

Photos by Christina Stuart, FLORIDA TODAY

Port security. Steve Kroecker of SeaAway Habitat Technologies points to a part of the "Sea Sentinel" as he explains his company's proposal for port security.

Container security form of 'profiling'

SECURITY, from 1C

of crew and passengers.

The Coast Guard typically uses a form of "profiling" to find containers that could cause problems, asking questions like: "Where is it coming from? What do the shippers say is in it? Did it make any unscheduled stops? And is there a reason to suspect bad-guy activity?" Robbins said.

He said companies like SeaAway have a good shot of getting the government's ear because "it needs help. They can't think of everything. There is so much government spending on homeland security. Get entrepreneurs involved, and hope the government is smart enough to know a good idea."

Multipart system

Stephan Kroecker, the lead engineer and brains behind SeaAway, is hoping some high-ranking official in homeland security thinks his is an idea worth doing. Kroecker's wife, Bernadette, is the owner of the business, which has 11 employees and plans to add nine more by next month.

He said his plan, using "Sea Sentinel" floating platforms, "Sea Handler" ships with the same cranes used at ports and "Awareness Buoys" sprung from a desire to design a system that checks cargo away from the ports, so problem containers can be destroyed or dumped at sea.

That would keep people safe and possibly prevent the shutdown of a port for decades if a nuclear device exploded, Kroecker said, which would be a "\$1 trillion mistake. A busy port, like Jacksonville, is astronomically important to us."

Kroecker has a patent on a wireless heart monitor and worked as a lead engineer on the Sony Caddycam, a camera used to analyze golf swings and baseball pitchers.

His knowledge of ports and port security comes from 5 years in the Coast Guard and designing and building bridges and dams as an engineer for several maritime-related companies. His mother was also in the Coast Guard and father was in the Navy.

Kroecker believes his idea could be a profitable venture for any country, region or state because of the fees they could charge ships to pass through the system.

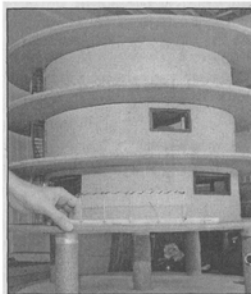
To try and get his ideas to the policymakers who could bring them to reality, he sent 536 presentations of his "Sea Sentinel" system to government officials in homeland security and senators and congressional representatives who have ports in their districts.

His next hurdle: finding either a government agency to pledge funding or coming up with the money from private investors of venture-capitalist firms.

He said he and a handful of others already have spent \$1 million in applying for several patents. He estimates he will spend about \$400,000 completing the patent process.

The "Sea Sentinel" system isn't meant to replace what the Coast Guard does now, Kroecker said, but rather be the "missing link. . . to sew up the nation against a container-borne threat. Our ports are wide open, and we are just asking for it."

His idea would work with a federal mandate that all containers in the next two years must have an electronic security device inside, to log if it was tampered with after it left the ship's home port.



Proposal. The "Sea Sentinel" proposed by SeaAway Habitat Technologies would be a floating platform off the coast that would handle scanning, identification and compliance of incoming ships.

Kroecker's platform would scan those devices and remove any that could be a problem.

He estimated it would be possible to remove a container from a cargo ship, which sometimes are stacked 10-deep, and put it back in less than 12 hours.

To fund the sea-based toll-booths, Kroecker said states could charge foreign vessels a fee of about \$15 per container.

Alternative approach

But Kim Petersen, president of Fort Lauderdale-based SeaSecure, thinks the "Sea Sentinel" system proposed by Kroecker would be too costly and less efficient than what Petersen's company does: train security specialists that check cargo in foreign ports before the U.S.-bound ship leaves port.

Through various initiatives to improve security, Petersen said the United States has raised its inspection rate of shipping containers from 4 percent to 7 percent. But that's still "93 out of 100 containers allowed into the country on the basis of manifest knowledge and good luck," he said.

He said the training his company gives inspectors, who are placed at foreign ports and on the ship's themselves, are in line with the U.S. government's goals of stopping and analyzing suspect containers before they are in a local port.

Petersen added that plucking a cargo container off of a ship at port is "both a dangerous and delicate procedure," which likely would be much more difficult on rocky seas, which is what SeaAway is proposing.

Further, with ports being an "engine of commerce, and not a prison, it's vital" to keep the flow of goods and services steady, because "any bottleneck would create a risk to commerce" and force someone along the supply chain to pay a hefty sum of money.

Kroecker countered that his "Sea Handler" ship and the cargo vessels he would magnetically grapple onto to check containers are so large that "it would take some pretty big waves to get them moving. But there will be some limitations" where ships would have to wait, like high winds or a storm that could cause a dangling container to fall.

Whoever is right, the government likely will "jump on anything that will be an improvement" over current port-security measures, said Canaveral Port Authority Chairman Ray Sharkey. "Security is always on my mind. The biggest problem is there are so many areas you are vulnerable to. You can't guarantee there won't be a problem unless you build a magic dome." ■

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