

FINAL DRAFT

(U) SIGINT 101 Seminar
Course Module

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(U) SIGINT 101 SEMINAR

Course Objective: (U//~~FOUO~~) To convey the fragility of SIGINT and to increase editors' and reporters' understanding that there are other ways to express similar thoughts in an article without compromising the story and without compromising SIGINT.

Attendees: (U) This course is by invitation only.

Logistics: (U) Audience consists of 6-10 media representatives, print and broadcast—reporters, editors and producers.

Location: (U) Director's Technology Demonstration Center (TDC) and NSOC (stopping by the National Cryptologic Memorial to address its relevance in honoring our silent sentinels who lost their lives during the performance of their duties).

(U) Ground Rules:

(U) "Off-the-record" statements may not be reported.

(U) The Media will have to respect that at some times during the exchange responses may not be fully addressed because of classification issues.

(U) The SIGINT 101 Seminar will not be recorded or video taped; it's for informal information exchange only.

(U) The Media will be asked to leave behind cell phones, two-way pagers, cameras, video equipment, and tape recorders.

Approved for Release by NSA on
08-24-2007, FOIA Case # 48262

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Introduction: Opening remarks—Judi Emmel, Director, NSA PAO

(5 minutes) NSA seal on the background screens

- Coffee, tea, and pastries in the TDC.
- Establish Ground Rules.
- Stress that this is the first-ever such course in NSA's history.
- Review the SIGINT 101 Seminar's agenda for the morning.
- Offer tours of the National Cryptologic Museum following the seminar.
- Request feedback for improving the course for follow-on sessions.
- Introduce the Director.

“From its beginnings, our Nation has relied on the art and science of cryptology to ensure American freedom and security. The foundation of this legacy of success rests on the National Security Agency's (NSA)/Central Security Service's (CSS) ongoing ability to provide our Nation's leaders with a thorough and comprehensive knowledge of our adversary's plans and intentions.”

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Part 1-DIRNSA Introduction—A sincere discussion...Why We've Invited You Here

(10 minutes) NSA seal on the background screens

Key points:

- We want to increase your awareness that SIGINT is fragile.
- This isn't about controlling what you write – we respect the 1st Amendment and we don't want to stop you from publishing stories. We request that you understand why we are so concerned about losing valuable sources.
- We hope that the next time a story comes across your desk, and the words "NSA" or "intercept" or "phone conversation" are used, you will know what goes on behind the scenes here that led up to the "event" and what ramifications will result from the unauthorized disclosure.
- We want you to understand why it is important to protect our SIGINT equities.
- We want to emphasize that we deplore "leaks" or other unauthorized disclosures of properly classified material. That said, in limiting the damage such disclosures could inflict on our national security, we want you to leave today with an understanding of our concern about "the fact of" leaks—that is, the content of the material disclosed. But, we also want you to understand that in many instances, we believe reporters can deal with the content of leaks in a way that does not expose intelligence sources and methods.
- Today we'd like to offer suggestions on how that could be done.
- We need your help, and the Nation needs your help.

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**Part 2 – Where SIGINT has made a difference—This Prototype course
presented by Dr. Bill Nolte, former NSA NCS Commandant**

(30 minutes) Minimal Visuals on background screen—history related

Key points:

- Commentary on interesting SIGINT stories from an NSA historian.
- What would have happened if NSA weren't there?
- How we supported the warfighter.
- How we supported the national/international decision maker.

History script follows

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SIGINT MADE THE DIFFERENCE

(U) Before WWII, the U.S. had a limited program of Signals Intelligence (SIGINT) in the Army and Navy.

(U) During WWII, in cooperation with Great Britain, the U.S. exploited a very large number of enemy cryptosystems, from low level to high-grade systems. The information derived from SIGINT was used by all high-level commanders; it clearly helped shorten the war by as many as two years and saved untold tens of thousands of Allied lives.

(U) The WWII effort was labor intensive. There were periods in which critical messages were not read. For example, the Allies used decrypts from German Navy messages to help Atlantic convoys avoid submarine wolf packs and, eventually, to hunt the German submarines themselves. However, the German Navy was the most security conscious of the services and frequently changed or upgraded the way it used its ENIGMA machines to encipher communications. During those periods when the Allies were exploiting German Navy ENIGMA traffic, convoy tonnage lost went down and U-Boat losses went up; the reverse was true for those periods when Allied cryptanalysts were struggling to recover from ENIGMA changes.

(U) In 1940, U.S. Army cryptanalysts solved a high-level Japanese machine system used by the Foreign Ministry for communication with its major diplomatic posts. The Army gave the system the codename PURPLE. The ability to exploit this system gave U.S. policy makers an invaluable insight into Japanese foreign policy prior to and during the war. However, it also provided an extraordinary source of information to the Allies that made it one of the most important intelligence sources of the war.

(U) Many in the Japanese government and Army admired the German military machine and wanted basic information on its organization and practices; they were also interested in details of its operations because German success or failure affected their own position in the world.

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(U) In the spring of 1942, Japanese intercepts referenced a pending naval operation designated as "AF." To alleviate any doubts, the commanding officer of the Midway installation sent a message in the clear indicating that the installation's water distillation plant had suffered serious damage and that fresh water was needed immediately. Shortly after the transmission, an intercepted Japanese intelligence report indicated, "AF is short of water." Armed with this critical knowledge that "AF" was Midway, the United States was able to strategically get into position against the Japanese naval advance, resulting in an incredible U.S. victory.

(U) The Japanese Ambassador in Berlin was Baron Oshima Hiroshi, who was concurrently a lieutenant general in the Japanese Army. The Germans were happy to provide their ally with detailed briefings and front-line tours, particularly in their early, successful operations. Baron Oshima wrote detailed military reports as well as diplomatic dispatches, enciphered them in PURPLE, and broadcast them to Tokyo -- thus, what he learned in Berlin was read in Washington, sometimes faster than the intended addressees in Japan.

(U) Baron Oshima's reports contained a wealth of detail on the organization, operation, and deployment of the German military. They included details about combat operations. In the German build-up to repel an Anglo-American attack on the coast of France in the spring of 1944, Oshima and his staff toured the "Atlantic Wall" and interviewed the Commander-in-Chief West on his plans -- all information greatly appreciated by General Eisenhower's staff planners. Oshima's reports contained the only reliable information about the fighting on the Soviet-German front; certainly, it had more details than the Soviets themselves were telling their Allies. At the end of the war, Oshima's reports told of the last-ditch plans before the fall of the Third Reich.

(U) As an aside, Oshima was convicted as a war criminal in the Tokyo trials and served ten years in prison. He was released in 1958 and died in 1975, never knowing he had been one of the unsung architects of Allied victory in the west.

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(U) Scarred by the experience of the world war and convinced that SIGINT had made a vital contribution to victory, senior leaders, both civilian and military, became heavy consumers of SIGINT. In fact, SIGINT became an important component of decision making for the rest of the Cold War.

(U) In the postwar era, U.S. cryptanalysts made a break into a high-level system used during World War II by the Soviet espionage apparatus. This project, known by the codename VENONA, enabled American counter-intelligence to stop the wholesale loss of defense secrets to the USSR; it also was the background to many of the famous spy cases of the 1940s and 1950s.

(U) Because there were no requirements for information on Korea, the U.S. SIGINT system provided no warning about the North Korean attack on the south in June 1950. However, within days of the outbreak of war, the SIGINT system was producing useful reports for American commanders.

(U) The SIGINT system was able to track the movement of Chinese divisions to the Manchurian-Korean border in the summer and autumn of 1950 with the information that they were being provided maps of Korea. These reports were sent to Tokyo, but apparently discounted by General MacArthur's intelligence staff.

(U) In the period immediately after WWII, defense and intelligence officials sought to find ways to consolidate or centralize SIGINT production. In 1949, the new Department of Defense created the Armed Forces Security Agency (AFSA) as a centralizing organization. However, AFSA lacked sufficient authority to be effective. Based on bureaucratic dissatisfaction with AFSA and a misperception that it was not supporting American forces in Korea well enough, in October 1952, at the order of Harry S. Truman, the Defense Department reorganized AFSA into the National Security Agency.

(U) In the period between WWII and the Korean War, American cryptanalysts were beginning to exploit a number of Soviet cryptosystems such as VENONA. Although none were fully solved, the project held out the promise of an information breakthrough as important as the penetration of German systems in WWII.

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(U) The U.S. continued to produce valuable information about the Soviet Union in the 1950s and 1960s from communications. However, this growing success was betrayed by two traitors (one American, one British), prompting the Soviets to change their communications and prevent exploitation of them.

(U) In the Cuban missile crisis, SIGINT provided critical information that enabled the Kennedy Administration to manage the crisis and avoid war with the Soviet Union. (It should be pointed out that SIGINT did not detect the presence of offensive nuclear missiles in Cuba.)

(U) In fact, it is not too much to say that SIGINT has provided a measure of support in virtually every crisis of the Cold War, and sometimes has been critical for crisis management. SIGINT support has also been important to diplomacy, narcotics interdiction, and anti-terrorism measures.

(U) In Vietnam, SIGINT provided warnings of all North Vietnamese ground offensives. In addition, U.S. pilots operating over the north had near-real-time data sent to their cockpits from intercept of North Vietnamese air controllers.

(U) It is frequently argued that it does no harm to reveal details of SIGINT operations, since the Soviet Union knew what was going on anyway. The USSR, however, was not the only target of SIGINT, and information important to U.S. security was often derived from other targets.

(U) During the crisis period after the North Korean capture of the ship PUEBLO on the high seas, the ability to read communications helped U.S. officials to understand that the crisis might be settled by diplomatic rather than military means.

(U) As a result of losses of documents aboard the PUEBLO, several important SIGINT sources dried up.

(U) SIGINT has been used at the highest levels for both strategic and tactical decisions.

(U) Former President George Bush came to NSA on May 1, 1991, and publicly thanked the Agency for its support during operations DESERT SHIELD/STORM.

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(U) Many of General Schwartzkopf's troop dispositions and most of the targets for the air campaign against Iraq were based on SIGINT information.

(U) What if our SIGINT sources and methods weren't publicly disclosed? Even before NSA was formally established and charged with two of the most sensitive and technical missions in the U.S. government, SIGINT and Information Assurance, protecting the nation's classified operations was critical to supporting the war fighter. Now, in today's highly technical environment, where SIGINT sources have exploded into a chaotic global network, protecting sources and methods is even more paramount. How would the world be today, if history could have been different?

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Part 3 - Collection and Reporting Exercise "Top Gun"/Examples of Languages

(15 minutes)

This exercise will be a casual demonstration of the multifaceted, global communications structure NSA is charted to collect from and report on. TSgt Donny Weber, NSA PAO, will lead this exercise.

Key points:

- This is not an easy job—the volume, velocity, and variety of human communications.
- Demonstrate the multiple channels/frequencies available in the global marketplace
- Demonstrate the diversity/similarities of dialects—6,500+ languages in the world.
- Reemphasize the trends influencing the challenge in today's environment: globalization, democratization, diversification of threats, transformation through technology.

The following presentation provides a visual snapshot of the exercise, which is comprised of a listening activity, language ability demonstration, and signals samples.

NSA PAO has received OGC concurrence for using a segment from the movie "Top Gun," as well as for the signals demonstration.

The purpose of this exercise is to demonstrate communications in a natural environment. TSgt Weber pulled language samples, courtesy product advertisement and Washington Post articles, and created, in our Agency lab, signals that replicate real signals. The language samples were received by the NCS, and are a part of the unclassified Voice of America training. The signals used in this exercise are not actual intercept.

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Part 4 - SIGINT Overview - Director of SID

(30 minutes)

NSA was established by Presidential directive in 1952 to provide signals intelligence (SIGINT) and communications security activities of the Government. NSA later gained the responsibility for also providing information systems security and operations security training. SIGINT is one of our dual missions, working with Information Assurance to provide foreign intelligence information and to protect our own national-security related information systems. It is within our SIGINT mission that unauthorized disclosures have done the most damage.

I'd like to introduce NSA's SIGINT Director. He will:

- Identify the nuts and bolts of SIGINT, and new challenges.
- Explain how our customers have increased, as have the requirements.
- Explain the opportunities/boundaries in the current system.

SID briefing follows

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Part 5: Legalities of what we do--offered by Robert Deitz, former NSA GC

(15 minutes)

- NSA is a very powerful agency engaged in a secretive business; the American public historically has distrusted power and secrecy.
- The history and philosophy underlying the Bill of Rights reflect distrust of governmental power; juxtaposed with this distrust is an understanding of the need for intelligence and secrecy (as noted in the examples you've heard earlier).
- As the U.S. continues its fight against international terrorism, NSA is challenged to provide information to support the warfighter and policymakers. Our ability to accomplish this task depends on the continued vitality of our intelligence systems--the sources from which information is collected, the means (techniques) by which information is collected, and then how it is transformed into intelligence that can be passed to the warfighters and policymakers.
- Our sources and methods can be compromised in a number of ways, including through leaks to the media of information about sources and methods. The damage resulting from press publication of leaks of SIGINT information is not a new concern.
- A debate on national policy issues loses nothing more by writing to protect the intelligence source than by protecting the news source. Information about the source of the intelligence or methods of acquisition may be removed without distorting the substantive information itself or stifling any ensuing public debate on policy issues at hand.
- In United States v. Progressive, the United States District Court for the Western District of Wisconsin enjoined publication by a private researcher of a compilation of publicly available information describing a method of manufacturing and assembling a hydrogen bomb. The court reasoned that public knowledge of the technical details of hydrogen bomb construction was unnecessary to informed debate on the dangers of nuclear proliferation.

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- We are not suggesting that public debate be curtailed in order to stem leaks; we are proposing that the public be informed with due regard to other factors, in particular the preservation of this country's vital intelligence sources and methods that contribute, along with public debate, to the goal of a free, self-governing society.
- Recurrent allegations: NSA spies on U.S. citizens; NSA operates without oversight.
- NSA is subject to oversight from multiple bodies within all three branches of government to ensure we're operating within our legally mandated charter.
- Church and Pike and the 1970's were a watershed for the intelligence community; revelations of the Committees resulted in new rules for the intelligence community, rules meant to prevent abuses while preserving intelligence capabilities.
- Series of laws and Executive Orders established oversight procedures and substantive limitation on intelligence activities: 1) HPSCI/SSCI formed; 2) FISA; 3) E.O. with formal system of intelligence oversight; 4) Presidential IOB established along with DoJ and agency oversight mechanisms.
- Intelligence functions are of necessity conducted in secret, yet the principles of our democracy require an informed populace and public debate on national issues; these opposing principles—secrecy on the one hand and open debate on the other—can be reconciled successfully through rigorous oversight.
- The media enjoy a special role within the structure of our society and how society is governed; you are, and should be watchdogs. Nonetheless, we ask that when intelligence information is reported, fragile intelligence source and method information, which is unnecessary to informed debate, not be disclosed along with it.

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Part 6 - "Get it, Know it, Use it" Panel discussion with DIRNSA, SID, GC, etc...

(45 minutes) A pencil-down session, totally off the record

Key Points:

- Small, innocuous remarks, in total, are damaging. A good reporter will take leads and create a bigger story.
- Reporters go to great lengths to protect their sources, as do we. The classification of our SIGINT information is based on not only the content but also on the source and method used. Jeopardizing either can detrimentally impact national security, resulting in loss of life and millions of dollars to taxpayers.

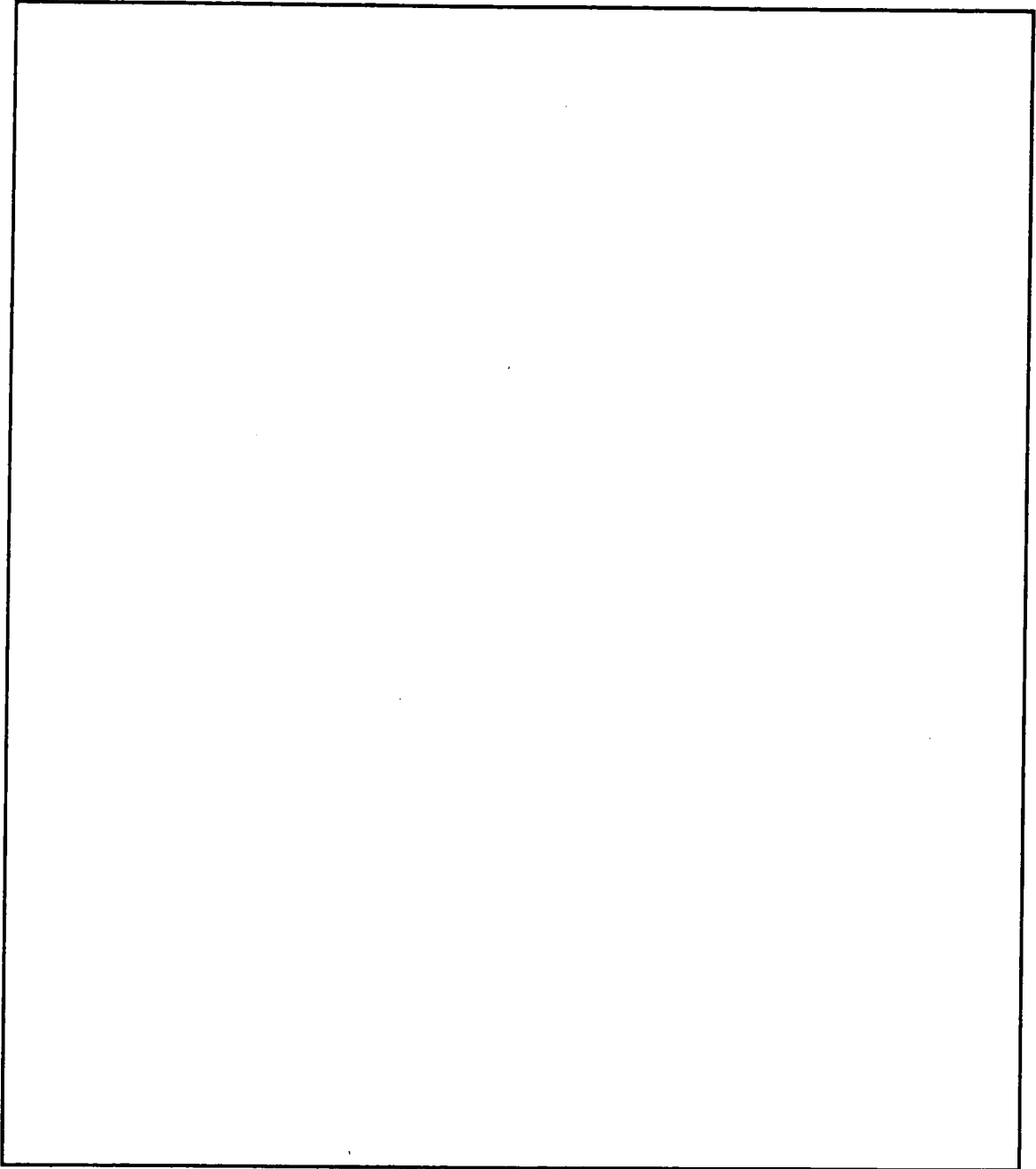
(What follows are anticipated questions from the media during this Panel Discussion, based on previous inquiries to NSA PAO. Suggested responses included.)

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Anticipated Questions/Proposed Responses for NSA Panel:



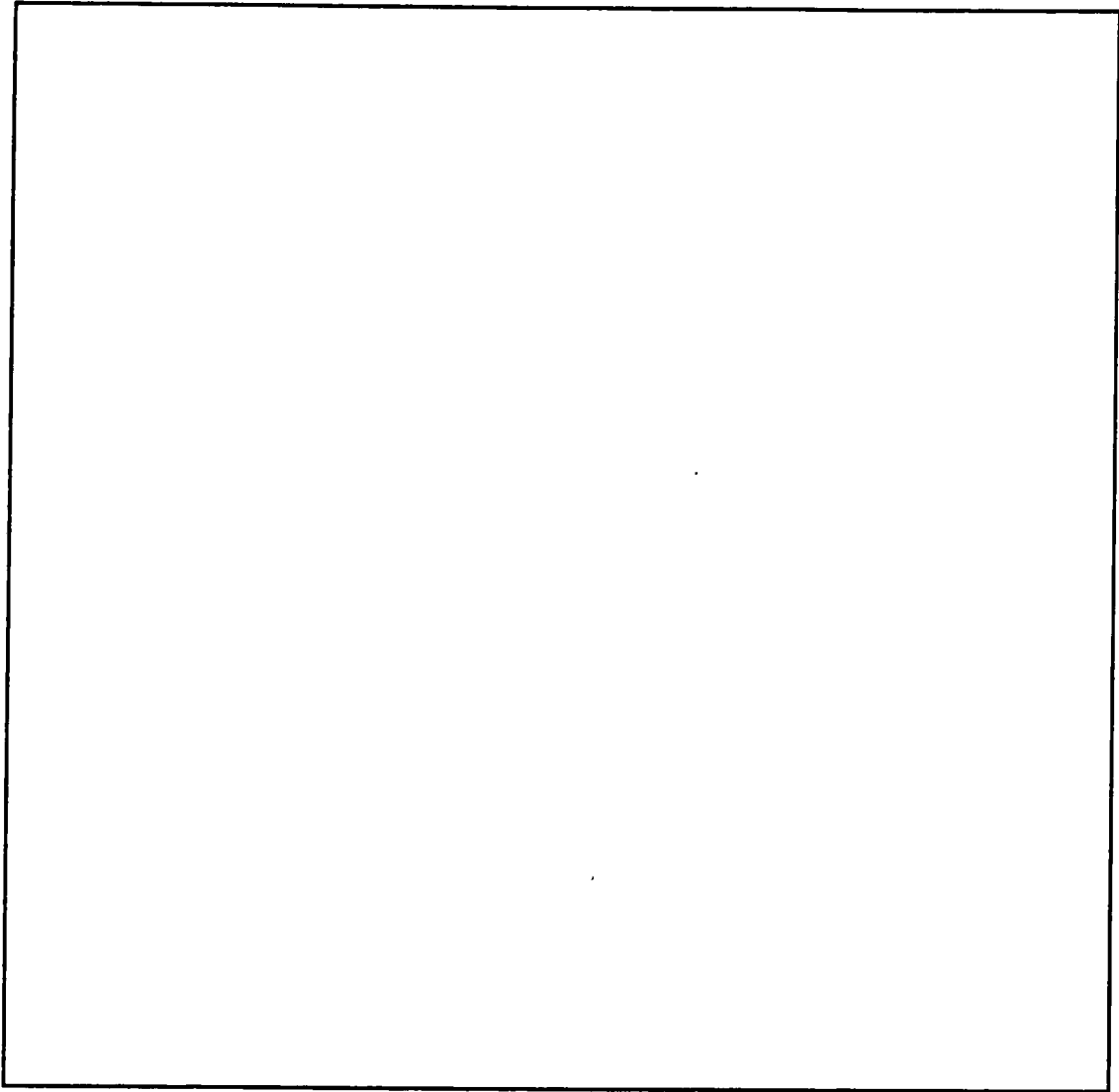
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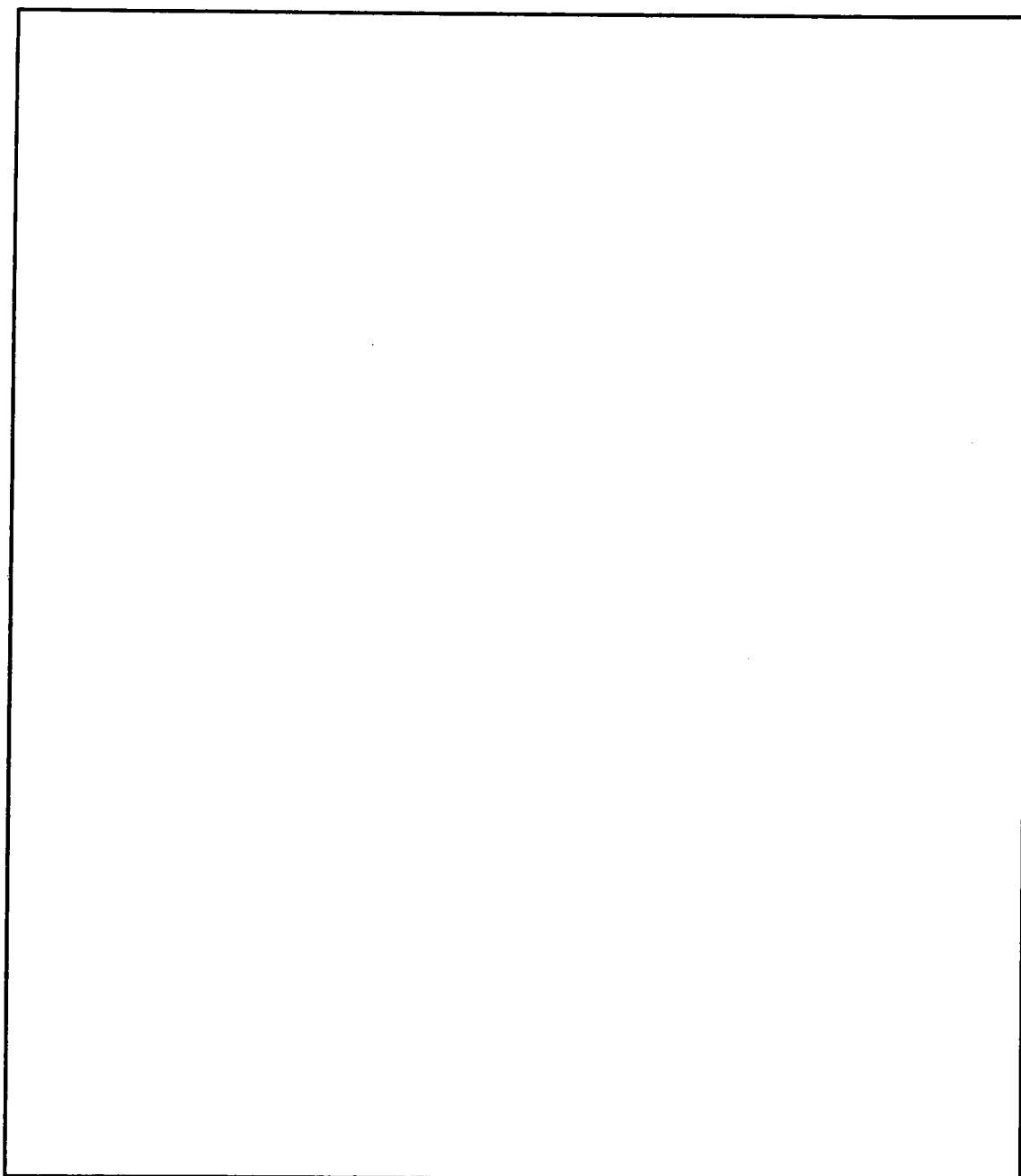
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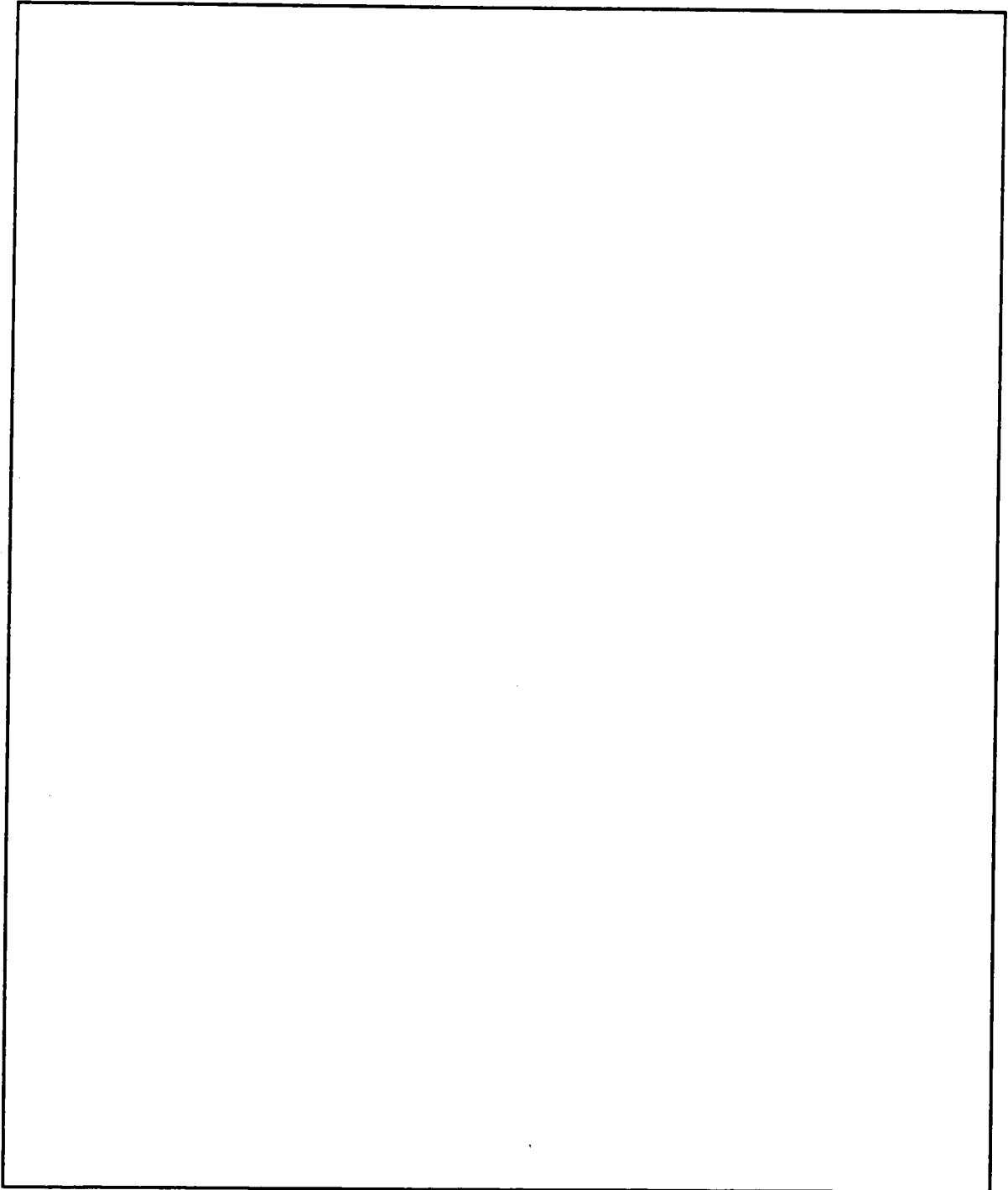
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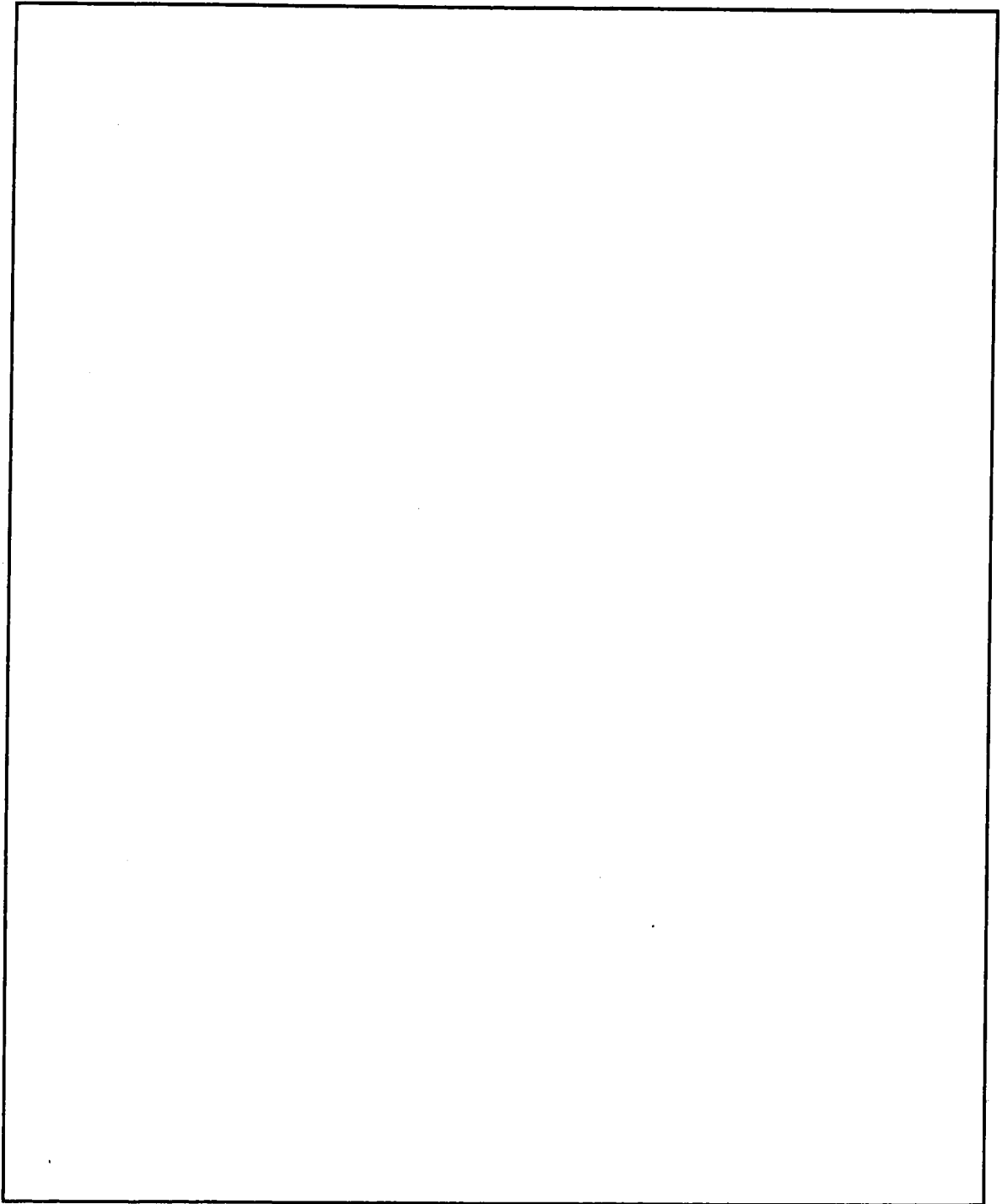
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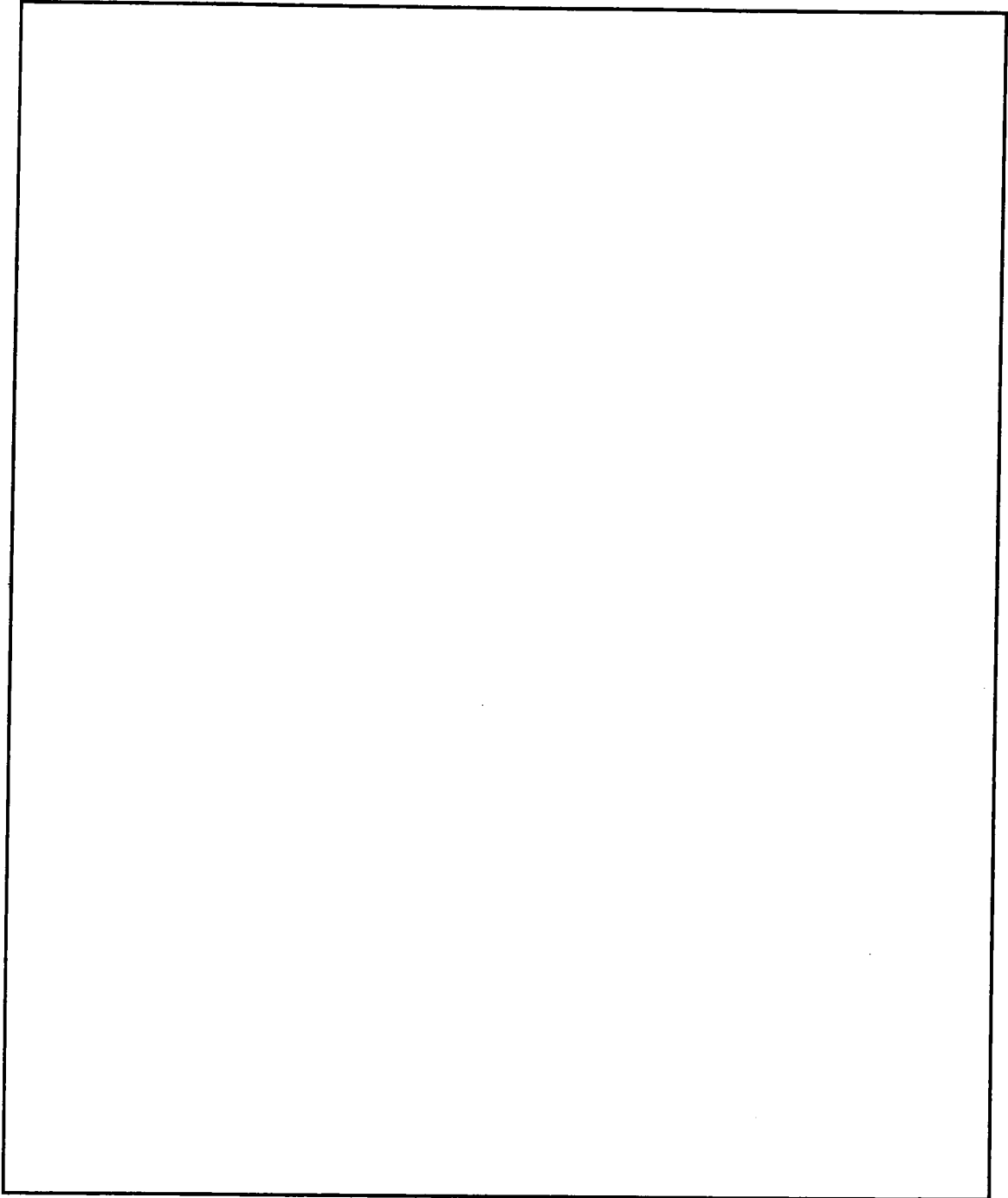
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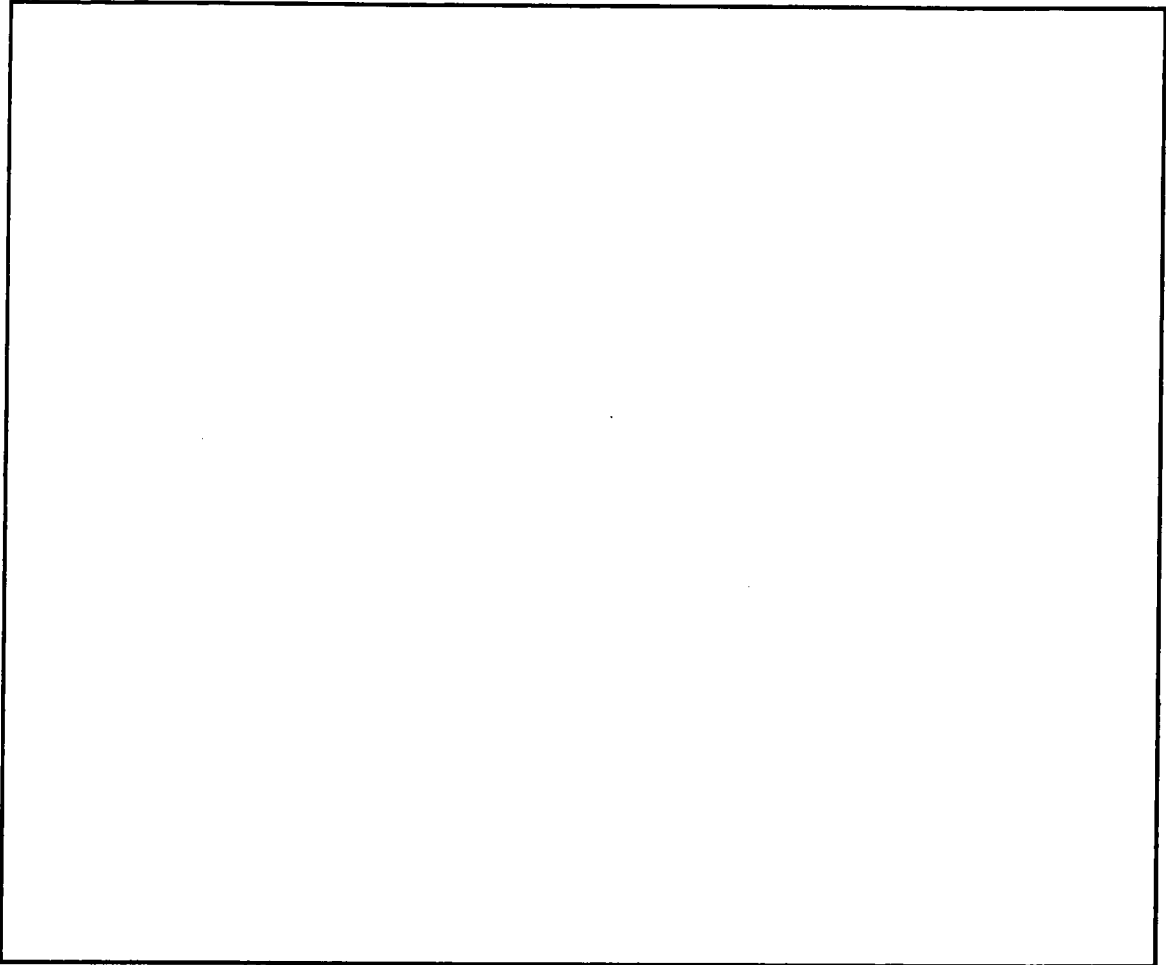
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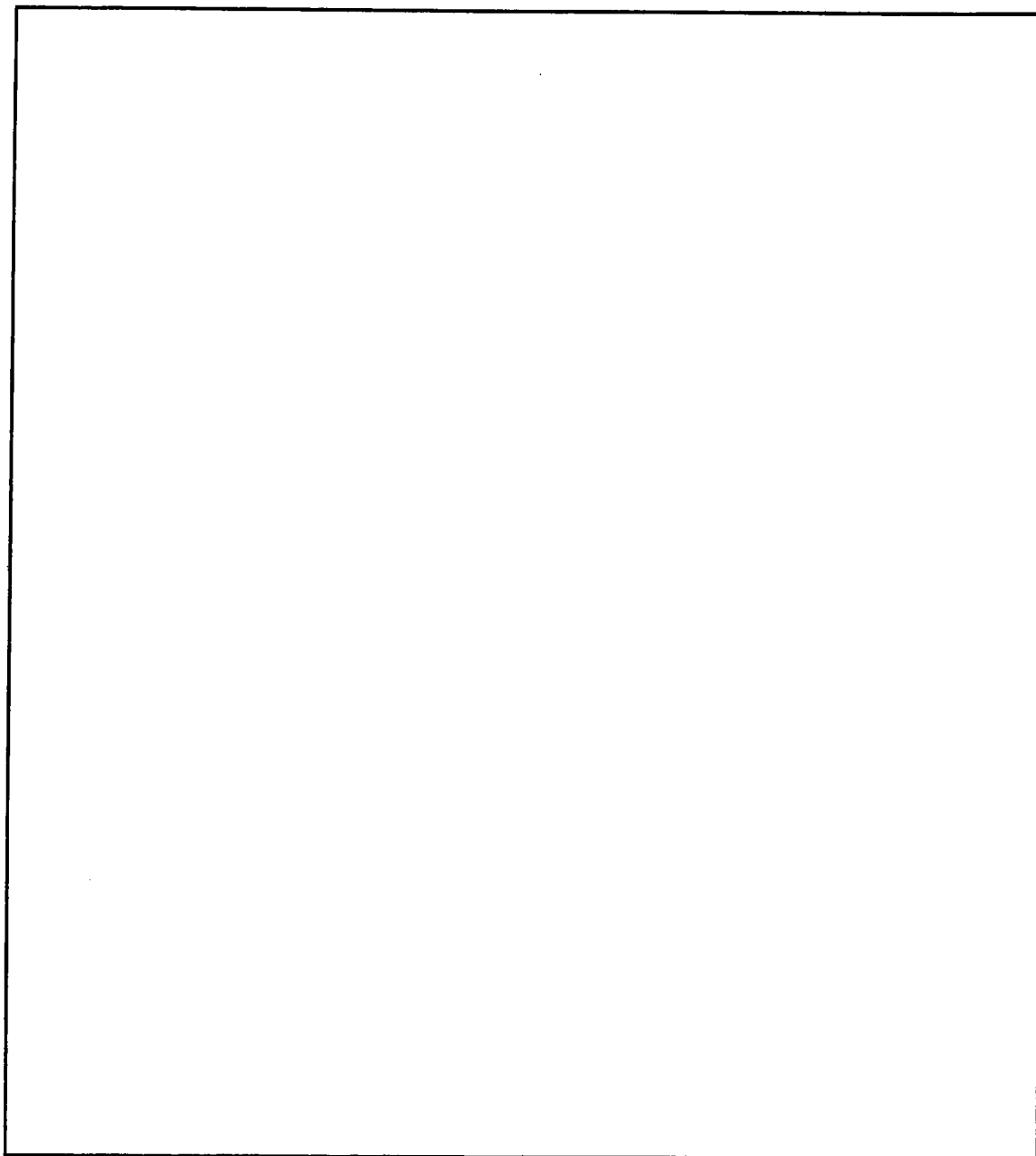
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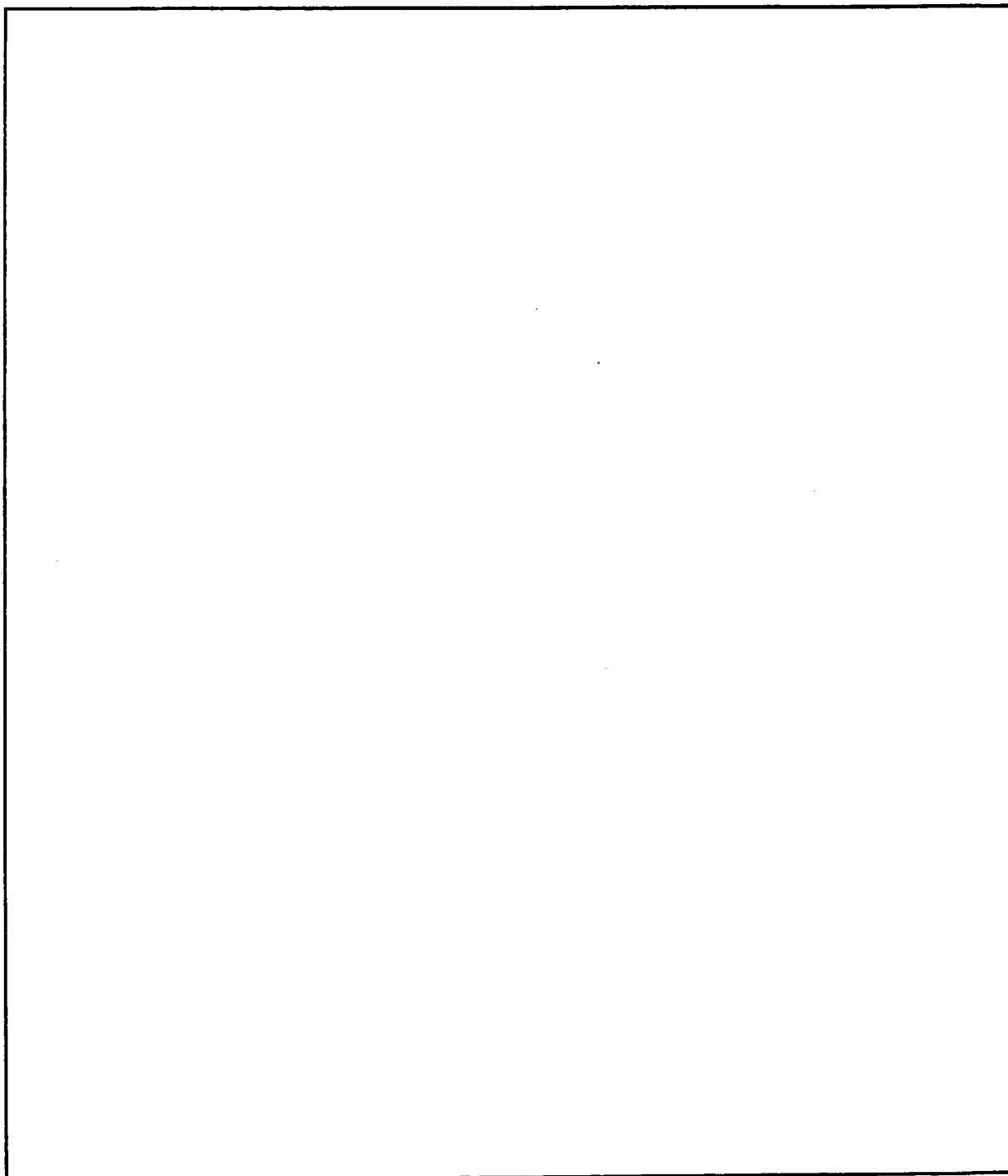
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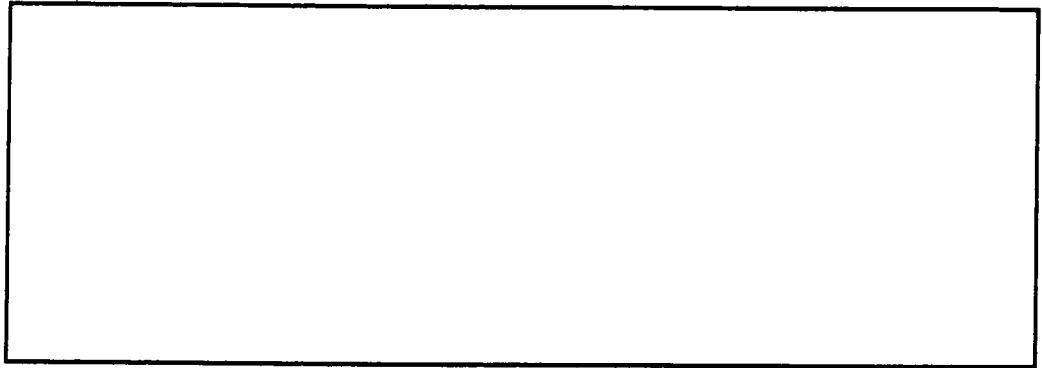
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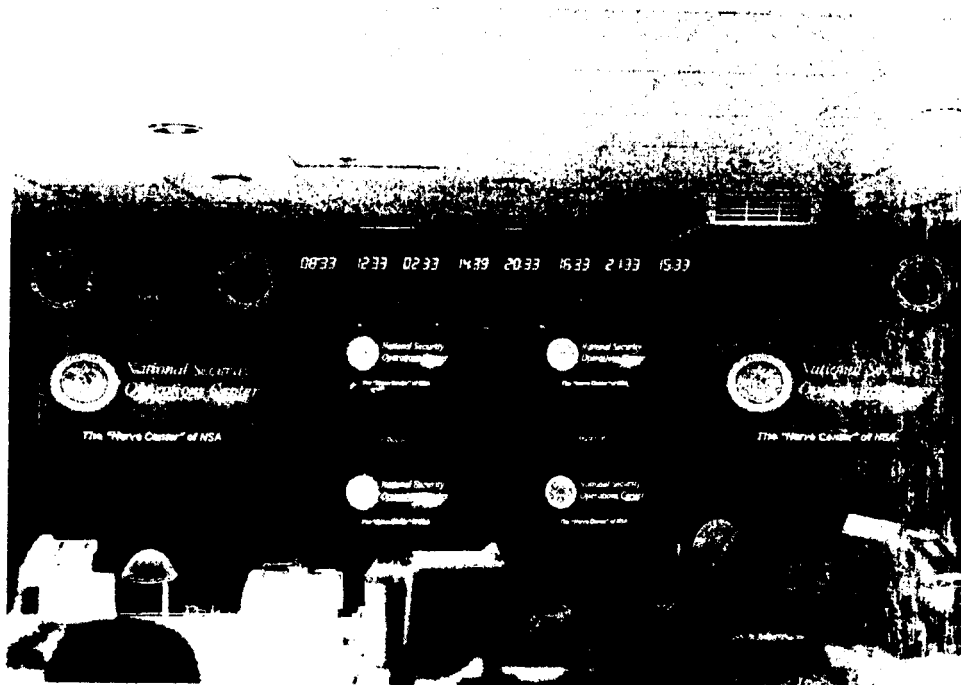
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Part 7- Tour of NSOC (30 minutes)

The National Security Operations Center (NSOC), established in 1972, is the NSA's 24/7 nerve center for the dual missions of foreign signals intelligence and information assurance. It integrates cryptologic operations with military commands and other agencies within the Intelligence Community. NSOC provides critical foreign SIGINT to the nation's decision makers, supports the Nation's military by understanding allied operations worldwide, and alerts them to hostile military operations that may jeopardize peacetime activities. The Center also protects vital national security-related information from the Nation's adversaries by performing computer incident and intrusion reporting while also monitoring threats to U.S. government information systems. In addition, NSOC is the executive manager of the Nation's CRITIC program, which gathers and distributes critical information that may affect national security and requires the immediate attention of the President and the National Security Council.



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Part 8--Course Wrap Up--NSOC Conference Room

Gen Hayden, Bob Deitz, SID DIR, Judi Emmel

(15 minutes)

- Sodas, cookies provided

Key Points:

- Reestablish Ground Rules.
- The information discussed today is off-the-record.
- We can't tell you how to do your job, but we thought we'd show you some reporting.
- Without confirming or denying the information in the articles or their accuracy, we took the liberty of rewriting news articles to ensure NSA sources and methods are protected.
- These articles are for demonstration purposes only.
- This is where we need your help.
- Thank attendees for participating in the course.
- Offer tours of the National Cryptologic Museum.
- Request feedback for improving the course for follow-on sessions.
- Provide reporters with NSA Press Kits, photographs, B-Roll prior to departing.

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ATTACHMENT A

PROTECTING SOURCES AND METHODS

Please note that NSA/CSS is neither confirming nor denying the accuracy of the reporting in the following news articles but, if you were to assume that the articles were accurate, the accompanying rewrites of each article would have better protected fragile SIGINT sources and methods without changing the substance or overall thrust of the articles.

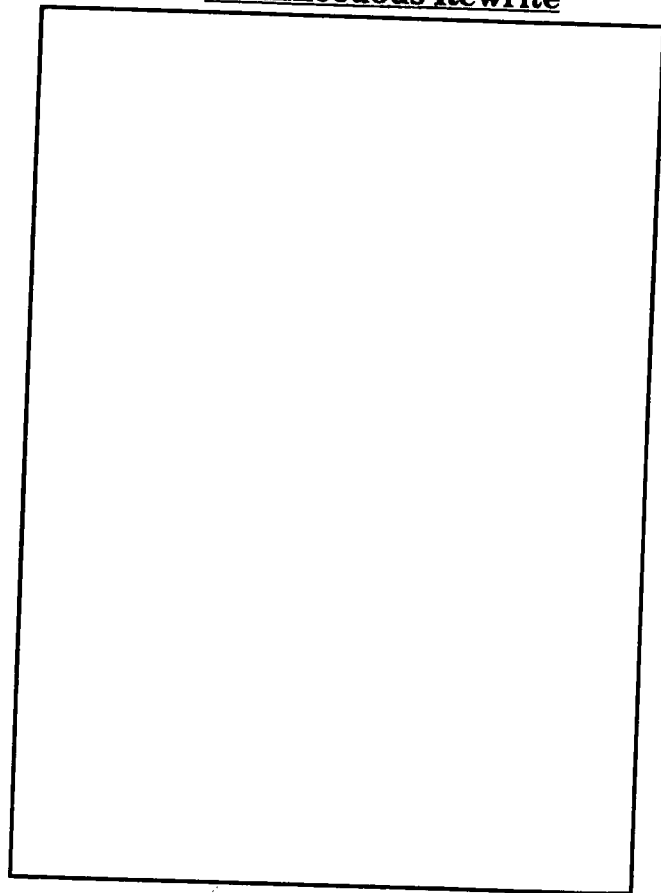
What Was Printed.....

...six embassy attacks were prevented when U.S. intelligence agencies used a reconnaissance satellite to monitor bin Laden's telephone calls and tipped off local officials.....

...an exhaustive review of electronic intercepts of the traffic on bin Laden's communications network has uncovered some evidence that bin Laden helped plan the attacks, along with some congratulatory messages after the Aug. 7 bombings in Nairobi and Dar es Salaam.

American intelligence agents learned of preparations for a strike by eavesdropping on conversations between Mr. bin Laden and members of the loosely knit terrorist organization that he operates around the Islamic world...

An Innocuous Rewrite



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