

Role of Signature in Offense and Defense

We will seek to exploit all the advantages conferred by richly networked communications and attempt to deny those same advantages to the enemy. A key factor will be our ability to control and minimize our signatures and raise and identify adversary signatures. All echelons must understand and manage signatures through a combination of emission control and the use of decoys, cover, concealment, camouflage, and deception. Redundancy, hardening, and other defensive measures are necessary to protect our ability to gain and distribute intelligence in the face of sophisticated jamming, hacking, and other threats. Nevertheless, we have to be ready to operate in full expectation that our space-based capabilities and networks will be attacked, compromised, degraded, or denied. The point is to make our networks resilient even as we learn to operate with disruptions and latency. To do this, we must:

- Protect our networks and nodes as the friendly center of gravity.
- Explore advances in commercial encryption technologies to harden our networks.
- Ensure the MAGTF is able to establish low-signature operating sites.
- Develop and train to sustain a viable mission command framework when communications are degraded or denied and positive control is not feasible.
- Ensure Marines at every echelon are capable of executing their missions working from an understanding of commander's intent and gaining situational awareness through basic military reconnaissance and scouting techniques.
- Explore the value of redundant communications systems or commercial networks to overcome jammed or compromised systems.
- Practice network foraging, finding and exploiting existing communications resources, to reduce signature and provide alternative C2 avenues.
- Approach security cooperation activities in a manner that gives us insights into the local signature norm such that we can better detect and accurately interpret threat activity and raise an adversary's signature.