David Chritton, 43 Years in the Security industry, ASIS security member since 1984 Certified Protection professional for more than 10 years. Owner of Microbiz and senior partner. Proud member of the SJYC Yacht club on Bethel Island.

Windmill Cove.

A pleasure to be able to share some information on Harbor Security. This Discussion will try to focus on Generic issues and solutions facing each of the members.

4:10pm **Session 3: Harbor/Marina Security:** A safe marina goes well beyond just providing adequate lighting and locked gates. As a harbormaster or marina facility manager you are charged literally with keeping everything safe and secure… that includes not only the physical plant and moorage slips and vessels but also your staff, tenants and the visiting public…in addition to ensuring that adequate protections are in place for maintaining a sound fiscal structure to maximize investment and meet revenues projections and budgetary constraints. And, don't forget about the environment. It is your job (and that of your staff) to ensure that your marina policies, practices and training are in concert with governing local, state and federal regulations and that you provide prudent and competent leadership and guidance to establish and support necessary safeguards.

There are many ways to build your layers of security and you need to find what works for you.

Scott Grindy sent me the below list, and I will work my way through it. Simple to Complex

Physical deterrents: Physical barriers.

- Locked Gates and doors. 1. Keys are good, but… they are hard to audit who goes in where and what do you have to do when a key is lost?......you have to change out the locks and issue new ones.

The next improvement is "Stand alone" coded touch pads. The simplest is mechanical, some are electric strike or door lock. The weakness with these systems is that codes can be given out to family and friends or others. Hey. The code is 1,2,3,4…help yourself. The problem is you don't know who has the door code or who they have shared them with. Most don't even have an audit trail. So the best practice for this type of system is to regularly change codes. At least semiannually if possible. Codes are programmed at the device so its more work than sitting in your harbor office and changing via a computer.

Sounders/strobes

Intercoms: Wired with Master stations. Some use phone lines.

MONITOR   TALK   OFF

stock photo

The next upgrade is a badge reader system. Badge, fob, card. Card with Picture ID is best. These are almost always electrified, and computer controlled from the Harbor office. The have numbers so they can be individually issues and easily turned off if lost. They also are basic Hid prox to higher corporate 1000 security, I-class, Myfair, Desfire and others.

They require Readers.
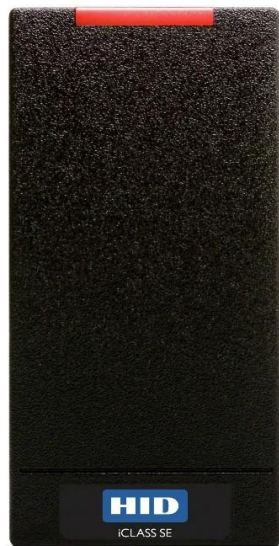
Every tenant has a badge issued to them. If they are lost or stolen, they are easily replaced, and the old card\Fob turned off. Standalone means you go to the gate or door and program via touch buttons or a laptop. Better is computer-controlled systems where you have a PC or Clouds based database.

One of the improvements that we use is communication via wi-fi. Its hard to run wires out to the marina gates. So, we build a wireless network and I will discuss that later.

Cameras

Once you set up Physical barriers, you need validation. That means cameras. Typical design is a Vandal dome-Camera covering the gate, door or secured areas. These cameras have wires run back to a NVR-Network video recorder. It can be a box with at least 2 TB hard drive. More is better and 30 days minimum recording. Although more is better. 90 days should be the goal.

Old style single image cameras use is 18-2 24Volt AC power and a coax. That would be Analog at 1/3 of a mega pixel. This provides Blurry pictures and there is no good way to enhance the picture. Wire Range was typically 800 feet without a booster.

Newer IP systems us a Cat 6 wire which is typically 24 gauge 4 pairs in one shielded cable. Those wires are 1 pair for power, one for video signal and 2 spare wires. For outside use Burial cable is better. Range is roughly 300 feet without boosters. That's not very far. . Variations on this are boosters- a small module at each end of the wire to boost the signal up to 1000 feet or more. We can also do 2 into 4 into one module, Fisheye cameras, and 4 in one cameras or 4 in one with PTZ. I call those the spaceship
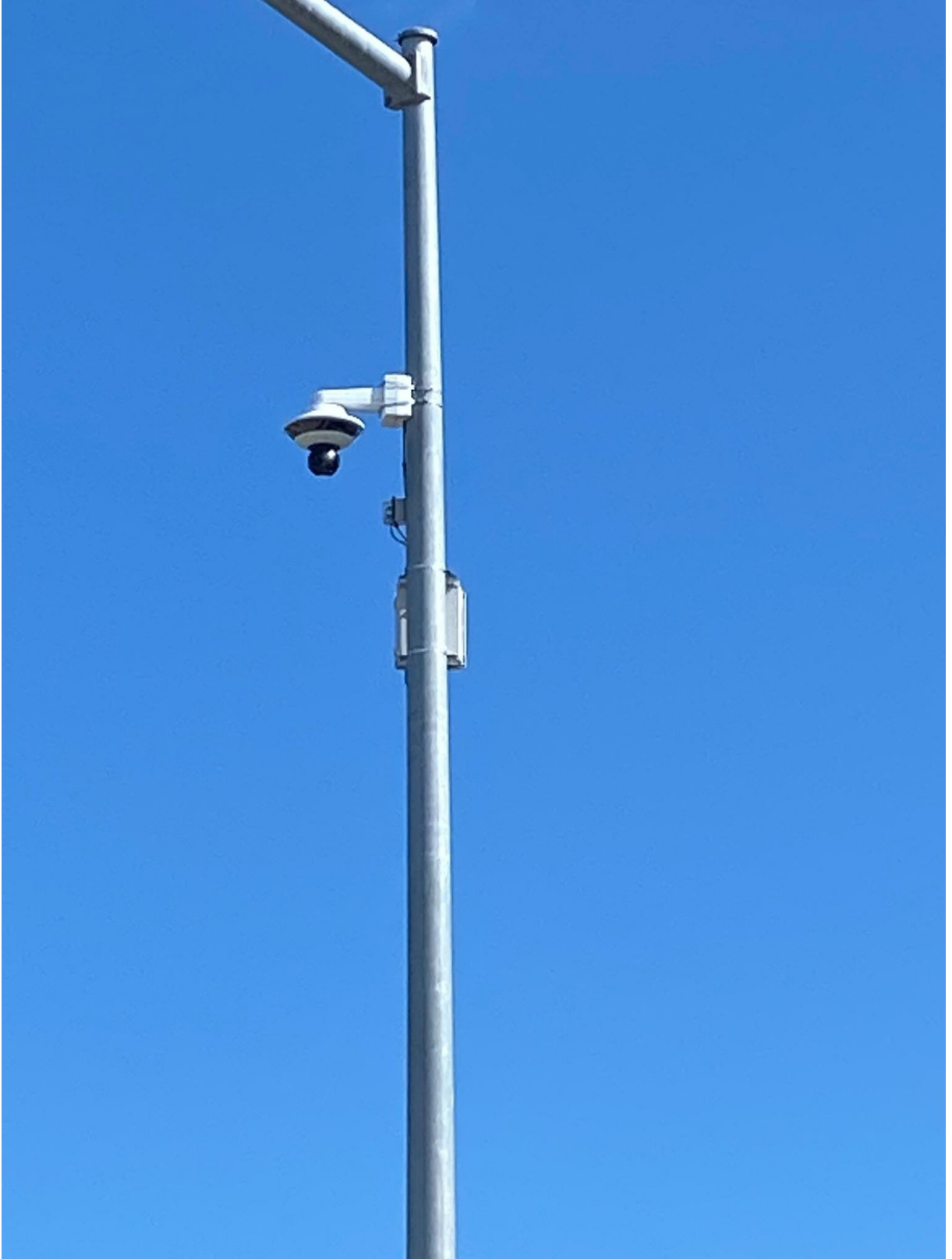
Fisheye

Above records with 4 cameras all the time plus the lower PTZ camera.

Questions? What if there are no way to run wires…. Because there is lots of water and no direct route. We build a wireless network. We need a line of sight and can do up to 1 mile.

Light poles. Get there power but they must be 24/7 power. So Photocells can be added to turn the lamps on from dusk to dawn.

Discussion topics:

Subject: RE: PCC: Harbor/Marina Security

Camera's

    1.Cameras types and needs in a marina / harbor setting

    2.   How to download for violations and more

    3.   Storage of video information whats required

    4.   Bird proof vandal proof type things- small nails and other ways to scare them..birds of prey

    5.   Where and how to monitor-live viewing versus playback.

    6.   Portable options for events and more- Go Pro. Body cams.

    7.   Wire or wireless

    8.   Face readers

    9.License plate readers- typically called LPR.

    10.

Gate access control

1.   Key fob (don't give out hard keys)

    2.   IC core systems on your hard key gates so if you have to change keys it can be done quickly and or by rotation

    3.   Tracking with key cards

    4.   Cost of key cards aka what to charge the boaters.

    5.   Salt water environments vs fresh impacts to the systems

    6.   Spare parts

7.   Wire or wireless

Burglar systems for buildings

    8.   Windows and doors.   and Motion detectors. Keypads for codes.

    9.   Whats new

Best Regards,

Scott Grindy

Harbor Master CMM, CPE

San Francisco Recreation and Park Department | City & County of San Francisco