Commercial and civilian maritime vessels are constantly in danger of being hijacked by pirates in waters in and around Africa. These attacks have become more dangerous in recent years as the pirates have been using drones to surveil ships before they carry out their attacks. The team aimed to create a ‘No Drone Zone (pictured right) that could neutralize a drone while in flight.

In order to achieve the stated goal of protecting maritime vessels, the team broke up into three subteams to create the needed parts of a No Drone Zone. The hardware team worked with the computer necessary to run the underlying automated hacking script. The software team wrote and created the script that was able to identify and hack the drones. Finally, the radio team worked with sophisticated radio equipment in order to analyze radio signals and work on a way to play out different cyber attacks against drones that use such communications.

The team was effectively able to create a system that can automatically scan the airwaves for drone communications and take steps to neutralize the vehicle. This system, while mainly invented to work on ships, could be expanded to places like military installations, sports stadiums, or even prisons in order to protect these locations from hostile drone attacks, whether those attacks are made with an intent to harm or an intent to surveil the location.

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