

**3 reconnaissance,  
and surveillance  
platforms; they offer  
superior**



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3 SEP 2002 SUCSESSES AND FAILURES OF SIGNALS INTELLIGENCE The United States must be prepared to deploy against sophisticated and unsophisticated adversaries on a moments notice. The enemy may have little concern for the Hague Convention, which seek to limit collateral damage and noncombatant casualties.

Signal Intelligence provides foreign data that analysts can collect, process and analyze into intelligence information. Whoever has the ability to control and exploit the electromagnetic spectrum, which ranges from zero to infinity, will know their enemies vulnerabilities, create opportunities, achieve tactical surprise, and result in mission accomplishment. Considerations such as successful and unsuccessful collection in Signal Intelligence will be a tremendous factor in planning and the execution of U.

S. military operations. There are numerous accounts of the successful gathering of Signal Intelligence that prove to be of use. The rapid advancements in microelectronic technology forces the government to design and manufacture sophisticated new radars, airborne reconnaissance, and surveillance platforms; they offer superior capabilities over previously employed systems.

Having accredited systems and networks, in accordance with Department of Defense guidance, will ensure that units are within regulations while collecting signals. To obtain the most beneficial information, analysts need to be properly trained in the latest and greatest data sets. Staffing 100% qualified personnel in strategic locations will lead to optimal performance in signals analysis; commanders should provide the capability of target

redundancy with different forms to ensure that collection requirements are met. Lastly, understanding commander's intent and the focus of effort are critical ingredients for success. Despite the factors that lead to success, there are just as many failures, which need to be discussed.

Failures are the temporary or possible permanent annihilation of the ability of a mechanism to perform its required purpose. The number one failure in signal intelligences is bureaucracy. All of the policies, guidelines, rules, procedures, course of actions, and laws, create so much red tape, that signal analysts cannot do their jobs, which is to collect, process, or analyze foreign intelligence information. Once the analyst work through the political rubbish, the opportunity for collecting Signal Intelligence may have disappeared.

Units that try to use lethargic and robust radars against state of the art Electronic Security will provide marginal data if any; the Electronic Security provides firewalls, secure logins, and offers protection resulting from measures that are designed to deny unauthorized persons access to information. Some radars have the ability to use passive tracking, which means that there is no target illumination by the tracking system.

Passive radars are difficult to counter and offer little results; by the time intervention occurs, a successful collection opportunity has been denied. Stealth technology degrades signals collection because the targets are designed to absorb signatures and operate undetected against known radars. Target that modify their radar cross sections are, formulate collection failures; the geometrical returns are altered or diverted into space.

Inexperienced analysts that cannot analyze the signals and determine what is interference or modified equipment signatures will facilitate a delay in a <https://assignbuster.com/3-reconnaissance-and-surveillance-platforms-they-offer-superior/>

commander's decision. Most Signal Intelligence failures are caused by failures of analysis, not failures of collection because relevant information is discounted, misinterpreted, ignored, rejected, or overlooked because it fails to fit a prevailing mental model or mind-set.

Implicit communications are essential to commanders because they remain the most effective means for converting information into effective decision making. This is one of the most important portals for the United States. If an analyst can provide the best possible information well in advance to decision makers, and a vital decision is achieved, then Signal Intelligence is a success; on the down side, if the information is not collected, processed, or analyzed in a timely manner, for one reason or another, a failure has been attained.