Spartans in Darkness:
American SIGINT and the Indo-China War, 1945-1975
Cover Photo:

(U) Sentry atop a bunker complex at the Phu Bai station in 1972
(U) Spartans in Darkness: American SIGINT and the Indochina War, 1945-1975

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(U) Dedication

Before the battle [of Thermopylae], Dianeees, the Spartan, was warned that the number of the Persians was such that when they loosed their bows, the arrows would block the sun. 'So much the better', observed Dianeees. 'If the Persians hide the sun, then we will fight in the shade rather than sunlight'.

Herodotus, The Histories

This book is dedicated to those Allied cryptologists in Indochina, whose devotion to duty, under the worst of conditions, was borne with the courage, virtuosity, aplomb, and humor that only true professionals can display.
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(U) Foreword

America’s war in Vietnam continues as a topic of highest interest among scholars and the general public alike – and as a topic of the highest controversy. As this introduction is being written in April 2001, several news stories related to the war and its aftermath are unfolding on newspaper front pages.

The Vietnam War has been the subject of countless memoirs, histories, and adventure tales, yet a critical aspect of the war has been lacking in what has been written so far. Even monographs on the role of intelligence in the war do not treat the signals intelligence (SIGINT) and information systems security (INFOSEC) aspects of the war, or do so only in the most superficial ways.

Robert Hanyok’s meticulously researched and richly detailed history of cryptology in the Vietnam War fills this void. It provides a grand perspective of these most secret aspects of the war, and answers many of the questions historians ask about it.

Those who work SIGINT tend to view it mechanistically. It is often believed to be “cut and dried,” that it provides an unchallenged source of information – what the other side is saying to itself, and therefore what must be correct.

However, the interpretation of SIGINT and its political or policy implications often generate considerable discussion and controversy. This was certainly the case with SIGINT in the Vietnam War. Mr. Hanyok’s study looks carefully at these controversies – and itself has several areas likely to be controversial in the implications and interpretation.

This is a stimulating study, highly recommended for all who are interested in U.S. policy in the last half of the twentieth century, the conduct of the war itself, and the role of cryptology specifically.

I also recommend, for context on the times and background to U.S. SIGINT and INFOSEC, that the reader also consult Dr. Thomas Johnson’s four-volume American Cryptology during the Cold War, 1945-1989.

DAVID A. HATCH
Director
Center for Cryptologic History
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"And even I can remember a day when historians left blanks in their writings: I mean for things they didn't know. But that time seems to be passing."

Canto XIII, Ezra Pound

(U) The Vietnam War, or more accurately, the Indochina War, perhaps was the momentous event of American history in the third quarter of the twentieth century. Besides the casualty count – 58,000 dead and another half million wounded – it devoured the resources of the United States, weakened its economy, turned generations against one another, and hurt its international image. Opposition to the war coalesced with the strong currents of the 1960s' domestic social change – the nascent women's push for equality, the youth "rebellion," and the surge in the civil rights movement – and charged them with even more fervor. And the failure of various administrations to reliably define the war's purpose, and truthfully report its course, ground down the relationship between citizen and government to a razor-thin bond.

(U) After the war, there were several concurrent efforts to arrive at some meaning about it. Attempts were made to define it as a crusade against communism: others called the war a failure in strategic policy or a tragedy born out of the arrogance of power. Some observers called attention to the war's effect in later American foreign policy – the "Vietnam syndrome," a reluctance to get involved in long-term ventures. Finally, others pointed to the deeper social costs of the war, how veterans and nonveterans tried to come to grips with their attitudes towards the war.

(U) Ironically, the American cryptologic community, especially the National Security Agency, appeared to remove itself from any examination of its role in the war. This distancing was measured in the paucity of histories, studies, and articles about the war. How could such a war, which SIGINT had covered since 1950, that, at its peak, involved as many as ten thousand cryptologists from a number of allied nations, not be worth a serious historical consideration? By ignoring its past, how much had the American SIGINT community impoverished its sense of historical continuity? What stories and what truths were buried under the silence? What could American cryptologists learn about themselves and their performance during the war? And what lessons could we carry into the future?

EO 1.4.(c)

The immediate origins of Spartans in Darkness lay in a conversation I had some years ago with a retired NSA senior who had an extensive personal knowledge of the war in Indochina. In passing, I had mentioned my scheme for writing a complete, multivolume history of American SIGINT during the Indochina War, beginning with World War II and finally coming to the American involvement. Rather abruptly, he strongly suggested that I get out a single volume on the war before "those who were there are gone." This approach, of course, was correct: inasmuch as the Vietnam-era population of the National Security Agency (and the associated cryptologic elements of the four armed services) was beginning to retire in ever-increasing numbers, there was a need to produce a history to which they could contribute, as well as one with which they could identify. There also was a growing interest in the war by the younger generation of Agency personnel within the cryptologic community – who had no direct experience and little memory of the war – as evidenced by their attendance in various classes and seminars on cryptologic history. That situation made final my decision to produce this overview volume.
(C/SI) The major historiographical problem was the dimension of the SIGINT effort during the American phase of the war. Just the numbers alone suggested the size of the problem. At the height of the American involvement, upwards of 10,000 American and allied cryptologists were supporting the war in South Vietnam, mostly in sites throughout Southeast Asia. A smaller group at Fort Meade worked the SIGINT from NSA headquarters at Fort George G. Meade, Maryland. The corresponding records available for my research, despite rumors of a massive destruction of paper records from the early 1980s (which may have been partially true), were staggering: over 150,000 pages in the Center for Cryptologic History's various collections, and about 400,000 pages from the NSA Archives, Records Center, and other collections (on-line and hard copy). Happy is the historian with such a bounty, but cursed is he in deciding what exactly to write about without getting mired in the bog of so much available detail, that, due to the nature of intelligence, often was conflicting.

(C/SI) I decided that the best way to avoid being buried under this material was to write an overview of American SIGINT during the Indochina War. However, it would be one with a difference: I would concentrate on various topics and critical incidents of the war, making them the narrative framework for this cryptologic history. The topics and incidents I included were an eclectic collection, and required individual treatment. Hence, this history is not the usual linear, chronological narrative. Rather, I approached each episode in a somewhat different manner, tailoring the historical treatment to the issue at hand. For example, the chapters on the SIGINT during the air war, and the South Vietnamese SIGINT organization probably come closest to resembling a classic historical narrative.

(U) Not all topics of interest could be covered in this history. This was a decision based on several factors. One was the realization that other cryptologic organizations were producing histories of their participation in the war. One example is the Army's Intelligence and Security Command, which is working on a history of ASA participation that emphasizes tactical SIGINT units. Also, I did not want to repeat what previous histories have covered. In this case, I knew that three volumes had been written about communications security (COMSEC) during the war. Although much more can be written on this effort, it requires a volume of its own. A final reason was that the impact of a topic fell out of the time frame of the war. A good example of this is the Prisoner of War/Missing in Action (POW/MIA) controversy. No other subject affected Americans as passionately as this one. Although there had been interest in the fate of POWs and MIAs during and shortly after the war, the peak of public attention did not occur until the 1980s and 1990s. This sad story, and the SIGINT aspect of it, deserves its own telling.

(C/SI) Spartans is something of a departure from the previous histories of SIGINT in the Indochina War. For the most part, those histories, written between the late 1960s and the early 1970s, were detailed descriptions of technical SIGINT collection and processing systems, and
organizations. While intrinsically interesting to a narrow range of cryptologists with similar specialties, the histories themselves left most questions about the results of SIGINT unanswered, who made use of the intelligence derived from it, and its effect on the course of the war. These histories often minimized or completely ignored some significant outside influences and determinants, as well as previous cryptologic events and efforts, all of which affected SIGINT activities in Indochina. Some of these factors included the attitude of command authorities towards SIGINT; the technical and operational limitations of cryptologic techniques and technology; the natural "competition" or "friction" between intelligence organizations and services; and, most importantly, the capabilities of Vietnamese communist cryptography and communications, and its personnel, which were the real targets of American SIGINT.

-(C//S)-Surprisingly (or maybe unsurprisingly), the effort at writing histories of cryptology during the war ended at about the same time that the last American troops left. Since the fall of Saigon in 1975, precious little of that history had been written: A special issue of the now-defunct NSA Cryptology magazine, one short, useful work on the Purple Dragon Operations Security program, a handful of articles in various NSA inhouse technical journals, and a three-hour session at the 1990 Cryptologic History Symposium. This scarcity is not easily explainable. However, one sad result was that much of the history of SIGINT during the war was displaced by a corps of truisms, myths, official and popular misconceptions of what happened - all elements of a conventional wisdom that held that American SIGINT had been fabulously successful.

(U) To avoid the limitations of those previous works, and to correct the popular misunderstandings of what happened, this history will consider American SIGINT during the Indochina War through the two perspectives of scale and context. We will consider the scale of the conflict in terms of time and geography. We also will examine the context in which American SIGINT operated, that is, within both the prosecution of the war, and the struggle between American cryptologists and Vietnamese communist cryptographers and communicators. The benefit of this more extensive approach will be in a richer and more complete narrative, a text more sensitive to the nuances of the environment in which SIGINT operated. In understanding the circumstances in which SIGINT worked, we can better judge the effect it had, and, in an ironic corollary, see how the environment influenced SIGINT.

(U) Scale

(U) For many Americans, their view of the war in Indochina remains circumscribed by the years of the direct military intervention from about 1965 to 1973. Although most histories trace the war back to the days of the French suzerainty, that period seemed to many Americans as an interesting prelude, but not terribly relevant - an attitude carried by many American leaders, as well. The problem, of course, is that this myopic approach distorts the reality of the fundamental issues of the war and the attitudes of the combatants, both of which had been set long before the United States intervened with its own troops.

-(S//SI)-The earlier histories of American SIGINT during the conflict also reflected this limited outlook. Although there were unique cryptologic problems that emerged during the American intervention after 1965, many other such problems of the war, such as the nature and effectiveness of high-level Vietnamese communist cryptography, and the constant shortage of qualified analysts, especially linguists, could be dated to 1950.

(U) By considering the long-term evolution of a SIGINT problem, the reader reaches a better understanding of the historical reasons why certain cryptologic approaches and processes were adopted in lieu of others. The SIGINT problems
that Americans encountered during the war were never static affairs. Often, the Vietnamese cryptologists reacted to what they called American "technical means." Similarly, American cryptologists had to refine their techniques and processes to meet the Vietnamese countermeasures. Like all history, the story of SIGINT during the Indochina War is one of constant evolution. The longer the time we take under consideration, the better the dynamics can be understood.

Also, we will consider the war in a geographic scale beyond Indochina. Partly, this larger regional approach is dictated by the range of the war. The struggle centered in the four countries that traditionally made up Indochina – North and South Vietnam, Laos, and Cambodia. (The French considered Indochina as five colonies: Laos, Cambodia, Tonkin, Annam, and Cochin China.) Yet, the war, and its SIGINT interests, reached across the borders of those four countries to include portions of the greater Southeast Asia region.

The chance that the considerable forces stationed there would intervene in the conflict was a major concern for Washington planners early in the war. To the west, Thailand was a strategic base for the American 7th Air Force and supported a considerable American cryptologic presence. Significant SIGINT support came from sites in the Philippines.

It is useful to remember as well that, in the long history of the Indochina War, forces from a number of countries were involved – anywhere from sixteen to twenty-two depending on how one defines their specific involvement. This lent an international shading to the war. And this international effort was repeated in the cryptologic arena. SIGINT and COMINT elements from the United States, South Vietnam, and others participated in monitoring, analyzing, and reporting of signals intelligence during the war.

(U) Context

(U) The history of American SIGINT during the Indochina War needs to be placed within the context of that conflict. In war, intelligence derives its utility by supplying commanders with the knowledge of the enemy's means, ends, and plans to realize them. The mere accumulation of data, or the fielding of intelligence gathering, processing, and reporting systems and organizations does not meet the main objective of supporting one's own command. These are only the preliminary, though necessary, steps. Ultimately, intelligence can be judged only on what information is (or is not) provided and how it is delivered. Looking only inwardly at intelligence activities, and removing intelligence from the context in which it operates, allows for only a myopic view of its own effectiveness.

(U) At the same time, we will not overlook how SIGINT performed its many unique tasks. However, this review will be cast in the most rel-
American SIGINT’s successes and failures against the technical, doctrinal, and procedural actions taken by the Vietnamese communist cryptographers and communicators. This approach may seem almost too obvious to state. Yet, in earlier cryptologic histories, communist communications and cryptography were discussed only occasionally, and usually as some fixed list of objectives. As we discussed above, this static, limited approach is misleading. The true targets of American cryptologists were Hanoi’s communications and cryptographic systems, and they changed often to defeat our best efforts.

(U) In this regard, we are fortunate to have a Vietnamese communist history of their own cryptographic effort during the war. Essential Matters, published in the original Vietnamese in 1990, and in translation in 1994 by David Gaddy, formerly chief of the Center for Cryptologic History. If the reader can overlook the numerous faults of socialist history – the paean to Ho Chi Minh, the tales of heroic socialist cryptographic technicians under fire delivering loads of codebooks, or the mind-numbing statistics of ever-higher production levels of key lists – what emerges is a remarkably detailed history of communist cryptography and communications security from 1945 to the fall of Saigon in 1975. The narrative in Essential Matters matches up quite closely to what Americans knew from intercept, cryptanalysis, captured documents, and prisoner of war debriefs. The close correlation allows the reader a rare opportunity to observe how both sides operated and reacted to each others’ work. Essential Matters should be read by all thoughtful American cryptologists who want to understand how target cryptographic and COMSEC bureaus operate, and how they are influenced by unique doctrinal, technical, and operational prejudices. Most importantly, it can be seen how an enemy’s knowledge of American cryptologic capabilities is incorporated into modifications of their own systems.

(U) History, if it is to be more than a mere chronicle, must investigate events and seek to explain their significance. Hopefully, these two approaches of scale and context will allow this history to answer the two fundamental and pertinent questions about American SIGINT during the Indochina war: First, how did American SIGINT operate within the framework of the war? and, second, what was the final influence or effect of SIGINT on the course of the war and its eventual outcome?

(U) To keep the reader apprised of certain important events and interesting sidelights which fall out of our topical scheme, we will make use of so-called “Interludes.” There are four Interludes: the Geneva Conference of 1954; the post-Diem political situation; the buildup of American cryptologic units; and the attempt by MACV to destroy the communist Central Office South Vietnam (COSVN) during the invasion of Cambodia.

(U//SI) A few technical comments about terminology in this history need to be made here for readers not familiar with cryptology. First of all, we will be using the terms SIGINT and “cryptology” almost interchangeably. Cryptology is defined narrowly as “the study of the making and breaking of codes and ciphers.” SIGINT is the acronym for signals intelligence and, while it covers aspects of cryptology such as cryptanalysis, it includes, among others, direction finding, signals analysis, traffic analysis, special identification techniques, and reporting of information derived from enemy signals of all types, not just communications. However, as a descriptive term – SIGINT or cryptologic community – the difference between the two is unimportant. COMINT is the acronym for communications intelligence. The difference between COMINT and SIGINT is that the latter encompasses intelligence from non-communications emitters such as radars, navigational beacons, altimeters, and other equipment. The intelligence from these sources is termed ELINT, or “electronics intelligence.” NSA official-
ly received the mission for ELINT in the late 1950s. COMINT and ELINT were then subordi-
nated under the category of SIGINT. Again, in ordinary and generalized descriptions, the differ-
ence between the SIGINT and COMINT is not important. The term "cryptography" refers to the "development of codes and ciphers" and is essentially a defensive art, associated closely with communications security or COMSEC.

Occasionally, we will include original Vietnamese texts, terms, or organizational titles. In all circumstance, we tried to remain faithful to the original language. For Vietnamese, in particular, this represented something of a problem. Although the transcription from the Vietnamese to a Roman alphabet was not difficult, the rendering of place-names required a decision. A literal transcription would have left us with familiar place-names written as Da Nang, Hai Phong, and Viet Nam. These versions would be unfamiliar to most readers, so we chose to go with the familiar English single word version.

(U) Finally, quotes from American messages are carried in upper and lower case. However, the actual texts of these messages normally were in upper case only. This would have been distracting to readers not accustomed to viewing such a format. So, we opted for the correct case format. The few exceptions to this occur in the chapter on the Tonkin Gulf incident. The need for a true representation of the messages between the Pacific commands and Washington dictated that the messages be reproduced in their original upper case-only format.

(U) Notes

1. (U) The overt combatants included the United States, South Vietnam, North Vietnam, Laos, Cambodia, Thailand, People’s Republic of China, Democratic People’s Republic of Korea, Republic of Korea, Australia, New Zealand, Philippines, United Kingdom, France, Japan, Nationalist China, and the Soviet Union. This list does not include the various colonial contingents that comprised the French Union Forces, such as those from Morocco, Tunisia, Algeria, Senegal, and the units of the French Foreign Legion. Nor does it include rumored contingents of “special forces” from the Warsaw Pact and Commonwealth “volunteers” in the Australian Special Air Service units.

2. (U) The translation is available from the Publications Team of the Center for Cryptologic History. It also contains a supplement on the Cryptography of the Vietnamese Border Guard. (Special Series Number 5)

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Fort Meade, MD
2001
(U) Acknowledgments

(U) There is an old African maxim that relates “That it takes a whole village to raise a child.” In a sense, this applies to any written work. Behind Spartans, there is a whole village of people who, in various ways, helped make this history possible. It would be foolish for me to claim that I could have done this alone.

(U) First of all, my appreciation to the editorial staff of the CCH Publications Team run by Barry Carleen. In particular, my thanks go to Barbara Vendemia, who lived up to every editor’s Augustan charge and turned my stone-like draft into the marble of a finished manuscript. And to who assumed editorial responsibility for the monograph following Ms. Vendemia’s departure, I offer my sincere appreciation for her hard work and patience as the book moved toward completion. I also would like to thank the NSA records managers and archivists who gave me virtually unrestricted access to the material both in the NSA/CSS Records Center and Archives. This was a historian’s dream. This group included Joseph Warren, Sharon Greenway, and especially my good friend, the late James L. Smith. Another research source was the on-line NSA product database, Anchovy, whose administrators always seemed to find whatever I needed.

(U) I also want to thank the many people who always took the time to answer my questions, discuss various points, and who reviewed this manuscript. Their comments, suggestions, and insights immeasurably rounded off my efforts. This list includes Ralph Adams, Gene Becker, R. Lou Benson, Dave Gaddy, Tom Johnson, Gerald Kelly, Bob Rich, and Milt Zaslow. A special thanks to for discovering additional records on the Gulf of Tonkin. Historians from outside NSA also lent their expertise and critical review. These include Diane Putney from the Historian’s Office, Office of the Secretary of Defense; Edward Marolda from the Naval History Center and Kent Scig from the Department of State.

(U) I would like to thank the numerous history professors and teachers who have endured me as a student over the years. I have been lucky in that I rarely had a teacher who was inadequate. The overwhelming majority were excellent teachers, who, at the same time, remained dedicated students of history. Of this large group, three of them particularly stand out: Monsignor Joseph Moody of Catholic University of America, deceased, the late Gordon Prange, and the late Hermann Schussler, both of the University of Maryland. All three, rather than merely having taught history, bequeathed to those of us fortunate to be their students both vision and understanding, as well as the daring to think independently.

(U) With such help who could fail? If there are any errors in this history, then, in the eloquent words of the Qur’an: “If I err, I err just on my own.”

ROBERT J. HANYOK

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