sealed assembly, molded of high impact, high dielectric plastic material. The 83-875 coaxial connector, sealed in, up inside a rain drip boot, keeping water from entering the fitting or feed line. Sealed in antenna connecting pigtails . . . antenna connecting eyes — hoist ring, smooth surfaces, no metal eyes to chafe or cut . . . Gloss finish, beads water . . . tensile strength, 500 pounds. A detailed specification and instruction sheet is furnished with each unit . . . with, a picture of the interior of the BALUN assembly. Color . . . white . . . length 5.50 inches . . . very light . . . very strong . . . hangs well . . looks nice . . . a must in every well organized ham installation, with . . . or . . . without the balun.

Center Insulator with BALUN	$10.00
Center Insulator without BALUN	$ 6.00

Design Registered
Send for flier, free.

O. WATSON GREENE
Wakefield, R. I. 02880
Tel: 401-783-2702

Classifieds

Wanted: buy or trade color porcelain television lightning arresters. Also strains and miscellaneous small color porcelain. **For Trade**: tiny cobalt porcelain spool marked "P.P." **Jimmy Burns** 16784 Ardmore, Conroe, TX 77302 (409) 231-3905.

Wanted: A feature on Pyrex is planned for the February issue. So, I'm looking for photos or ads showing Pyrex strains. And I need to hear from you regarding the Pyrex items in your collections. Do you have some, many, none? Does anyone have examples of the large tubular strains with the metal ends? What types of embossings have you seen (for example, I have seen a 12" Pyrex strain with a Navy SE number etched on it.) Let's work together and turn out a great feature. Dan Howard (503) 761-7799.

Roster Update

The new readers list in the October issue listed Peggy Johnson as a new reader. Her name is **Peggy Johnston.** Sorry.

Ray McAllister's correct E-Mail address is rscm@IX.netcom.com

Correction

Page 9 of the October OFS incorrectly states that the 3" ribbed strain (Part 00) is pictured on page 22. Instead the insulator pictured is the flat glass strain (Part 661).

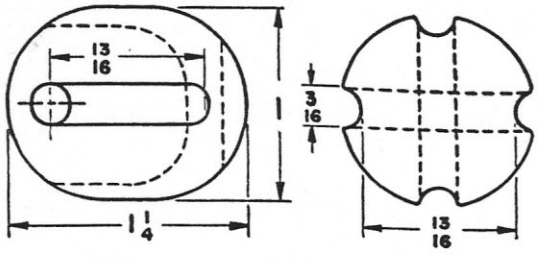
Upcoming Events

John Lewis wrote me about plans for a Spring time swap meet in the Pensacola, FL area. If I get more details before the April issue, I'll pass them along. Otherwise, contact John at (850) 968-5212.

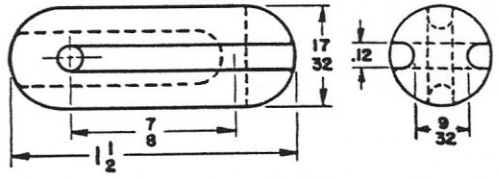
For information on many upcoming events, I recommend Bill Meier's insulator shows page at **insulators.com/shows/index.htm.**

Another interesting address: **http://www.eenet.com/pass/dir/insul.html** "Insulator Manufacturers" This is the one of the pages in a paid registry of radio component manufacturers. While the listing of insulator manufacturers is not extensive at this time, and is by no means complete, this page is worth watching. It provides information on some current manufacturers and may provide links for you to other interesting pages.

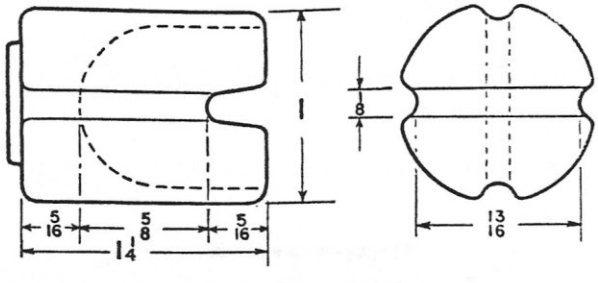
LOCKE STRAIN INSULATORS



Catalog Number - 25607—Type IN-78A



Catalog Number - 25608—Type IN-78



Catalog No. - - 24802

Standard Material of Items Above: Locketite with white glaze.

Blue Flash

by Dan Howard

On page 16 of the June, 1997 *OFS,* I described my golf ball insulator project. At the time, I thought that I was just being "cute" by using the "Blue Flash" brand golf balls to make the insulators. Well, as they say, truth often is stranger than fiction.

At a recent old radio club meeting, a fellow showed up with a lightning arrester for me. This large cobalt blue porcelain arrester looked like several others in my collection so I did not get too excited. However, after closer examination, I was surprise to see the brand name on the unit. You guessed it. It was a Silvertone "BLUE FLASH" radio lightning arrester.

So, by putting the new arrester with the Blue Flash golf ball insulators that I made previously, have I now assembled a one-of-a-kind "Blue Flash" antenna kit?

Anyway, **Bob Puttre** recently sent me an updated list of his lightning arresters. And the list just keeps getting longer and longer. Bob also recently acquired one of these Blue Flashes. As he describes it, the unit tapers to square ends, and is 4-1/8" long, 1-3/8" wide, and 1-1/4" tall.

While it may not be rare, this attractive dark blue conversation piece definitely has a place of honor in my collection.

Standoff or Strain?

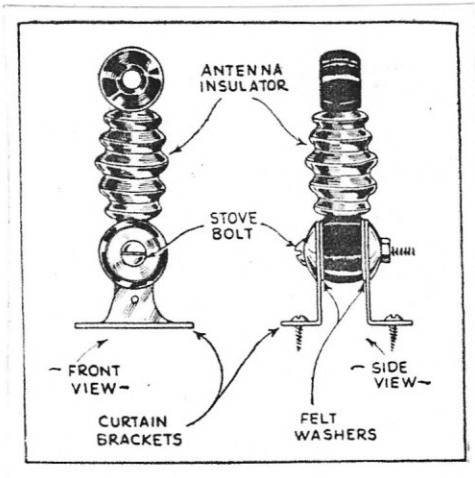
by Dan Howard

And here is yet another installment in the series of insulators that you can make yourself.

The article below is from the August, 1934 issue of *Radio Craft* Magazine (pg. 94). In it, an amateur describes how to take a glass strain and make it into a standoff (assigning a classification to this hybrid would be a real test for any insulator cataloging system).

I can thank my grandfather for keeping the leftover hardware from the roller-blind project a few decades ago. So, when I decided to build one of these standoffs, all it took was a trip into the workshop to retrieve the chrome brackets. You might check with the local hardware store to see if they are still available. The brackets came in pairs, one with a round hole, the other with a slot. Of course you want the ones with the round hole for your project.

I found the standoff to be quite functional.. Have fun!



USE of the inexpensive standoff insulator illustrated above, which utilizes ordinary window shade brackets, will improve reception on the shorter wavelengths.—CHESTER MCCLINTOCK