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SIGINT and the Information Explosion

[REDACTED]

(U) A few years ago I was attending a graduation ceremony. The guest speaker was exhorting the graduates to continue to pursue their education and self-development after graduation. To reinforce this point the speaker cited research on the growth of knowledge during the course of history. According to this individual, human knowledge doubled between the beginning of recorded history and about 1900. Knowledge doubled again between 1900 and the end of World War I. It doubled again between that time and about 1930; then again by 1940, and since then has been doubling every three to five years.

intelligence tool box, but it differs from the great wave of other "all-source" analysis that is sweeping over us in two significant ways:

(U) First: the analysis described above is straightforward. Each collection system provides a time, a location and the description of an activity. Analysis mainly consists of looking at the collectors' outputs and verifying that they really do correspond.

(U) Second: the sources described above are complementary, that is, they fit together neatly to form a coherent piece of "all-source" data.

-(C) Now what, you might say, does this have to do with SIGINT, or, more specifically, with Cryptologic Support Groups (CSGs)? Many things, but as the chief of a CSG myself, I see the greatest challenge in this information explosion is the growth of sources of information beyond our wildest dreams. In the days of the Cold War CSGs had a much simpler job than we do today. We interpreted SIGINT. We had a good time and we made many friends for the Agency. We worked with "all-source" analyst, but I submit to you that all-source analysis in those days was much more straightforward than it is today.



Must call George before we attack.
Anybody see a pay phone?

-(C) In the new all-source analysis, data from the various sources looks deceptively similar. In some instances, data from some sources looks much more attractive regardless of its validity. Who can forget sitting in their living room and watching the images from the Gulf War of Tomahawk missiles flying down the streets of Bagdad on their way to their targets? What watch center or executive office is now without CNN?

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-(S) For example, [REDACTED] would intercept a threat radar at a new location and almost immediately some other sensor, perhaps some sort of imagery collector, would be focused on location of the ELINT "hit." A resulting picture of the offending radar would be appropriately reported and the needed data base updates would be made. This sort of analysis continues today and remains a valuable piece of the

-(S) These are but two examples of new sources of information, undreamed of in the Cold War era, that are threatening and will continue to threaten the entire

intelligence community and the SIGINT community along with it. Why do the U.S. taxpayers need to spend almost [redacted] a year for classified intelligence.

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(G) Analysis by default: The effect of the above two biases is to choose the simplest source as the correct source with little or no effort to rationalize the two sources, especially if they are contradictory, [redacted]

[redacted]

(C) When I came to [redacted] last summer I encountered our own particular competitive source, in the [redacted] I want to describe it in a bit more detail than the examples above, because it contains some additional insidious pitfalls that will increasingly be challenging CSGs everywhere.

(S) I have discussed these phenomena with a number of people, including all the members of the CSG [redacted] who initially made me aware of it, as well as [redacted]

[redacted]

[redacted] These discussions point out another fact of life. While SIGINT reporting has a mature and established infrastructure, [redacted]

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[redacted]

The reason is that the SIGINT reporting penetrates the Capital Beltway, [redacted]

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[redacted]

(TSC) As everyone heard on Tuesday, we have a considerable and healthy effort devoted to the [redacted]

[redacted]

This juxtaposition of SIGINT and collateral data that do not have the neat complementary nature of ELINT and IMINT can produce:

[redacted]

(S) [redacted]

This was great, but it raises the question, is SIGINT in the future going to be useful *only* if it is the sole source of information on a given activity?

(FOUO) Classification bias: The intelligence source of choice is always the lowest classification, when the facts are generally similar, even if the audience for the all-source product has all the clearances in the world;

(FOUO) Former collector bias: The intelligence source of choice is always the source that the analyst understands as a result of being a former collector;

(S-CCO) If it is, we will all be taking the early out, because the likelihood of SIGINT being the sole source of information on any major event is getting slimmer to the point of not existing. If we are to succeed, we must learn to work so closely with the all-source analysts so we can assure that the full value of SIGINT is applied to every niche available. SIGINT is rapidly becoming a commodity in the information business that cannot

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dominate the market as it has in the past. The SIGINT market will increasingly become a series of small "value added" niches, where that key piece of SIGINT makes the difference in the all-source picture.

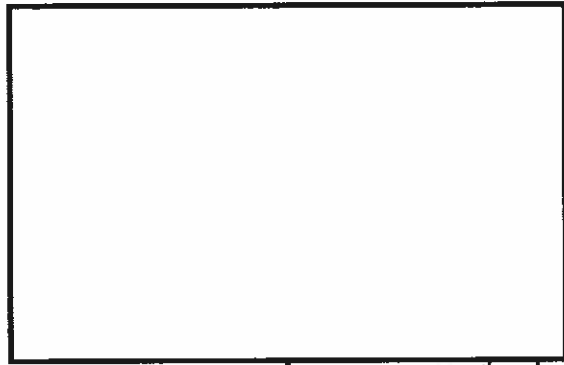
(C) One strategy that we will pursue [redacted] (and it is also being pursued by [redacted]) is the integration of our day analysts with the J-2 all-source analysts. This is an approach with dangerous pitfalls which can defeat the whole purpose of the integration. The danger is that the integrated SIGINT analyst can lose his or her identity as a SIGINTer. The moment that the SIGINT integree becomes just one more body in an all-source shop is the moment that analyst loses his or her effectiveness. If you will indulge me in a religious metaphor, the SIGINTer in an all-source shop has to be like a Catholic religious, that is, "in the world, but not of the world."

(C) SIGINT integrees who are worth their pay will always shine, and this will result in the temptation by their all-source colleagues to use them increasingly beyond the scope of their SIGINT charter. This temptation must be resisted. We can only be effective in working through the all-source analysts, not by becoming one. Let me cite a war story of my own as a case in point and I apologize those of you who've heard it before.

(C) I was the first NCR [redacted] integrated into the J-2 [redacted] in the early 1970s. (This preceded the formal "stand-up" of CSG [redacted] by about two years.) It was an assignment I resisted, based on my experiences in the SSG Det at MACV Hqs in Vietnam, where we had a clear and separate identity. (The Special Support Group Detachment at MACV Hqs was a CSG precursor in Vietnam before the Agency adopted the term CSG.) The headquarters [redacted] at the time was quite small. [redacted] had two officers, two NCOs, and me. It was also a short-tour area. All the military assignees turned over every 12 months. I was there for three years. A couple of months following my integration, the senior [redacted] was scheduled to

go on home leave for 30 days. The J-2 himself came to me and asked me to take over the [redacted] for the command while my [redacted] all-source analyst was on leave. I was most flattered by this invitation, but fell back on my experience from Vietnam and declined the J-2's request. I thanked the J-2 for his confidence in me, but said it would be unfair to the junior all-source [redacted]. I promised the J-2 I would support this individual in every way possible, but not to the point of doing his job for him. The J-2 said OK. This turned into a real win-win situation, with the junior J-2 [redacted] growing professionally and as a friend of SIGINT. The corny lesson of this story is that in the CSGs we can only succeed if our all-source analysts succeed. The CSG role is to help them succeed, not to succeed for them.

(C) To close I'd just like to say the times we are all facing are challenging and threatening. Our business seems to be shrinking, but for a SIGINTer this could not be a better time. We are living in an information age and we are the sales force for the largest and most sophisticated information production infrastructure history has ever known. To be successful, though, we must not forget who we are or why we are here.



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