



(U) Active Analysis: SIGINT That Can Predict

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(U//FOUO) The quality of our SIGINT analysis has never been more important to U.S. national security. At its essence, SIGINT is intended to provide our military commanders and policymakers with advance knowledge of foreign intentions and capabilities. If we can deny our adversaries the element of surprise, we may be able to outmaneuver them and achieve our goals peacefully... and we can also prevent "Pearl Harbor" attacks from occurring.

(U//FOUO) For SIGINT to be effective in this anticipatory role, we must not settle for simply describing and explaining facts - we must interpret the facts and make estimates of likely future events. To do this, SIGINT analysts must thoroughly understand both the world of the policymaker/warfighter and the world of our targets. Not only must we anticipate our customers' needs, we must anticipate how our adversaries will behave, and where we will find reflections of that behavior in foreign signals. We call this attempt to get ahead of the game "active analysis".

(U) Two Approaches to Active Analysis

(U//FOUO) So how should we go about understanding the target? An active approach to analysis can be based on two separate, but interwoven, lines of attack: hypothesis-driven and discovery-driven analysis.

- In hypothesis-driven analysis, analysts begin with a conceptual model of the target's intentions, capabilities and behavior, and use that model or understanding to make sense of new intercept, and to determine what tasking should be.
- In discovery-driven analysis, analysts begin with the data (perhaps as a result of search and survey), and use anomalies, patterns, or relationships within the data to create a model or understanding of the target.

While somewhat oversimplified here, active SIGINT analysis depends on the constant iteration of both hypothesis and discovery, while keeping in mind the SIGINT customers' dynamically evolving needs.

(U) Sharing Best Practices

(U//FOUO) For active analysis to succeed in preventing surprise, we must recognize current best practices in analysis and spread them throughout the analytic community. Since there is no textbook to guide us as we meet emerging challenges, it is essential that analysts carefully document the logic framing their work, document new information discovered from databases, and challenge each other to share their "best practices". You can contribute to the cause by exchanging best practices, using [THIS WEBSITE](#).

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1. [Strengthening Our Analytic Capability](#)
2. Active Analysis: SIGINT That Can Predict
3. [Pattern and Social Network Analysis](#)
4. [Analysis Series: Follow the People and Geospatial Exploitation](#)
5. [Deep Target Knowledge](#)
6. [Analysis Series Wrap-up: Continuous Learning](#)

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