

# The Birthing of the ***INSULATORS - A History and Guide to North American Glass Pintype Insulators***

We had already been active in the insulator hobby for over 20 years at the time that Carol took over editorial responsibility for *Crown Jewels of the Wire* magazine from Don and Dora Harned in 1985.

Marion and Evelyn Milholland were successful authors of multiple reference books and price guides for glass insulators and had been since 1967. Several years after Marion's death in 1976, we approached Evelyn about helping her to bring their reference works up to date to include the many new insulators that had been identified. Evelyn said, "The 1976 *Bicentennial Edition of Most About Glass Insulators* was the complete and final edition Marion wanted to have printed. There would be no further revisions." We tried on more than one occasion to change her mind in the years that followed. Finally, we asked for her blessings as we took on the production of a new reference book for the hobby. We gratefully received a positive affirmation from Mrs. Milholland.

And so in 1985 our five-year adventure was begun. Folks in the hobby seemed excited at the prospect of an up-to-date reference book. Household Internet and email were still a decade in the future so identifying and locating the owners of many of the unique insulators pictured by the Milhollands and other early authors seemed to be a monumental task. Phone calls and letters/postcards, conversations at insulator shows and swap meets were the means at our disposal to do our detective work. And, our years in the hobby gave us a working knowledge of where we might locate the insulators and their owners.

**Another decision was made early-on.** We had never been foreign glass collectors, and the foreign insulators found in the Milholland books were already being researched and had been identified with new Consolidated Design (CD) numbers published in references by Marilyn Albers since 1981. Our main collecting passion was CD 100-200. Power hadn't been our love, nor had we been threadless collectors. We saved everything from CD 100 to 200 and the more colorful the better. At the height of our collecting, we had nearly 5,000 pieces in that consolidated design range. We wanted to concentrate our book on North American (which included both Canada and Mexico) Glass Pintype Insulators. We knew that we would have to travel to photograph those pieces that were beyond our shelved collection and we'd have to locate the power and threadless CDs almost from scratch.

**Use of the Consolidated Design system** by N.R. "Woody" Woodward was our first hurdle. We talked with "Woody" to see if he would agree to let us use his CD numbering system in our publication. We got his permission, but confirmed in those discussions (I think we already had heard this) that "Woody" had not created nor did he particularly endorse the Threadless CD assignments. The threadless CDs were essentially developed and used by the Milhollands in their books so that they could be more complete reference books.

In 1985 there was a great deal of dissatisfaction in the hobby with Milholland's threadless CD assignments. Since Milholland's death in 1976, none of the newly discovered threadless insulator styles had been assigned CD numbers. We were faced with the same question that the Milhollands had faced -- Do we publish a "threaded-insulators-only" reference book? We decided not to do that.

At some point, probably in 1988, we contacted Ray Klingensmith to discuss this issue. Ray expressed an interest in tackling the problem. He was willing to do the research necessary to identify all of the new and established threadless styles and organize them under a more logical sequence of CD numbers. He did a lot of preliminary work which culminated in a document that was shared with a number of knowledgeable threadless collectors at the Allentown National in 1989. Pictures and CD assignments were shown, discussions took place, and the end result was essentially the source for the threadless information that was included in Volume 2 of our 1990 reference book, *Insulators, a History and Guide to North American Glass Pintype Insulators*.

Ray was acknowledged as the creator of the threadless CD numbers, and subsequently that same series of CD numbers was used in our five Price Guide publications: 1991, 1995, 1999, 2003 and 2007. Again, Ray was acknowledged for his contribution in each of these editions. Beginning with the 2007 price guide revision, Charlie Irons was acknowledged for creating and organizing battery rest insulators under an additional extension of Woody's CD numbering system.

All six of our publications were copyrighted and carry a Library of Congress Catalog Card Number. However, at no time did we assume that because we had published the threadless CD chart and copyrighted that material that the CD numbering system, including threaded, threadless, and battery rests, had somehow come to belong to us in 2007. At the time of that publication we were simply granted permission to use the original CD numbering system and its extensions by their respective developers: N.R. Woodward: Threaded, Ray Klingensmith: Threadless, and Charlie Irons: Battery Rests. That agreement and our relationship with folks involved remained intact for the 18 years of our book publishing.

We contacted collectors of insulators made by specific manufacturers and asked them to participate in the development of our book by sharing their research regarding their specialties. At the time of the books' publishing, we knew of no specialty references that provided extensive written, pictorial, and graphic detail of company history, advertising, imagery, factory floor plans, production records, patent drawings, etc. It was our hope to bring this newly explored and revealed level of knowledge to the entire hobby through our book.

Slowly the information began to arrive....some was typed, but much of it was handwritten. Everything had to be retyped and blocked to be pasted or 'hot waxed' onto the boards for printing. A more consistent spell check certainly would have helped!

Building the archive of photos to use was the biggest, most costly and time consuming of tasks. Remember, no digital photography was available. We rigged up some pretty unattractive light boxes to help get the photographic backgrounds as white as possible. Many of our photos were taken 'on the fly' at shows. We spent quality time at the homes of many power and threadless specialty collectors. These wonderful, personal visits were at the heart of the hobby for us and we all worked together to fill the major gap that not owning CDs over 200 presented. We wish we had kept track of the number of trips to Walgreens to have the pictures developed only to find out that they would need to be retaken.

Today, with a click of the mouse, digital photos become perfect images with an immaculate white background with no "hot spots" from rigged photo lamps. This was not so in the late 1980's.

Once a good photo print was selected, the real fun began. There was a product called Rubylith which was used to mask images so that a

line of negatives could be photographed for printing. Large rolls of that product were consumed as the masked images were prepared.

### Here is how each photo was handled.

The selected color print was identified with the CD number. Two registration marks were placed at the top of the print.

Registration marks came on a clear tape product like Scotch tape.



Next, a piece of Rubylith the size of the photo print was cut from the large roll, taped to the back of the

photo and folded over on top of the color print. Rubylith was a two-layer product, a clear layer (placed next to the photo print) and a red layer that needed to be cut. Carefully, with an X-acto™ knife, Carol trimmed each insulator outline by hand.

Once the entire insulator had been traced, the red Rubylith layer on the outside of the tracing was lifted leaving the insulator image covered in red and clear plastic covering the rest of the photo's surface.

The Rubylith-prepared photos could then be sent to the photographic lab to have two pieces of film made. With the Rubylith mask in place, a line shot was made. The red Rubylith layer became a negative image....the red was opaque, the clear was black. This piece of film created a window through which the image could be seen.

With the clear Rubylith plastic lifted off the photo, the second piece of film, a halftone black and white image, was made of the color photo print.

Once both pieces of film had been returned for placement on the boards to be sent to the publisher, text was added and the two pieces of film were “married” using the registration marks and placed into position on the board for each page of the book. Voila! Text, line illustrations and photos were ready to have film shot for **one page** of the book.

CD 131.4 pictured for this discussion was a “piece of cake” compared to cutting tiny saw teeth around minute drip points on a signal insulator! When you have a chance, count the number of photos in the two volumes and reflect on this discussion.

**Another “First” for our hobby references was to add color plates** at the back of Volume II. State-of-the-art at the time it was published, it set an early tone for the wonderful color that is now commonly appreciated on our computer screens, insulator websites, magazine pages, and more recently published reference books.

**How many books were published?** The original number of the two volume, soft cover, comb-bound books published by Tan Books of Rockford, Illinois, totaled 1,500. Three subsequent printings added 1,000 each. Also published at the time of the first printing, were 100 hardbound copies that contained both of the Volumes. They were intended to be purchased for donations to local libraries and had a grey cloth cover with red and black lettering. A couple of years after the first publication and when all of the hardbound books had been purchased, a different bindery was asked to bind 50 copies. These books had a red cover with black ink.

We are extremely grateful to the National Insulator Association for wanting to provide this publication as a part of insulator history. We thought you would be interested in the “back story” nearly 30 years after work began.

*John & Carol*

John and Carol McDougald

