

Signature Management

It is more than just turning off your cell phone

by Capt Ferguson Dale

Do you lose interest when you hear the terms cyberspace (cyber), electronic warfare, information operations, or electromagnetic spectrum? Are these terms all synonymous with *over my head*? Maybe you believe these terms should be left to the subject matter experts; maybe you are that subject matter expert or part of that younger crowd expected to know all this *stuff*. The reality is that all members of the United States Government (USG) have a responsibility to mitigate the security risks associated with their electronic footprint or signature that is associated with these terms. Many professionals view cellular phone discipline and social media settings as “doing their part,” but proper signature management must include the awareness and influence of all friendly, adversarial, and neutral signatures.

Friendly

Friendly signature management involves the ability to control any friendly electronic footprint viewable to others. With enough creativity, friendlies can modify their signature so their leaders can project them in certain directions as if those signatures were an invisible maneuver force. The easiest signature to manipulate is that of a cellular phone because it can be powered down at will. However, many tend to forget other friendly signatures such as the footprints made via the defense travel system or the power generator used in a field environment. Members of the USG, from the warfighter to the data processing professional at the Department of Agriculture, should view their signatures from their adversary’s perspective. Each footprint

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can be seen from great distances regardless if your cell phone is off or on.

Adversarial

The adversary gains an advantage by observing friendly or neutral signatures in whichever environment is most easily exploited. These signatures range from hackers and insider threats to espionage. Adversarial signatures do not require rest cycles and take advantage of time delays such as the targeting board process, having little to no control of friendly signatures, or neglecting to account for neutral signatures. Current and developing technologies will allow USG professionals to detect and influence adversarial signatures. Powering down cell phones gives adversaries less of a footprint to see but does not stop them from using other means to survey friendly signatures.

Neutral

Neutral signatures are any signatures that belong to parties who are neither friendly nor adversarial but can give away the presence of other signatures unknowingly or unwillingly. These can range from private citizens with compromised signatures near your table at a local barista to cellular phones in airplane mode quietly revealing troop movements to adversaries. Members of the USG can influence neutral signatures but may not be able to control

them. Friendly cellular phones that are powered off have no direct influence on neutral signatures.

Conclusion

Turning off cell phones is a useful step toward friendly signature management, but it is not the only one. Members of the USG can manage friendly signatures by recognizing all aspects of their electronic footprint or signature. Adversaries will see less of an electronic footprint when cell phones are eliminated from friendly signatures, but may still be able to use insider threats or neutral signatures. Since neutral parties can unknowingly and unwillingly become adversaries or allies, the USG may want to establish its own network within an area, then—as a last resort—deny, delay, or degrade any unsanctioned signatures within that network. Lastly, adversaries view false signatures as worse than no signatures, so consider masking your true signature with several false ones. This action will make leaving cell phones powered on useful if coupled with the creative use of current and emerging technologies.

