The
Broadcasters' Desktop Resource
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Broadcast Operations

Security Measured: I Can See You...



By Mark H. Voris

[May 2020] A broadcast station may invest a lot of money to build a transmitter site or studio. However, once it is built, what are you doing to ensure all thieves do not carry valuables off?

How secure is your site?

Whether it be the studio or transmitter site, there are individuals always on the prowl looking for whatever they can steal. What led me to write this article is that recently a couple broadcast tower sites in our area where broken into and vandalized.

I know this is not news to many of you, but ask yourself this question: "is my site secure enough to avoid this happening?"

AT THE ENTRANCE

Let us start at the gate. What kind of locks and chains are you using on your gates?

Padlocks come in many flavors and sizes. One that I have been looking at is the Granit made by ABUS.



These locks are designed to be resistant to cutting or sawing, and have a high tensile strength to resist force applied by attackers. Their high quality is highly favored amongst security professionals.

Chains also come in many sizes and strengths.

For example, Murphy Industrial Products sells hardened steel chains that no standard bolt cutter or other similar hand tool is able to cut through. The product is marketed as German PWAG chain.



Different sizes are available. We currently are using this product at a few of our sites.

Here is a shot of this chain on a gate at a site that was recently broken into.



Notice the tool marks on the chain

Now let me add a cautionary note: Most thieves are in a hurry to get in, get it, and get out so the hand tools such as bolt cutters and saws may be what most have to use – but now days one can get battery-powered grinders and saws from the local box store to cut through most anything.

In other words, there never is any guarantee that the bad guys will not get in. In fact, in the case of the lock above, they simply cut through the chain-link fence broke into the site.

COPPER THIEVES

The prize the thieves were looking for? Yep, it is all that copper!

Even though scrap copper prices recently have hit bottom and, in a lot of cases, seemingly not even worth the trouble to mess with, the bad guys still seem to be attracted to it and will attack if they think they can get away quickly with their prize.

We did learn here in the Omaha Nebraska area that groups of copper thieves do roam around looking for sites to hit and they often are not local folk.

This much is certain: they will not get much for it but we broadcasters will pay for it in a lot bigger way.

Still, if they see an easy opening, some bad guys will back up their pickup truck and, using a hook of some sort, will just pull the copper out in short order, causing all sorts of damage and expense.

One way to get thieves to ignore and not mess with your copper ground wires and strap is to use roofing tar to paint them. If you do so, scrap yards generally will not take it due to its difficulty to remove.

REACHING THE FRONT DOOR

Okay. So they made it inside the fence. What about the door on your building?

Most of our buildings have the doors that swing out which helps add to the security from any unwanted entry (It is easier to kick in a door that swings in than one that swings out). But, as in a case of another site that was broken into, some thieves were able to pry the door open.

You will want to discourage this by installing a door latch guard like this one.



KEEPING AN EYE OUT

Whether it is outside or inside your last line of defense hopefully is to see the intruders who are breaking in.

Outside cameras along with good lighting are a good idea for surveillance. For that you want to get good, web-based cameras.



A good outdoor IP Dome camera with motion alert and PoE (Power over Ethernet) is recommended, like the Anpviz 5MP PoE IP Dome. You can buy it for under $100 online

I prefer the dome cams over the others due to the low profile – and they are not as apt to be damaged. While these cameras are rated for nighttime visibility, it is important to have good lighting for the camera to see and get a clear image of the intruders.

LAST LINE OF DEFENCE

But what if they do get in?

Good cameras are a smart investment but there are things you can do to enhance their use.



I use an FDT (FD7901) HD WiFi Pan/Tilt IP Camera (1.0 Megapixel – 720P), Indoor Wireless Security Camera. (It comes in black or white.) It costs just over $40

I have been using these cameras for several years at all my sites and have had only one fail.

A newer model – with 2 Megapixel, 1080p specs – is also available but the FD7901 quality is good for transmitter site surveillance.

I have found the motion detection can be very sensitive depending on what setting you use. I have mine set up to send me a text and email whenever there is motion. When that motion is detected it will also take a snap shot of who or what is moving in the view of the camera.



Here is a transmitter site image

WATCHING THE INDICATORS

Even though these cameras do have night vision, I have found that, in seeing the lamps and LED indicators on equipment, it can be difficult to differentiate red from green.



To get around this I simply use a heat lamp fixture you would pick up at the farm store. Along with a 60W daylight LED bulb for a "night-light" that stays on 24/7, it illuminates the area in front of the transmitter quite well, as you can see.

It does not take a lot of money to add security to a site and discourage most all bad guys but it does take planning and execution.

We hope your site is – and stays – secure.

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