



The

Broadcasters' Desktop Resource

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... edited by Barry Mishkind – the Eclectic Engineer

Clay's Corner

Keep Your Copper in the Ground



By Clay Freinwald

[May 2014] Newspaper reports about copper thefts have slowed of late. But that does not mean the problem is gone. Site security is important, as just a relatively small amount of copper stolen can cost major dollars in repairs.

Even as copper prices have reached a four year low, thieves continue to strike broadcast and other sites in the quest for quick cash.

Local broadcast engineer Doug Fisher reported that thieves struck a broadcast station in Longview, WA late at night in mid-March, one of three similar thefts over a couple of weeks. The station's antenna, a folded unipole with ground radials attached at the top of the tower pier, sits just West of I-5 and south of Longview.

Unfortunately, that just made the copper easier to see, and the thieves saw a quick source of the metal on KLOG's tower.

Under cover of darkness, the thieves cut away strap that was grounding the tower and pulled some of the radials. But then they apparently touched something that was RF hot, causing them to drop their tools and high-tail it away from the site. Fortunately for them, the station is

relatively low power – 1 kW – and not 50 kW, as the result could have been different.

SMALL DAMAGE, BIG COST

According to KLOG's Station Manager Joel Hansen, the thieves netted less than \$1.00 worth of copper.

Still, he expects the repairs costs to total at least \$1500 – and that does not include the costs of being off the air until late afternoon.

As I keep preaching: it is just a matter of time before copper thieves discover your radio or TV station. That is why I keep asking “what are you doing about security?”

PROACTIVE PROTECTION

All in all, I would guess not too many drivers on the freeway are looking for copper thieves at 3 AM. That means it is important to take preventive steps to keep your copper in the ground.

One technique that appears to be somewhat successful is to apply a liberal coating of asphaltic roofing product to every copper surface. Not

only will it hide the copper color they are looking for but it will diminish the value should they elect to take the parts anyway.

All sorts of other solutions are being tried. For some examples, take a look at what is taking place to mitigate street light wiring theft in your area.

In an on-line discussion around ways to prevent the thieves from getting on the site in the first place, Kent Randles of Entercom in Portland responded to a suggestion that a fence with razor wire would be helpful. He responded that the bad guys already had an easy solution – they simply cover the razor wire with a sleeping bag and climb over the fence,

Once the thieves are on the property, they will use another sleeping bag around the tower feed

(to keep from being zapped) and flex the feed line until it breaks. It appears that many of them likely understand that at some point the transmitter will shut down and then they are free to haul away their treasure.

Meanwhile the thefts keep on occurring, so it is important to develop a plan. To repeat my warning: it probably is not if metal thieves will attack near you, it is just a matter of when.

*Clay Freinwald, a frequent contributor to **The BDR**, is a veteran Seattle market engineer who continues to serve clients from standalone stations to multi-station sites.*

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