P.O. Box 554, Portland, OR; 97207
503-292-8682 (Phone) 800-722-8078 503-292-8697 (Fax)
info@pr-tech.com sales@pr-tech.com

Powerline & Aerial Tower Markers

APPLICATION- Power Line Markers

In the 1950s the first power line markers were introduced. They were made of fiberglass, were cone shaped, and hung from the line with clamps. It turned out that the clamps were expensive and, swaying on the line, eventually the clamps wore into the line, in some cases bringing them down

Aluminum markers were introduced, however the orange paint wore off and the aluminum reduced phase spacing.

Spherical markers were introduced made of fiberglass, however it turned out that after some years, the orange fiberglass color faded to a light pink or white. After much testing, a new ABS plastic, stronger and lighter and retaining color 10-15 times better than fiberglass was used to make spherical markers, as is the case today.

The spherical markers are held on the line with preform, a utility splicing rod, As far as we know, in 40 years we have never had a marker come off of the line when held on with preform rods.

Around 1970, a competitor introduced spherical fiberglass markers held onto the line with rubber stripping. The rubber was bound to deteriorate in the sun, the wind and the harsh elements, as well as the motion of the line, so after a few years the markers would slide up and down the wire. But the price was cheaper than the better ABS plastic and the preform method of attachment. In order to compete we introduced the same method of attachment, but still using the better material.

Most markers are mounted on shield wires, because the FAA says: "They should be displayed on the highest wire" which is always the shield wire, if used. Standard markers have been successfully used on the shield wires of 500 KV systems.

If mounted on the energized wire, it has been the case that corona develops on the sharp edges of the marker when the voltage on the energized line is 150KV and higher, and the corona is sufficient to sometimes bum the markers down. If the marker is to be mounted on the energized line above 150KV, use the Model 36EHV or the 24EHVX, which models have a conductive coating, making them essentially a Faraday cage and distributing the corona.

For greater conspicuity at night, we can add strips of reflective tape on the outside of the marker. It is a fact that helicopters and small planes have flashing lights on at night which reflect off of the tape and can be seen by pilots at 1500 to 2000 feet away.