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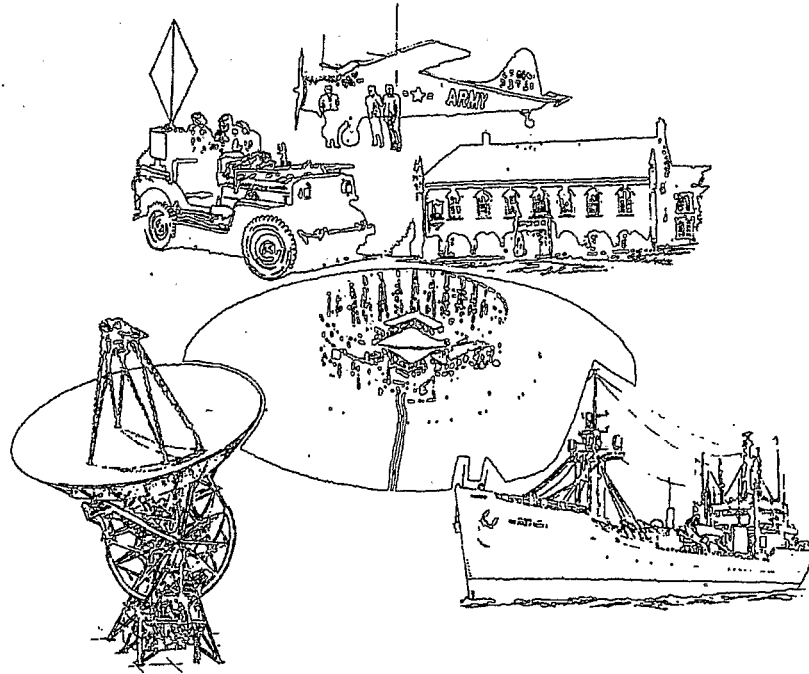
American Cryptology during the Cold War, 1945-1989 - Book III

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National Security Agency  
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UNITED STATES CRYPTOLOGIC HISTORY



## *(U) American Cryptology during the Cold War, 1945-1989*

*(U) Book III: Retrenchment and Reform, 1972-1980*



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**UNITED STATES CRYPTOLOGIC HISTORY**

*Series VI  
The NSA Period  
1952 - Present  
Volume 5*

*(U) American Cryptology during the  
Cold War, 1945-1989  
(U) Book III: Retrenchment and Reform, 1972-1980*

**Thomas R. Johnson**



**CENTER FOR CRYPTOLOGIC HISTORY  
NATIONAL SECURITY AGENCY**

**1998**

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Table of Contents

	Page
Foreword .....	vi
Preface .....	vii
Acknowledgments .....	ix
 <b>(U) BOOK III: RETRENCHMENT AND REFORM, 1972-1980</b>	
<b>(U) Chapter 14: Cryptologic Retreat from Southeast Asia</b>	
The War Is Vietnamized .....	1
The Fall of Saigon .....	3
Hanoi's Final Campaign .....	3
The Fall of Da Nang .....	5
The Fall of Phnom Penh .....	7
The Fall of Saigon .....	9
The Summing Up .....	15
The <i>Mayaguez</i> .....	15
 <b>(U) Chapter 15: Downsizing</b>	
The Great RIF Scare .....	21
The Clements Cuts .....	24
The Field Sites .....	26
Thailand .....	34
Closures and Consolidations .....	37
Tactical Systems .....	38
Remoting .....	38
Remoting the Small Sites .....	51
Guardrail .....	55
Reorganization .....	57
The Fitzhugh Panel .....	57
The Schlesinger Study .....	58
CSS .....	59
The Murphy Commission .....	65

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1.4.(c)  
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1.4.(d)  
P.L.  
86-36

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

The Hermann Study .....	66
The Ursano Study .....	69
The Creation of ESC .....	72

**(U) Chapter 16: Cryptology and the Watergate Era**

Background to Scandal .....	79
NSA and Clandestine Activities .....	83
Shamrock .....	83
Minaret .....	84
Clandestine Methods .....	86
The Huston Plan .....	87
The White House Tapes .....	88
The Allen Era at NSA .....	89
The Church Committee .....	91
The Pike Committee .....	95
The Abzug Committee .....	98
The Backwash .....	100
The Revelations .....	100
<i>Glomar Explorer</i> .....	101
[Redacted] .....	[Redacted]
Executive Order 11905 .....	105
Congressional Oversight .....	107
The Enabling Legislation .....	108
The Enigma Revelations .....	109
The Impact of Watergate .....	112

EO  
1.4.(c)  
P.L.  
86-36

**(U) Chapter 17: The New Targets and Techniques**

Strategic Arms Limitation .....	117
[Redacted] .....	[Redacted]
Comsat/Intelsat .....	134
[Redacted] .....	[Redacted]
Cryptologic Communications in the Post-Vietnam Era .....	140
COMSEC and the Secure Voice Problem .....	142
The Soviet Threat .....	144
The Solutions .....	145
NSA Computers Enter the 1970s .....	151
The Era of Mainframes .....	151
Platform .....	155
NSA's Foreign Collaboration .....	155
Great Britain .....	157

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

Australia .....	159
Third Party Programs .....	162



**(U) Chapter 18: The Middle East and the Yom Kippur War**

Background to War .....	175
The Preparations .....	178
<hr/>	
The Attack .....	181
The Postmortems .....	183

**(U) Chapter 19: The Rebirth of Intelligence during the Carter Administration**

The Inman Era .....	189
The Carter White House .....	193
The War between the Admirals .....	196
Apex .....	198
The New Executive Order .....	199
Panama .....	199
SALT II .....	202
HF Modernization .....	206
The HF Studies .....	206
Inman Comes In .....	208
Kunia .....	210
Conventional Signals Upgrade .....	215
Bauded Signals Upgrade .....	215
The Perry Study .....	217
The Wagner Study .....	220
Bauded Signals Upgrade - the Project .....	221
The Third World Situation .....	223
The Peace Treaty with CIA .....	224
<hr/>	
The HAC Investigation and the Negotiation of a Peace Treaty .....	228
<hr/>	
Peace Treaty .....	231
Public Cryptography .....	231

EO  
1.4.(c)  
EO  
1.4.(d)  
P.L.  
86-36

**(U) Chapter 20: The Foreign Policy Crises of the Carter Years**

The Iranian Revolution .....	245
The Soviet Invasion of Afghanistan .....	250
The Sino-Vietnamese Dispute .....	254
The Soviet Brigade in Cuba .....	256
The Final Days .....	259

## Foreword

(U) The publication in 1995 of Books I and II of *American Cryptology during the Cold War* by Dr. Thomas Johnson created the NSA equivalent of a "best seller." Books I and II were distributed widely to offices and individuals and have been used as textbooks in courses at the National Cryptologic School. These two volumes filled a great need in the U.S. intelligence community for a comprehensive treatment of cryptologic history.

(U) The first book in the projected four-volume series dealt with the origins of modern American cryptology, particularly its organizational struggles in the 1940s and the great debates over centralization. The second book resumed the narrative in 1960, showing how the great strides in communications and overhead technology changed, renewed, and energized the cryptologic organizations. In both volumes, Dr. Johnson analyzed the successes and failures of cryptologic activities as well as support to national decision makers. Book II also gave an overview of cryptologic operations during the Vietnam War.

(U) Book III, which discusses and analyzes cryptologic operations from the fall of Vietnam through 1980, promises to have an impact on our knowledge and cryptologic education equal to its predecessors. This was a period of retrenchment in budgets and personnel, a period of shocking public revelation of improper intelligence activities, the beginnings of declassification about intelligence activities, and a period of technology changes that rivaled those of the previous eras.

(U) This is to say, Book III deals with the period of cryptologic history that, as much or more than previous times, determined the shape and capabilities of the cryptologic organizations of our own day. For this reason, the Center for Cryptologic History recommends Book III, *American Cryptology in the Cold War: Retrenchment and Reform, 1972-1980*, as especially important professional reading for all members of the intelligence community today. Plus, it's a darn good story.

DAVID A. HATCH  
Director,  
Center for Cryptologic History

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## Preface

~~(TS-CCO)~~ Expansion and centralization dominated American cryptologic history from the end of World War II to the end of the first Nixon administration. From 1945 through at least 1970, cryptology forged ahead in a virtually unbroken expansion of people, facilities and influence in the halls of government.

The paradox (true in general but not in particular instances) resulted from the exploitation of everything else that was important about adversary communications, and from the enforced centralization and modernization of the cryptologic system to milk everything possible from that which was exploitable. Successes were most pronounced on the SIGINT side but were also noteworthy in COMSEC.

~~(C)~~ The decade of the 1970s is remembered by most cryptologists as a scarcely mitigated disaster. Expansion came to a halt, beginning with the withdrawal from Vietnam from 1970 to 1975. The cryptologic system contracted in every way possible: people, facilities and money. Through the administration of three presidents - Nixon, Ford and Carter - the downsizing continued.

(U) Nixon's resignation in August of 1974 was followed only five months later by exposure of CIA operations by journalist Seymour Hersh. The result was a thorough airing of intelligence operations, including some by NSA, before two congressional committees, and further ignominy and public suspicion of intelligence and cryptology. Jimmy Carter came to the White House with a mandate to clean out the intelligence closet and a predisposition to do so. He set to it with a will.

~~(S-CCO)~~ But the days were not as dark as they seemed

Even with decreased money, cryptology was yielding the best information that it had produced since World War II. Two strong directors, Lew Allen and Bobby Inman, ably steered NSA through the post-Watergate mire. In the end, Jimmy Carter became a believer in intelligence, especially what was called in the White House "technical intelligence." It was he, rather than Ronald Reagan, who first arrested the decline in the fortunes of American intelligence.

(U) Reagan, who never understood intelligence as well as Jimmy Carter came to understand it, still had his heart in the right place. He directed an intelligence rebirth that resulted in a bonanza of money. The new dollars were shoveled into highly sophisticated technical systems rather than into more people (although cryptology did add

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some billets). By the end of the Cold War in 1989 the cryptologic system had lots of shiny new toys, and was using them to very telling effect. The decade of the 1980s marked the high-water mark of a cryptologic system that had been in evolution since 1945. And it had a presidential administration that believed in it.

THOMAS R. JOHNSON

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## Acknowledgments

(U) A work of this size cannot be produced without the labors of many people whose names are not on the title page. Among them are NSA's archival and records management staff, with whom I have worked closely over the past ten years to find the needed files of material. Two research assistants, Yolande Dickerson and [redacted] helped ferret out materials. My thanks also go to the librarians and archivists at the presidential libraries who spent long hours in dingy basement vaults while I toiled through the national security files looking for reflections of cryptologic information. I especially want to thank Donna Dillon at the Reagan Library, Leesa Tobin at the Ford Library, and Martin Elzy at the Carter Library, but others on their staffs also assisted.

(U) The mapmaking was handled by [redacted] and [redacted]. Numerous people in NSA's photo lab helped get the pictures ready for final publication. The Center for Cryptologic History's editorial staff of Barry Carleen, Barbara Vendemia, and [redacted] probably spent more time than anyone getting the book ready for publication.

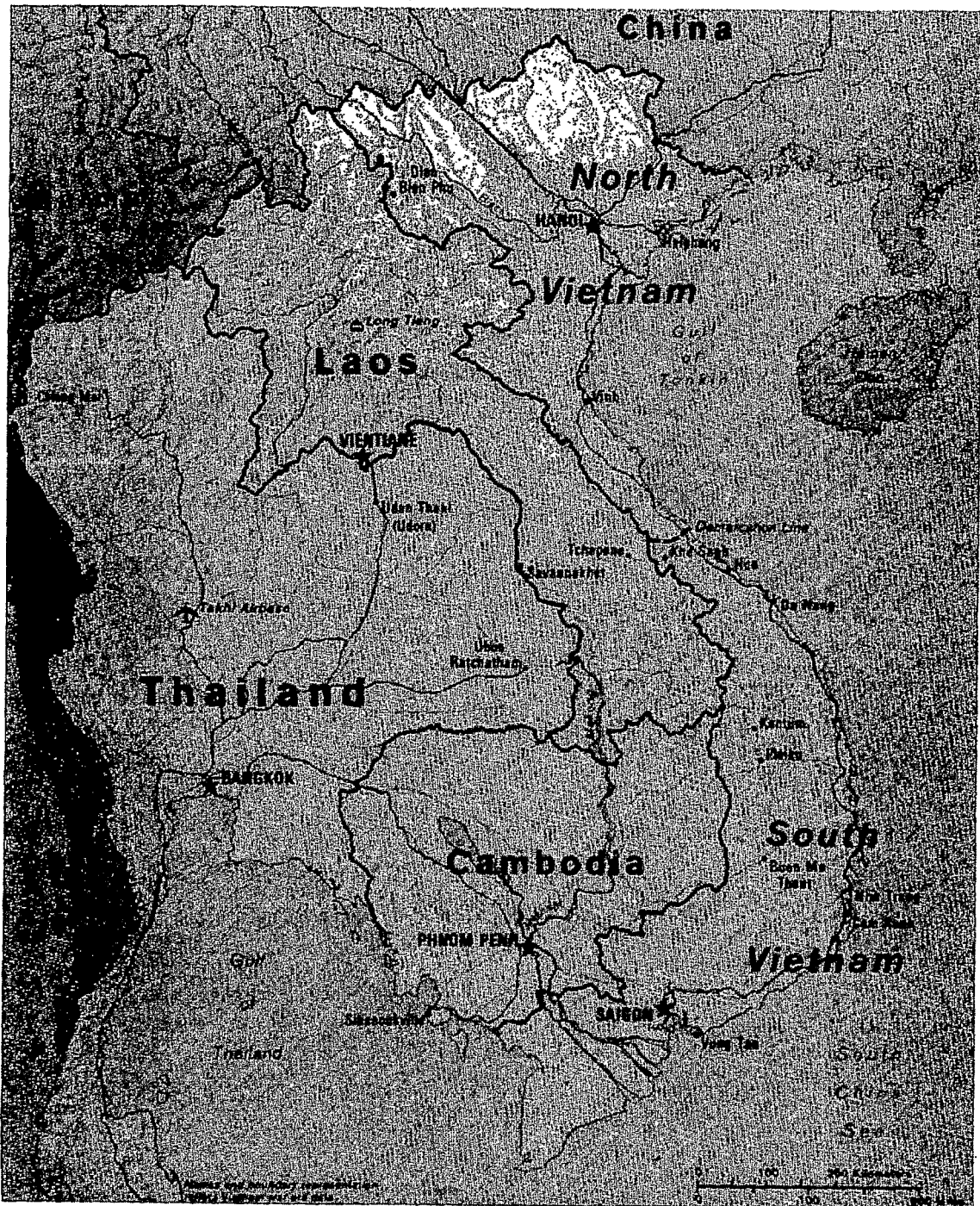
(U) The book had many readers and consultants. Most important were Milton Zaslow, Eugene Becker, and Richard Bernard, all retired NSA officials who volunteered their time to read, correct, and advise.

(U) Countless people agreed to oral history interviews to further the progress of the book. I especially want to thank four former directors: General Lew Allen, Admiral Bobby Inman, Lieutenant General Lincoln D. Faurer, and Lieutenant General William Odom, all of whom were willing to dedicate their time to set the record straight on important issues with which they were concerned. (Admiral Inman has sat for no fewer than four interviews over the years.) George Cotter and Robert Hermann provided unique information and seasoned judgments. John Devine and Marlin Wagner both gave important testimony on Bauded Signals Upgrade. The list of interviewees in the bibliography section is filled with the names of people who have provided detailed information on a host of projects and organizations. Much of these two books could not have been written without oral histories.

~~(S-CCO)~~ Finally, I was given access to two special collections which provided information of unique value. [redacted] the last incumbent in the old Soviet analysis office, A2, provided the executive files accumulated by him and his predecessors over a number of years. [redacted] of the Executive Registry loaned executive files of the deputy directors - this was generically the most valuable set of files used in the preparation of the four-book set.

THOMAS R. JOHNSON

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## (U) Chapter 14 Cryptologic Retreat from Southeast Asia

~~(C)~~ Direct American involvement in Vietnam ended with the cease-fire of February 1973. The Vietnamese were left to struggle on alone. [redacted]

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### (U) THE WAR IS VIETNAMIZED

~~(S-CCO)~~ The cease-fire that took effect in February of 1973 required that all U.S. military people be out of the country. The cryptologic infrastructure was already safely in Thailand, but the NSA office in Saigon had to remain to provide support to the ambassador [redacted]. Moreover, NSA was committed to advising the South Vietnamese SIGINT service, renamed the DGTS (Directorate General of Technical Security). There were NSA advisors at each of the major DGTS field sites, and as DoD people, they were technically illegal according to the peace accords [redacted]

~~(S-CCO)~~ As soon as Americans were out of South Vietnam, support for the military budget was reduced. The 1974 cryptologic budget almost dropped off the edge of the table, as major field sites [redacted] took huge decrements. The Air Force EC-47 operation was discontinued in May of 1974, replaced by the much smaller remnants of the ASA U-21 program. ACRP programs declined by 50 percent, as many programs were either canceled or reduced. [redacted] was closed in April, and the huge ASA station at Ramasun was ratcheted down by about 40 percent.<sup>2</sup>

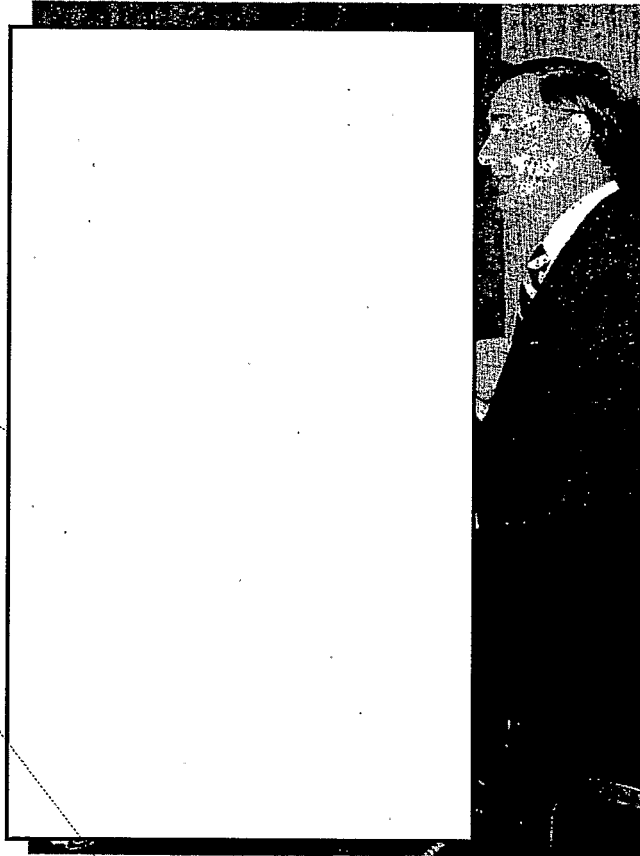
~~(S-CCO)~~ The actual effect of the cryptologic drawdown varied by entity. It was most severe on North Vietnamese civil traffic, which could no longer be heard by reduced RC-135 operations forced to fly south of the 17th parallel. NSA also reported substantial reductions in its capability to monitor GDRS (General Directorate of Rear Services, and thus infiltration) traffic. On the other hand, the ability to report on North Vietnamese air defense traffic suffered little or no decline.<sup>3</sup>

(U) In Vietnam, South Vietnamese military capability did not toughen up as fast as the Nixon administration had hoped, but the picture was not entirely dark. With only partial U.S. support (mostly from the air), the 1972 Easter Offensive had been blunted. Once American troops had left Vietnam completely, American arms and supplies bolstered ARVN capabilities. Vast quantities of military hardware arrived at South Vietnamese ports. So many trucks and jeeps sat on the wharves at Cam Ranh and Vung Tau that one

congressman wondered whether the objective of Vietnamization was to "put every South Vietnamese soldier behind the wheel."<sup>4</sup> The ARVN became, by the end of 1974, one of the largest and best equipped armies in the world, and its air force was the world's fourth largest.

~~(S)~~ The SIGINT situation was very complex. Although confronted with major deficiencies in manpower and equipment, [redacted] DGTS had developed at least the rudiments of what NSA had hoped for when the Vietnamization program began. It did a good job of collecting [redacted]

[redacted] Its performance in traffic analysis was spotty, mainly because the DGTS often did not see the value. It had an outstanding ARDF capability on paper, although that program was hindered to some degree by the reluctance of Vietnamese pilots to fly in areas of hostile fire. The EC-47 fleet that NSA bequeathed to Vietnam was aging and prone to mechanical failure, which drove aircraft downtime to unacceptable levels. The DGTS used ARDF results primarily for order-of-battle rather than for tactical targeting.<sup>5</sup>



(U) [redacted] at NSA with John Harney, then commandant of the National Cryptologic School

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~~(S-CCO)~~ [ ] had picked his SIGINTers carefully, and DGTS dedication was very high. It was hindered by a corrupt and inefficient government and by declining American financial support. Moreover, NSA had been very slow to recognize the need to give DGTS first-class SIGINT training. The philosophy in the early years had been to "buy off" the government in order to develop political support in Saigon for the build-up of American cryptologic capabilities. NSA never permitted a level of SIGINT exchange with the ARVN SIGINT organization that the wartime situation demanded, and its lack of technical expertise was consequently low. When the Americans left, DGTS had a long way to go.<sup>6</sup>

(U) The improvements in overall ARVN capabilities had resulted in at least a marginal improvement in the situation in the countryside. Village security was better in many areas, and the government, still corrupt and oppressive, had nonetheless announced a new land reform program. At year's end, a shaky stalemate existed between the ARVN (Army of the Republic of Vietnam) and the NVA (North Vietnamese Army). Little had changed in the government's ability to control geographical areas since the cease-fire.<sup>7</sup>

~~(S)~~ But trouble was afoot. NSA reporting since the cease-fire documented huge NVA shipments to the South. Unhindered by American bombing, they brought in engineers and road-builders, and turned the Ho Chi Minh Trail into the "Ho Chi Minh Road," an all-weather highway suitable for heavy transport. By early 1975, NVA forces were better equipped than at any time in the past.<sup>8</sup> They were obviously waiting for the opportunity to renew conventional warfare.

## (U) THE FALL OF SAIGON

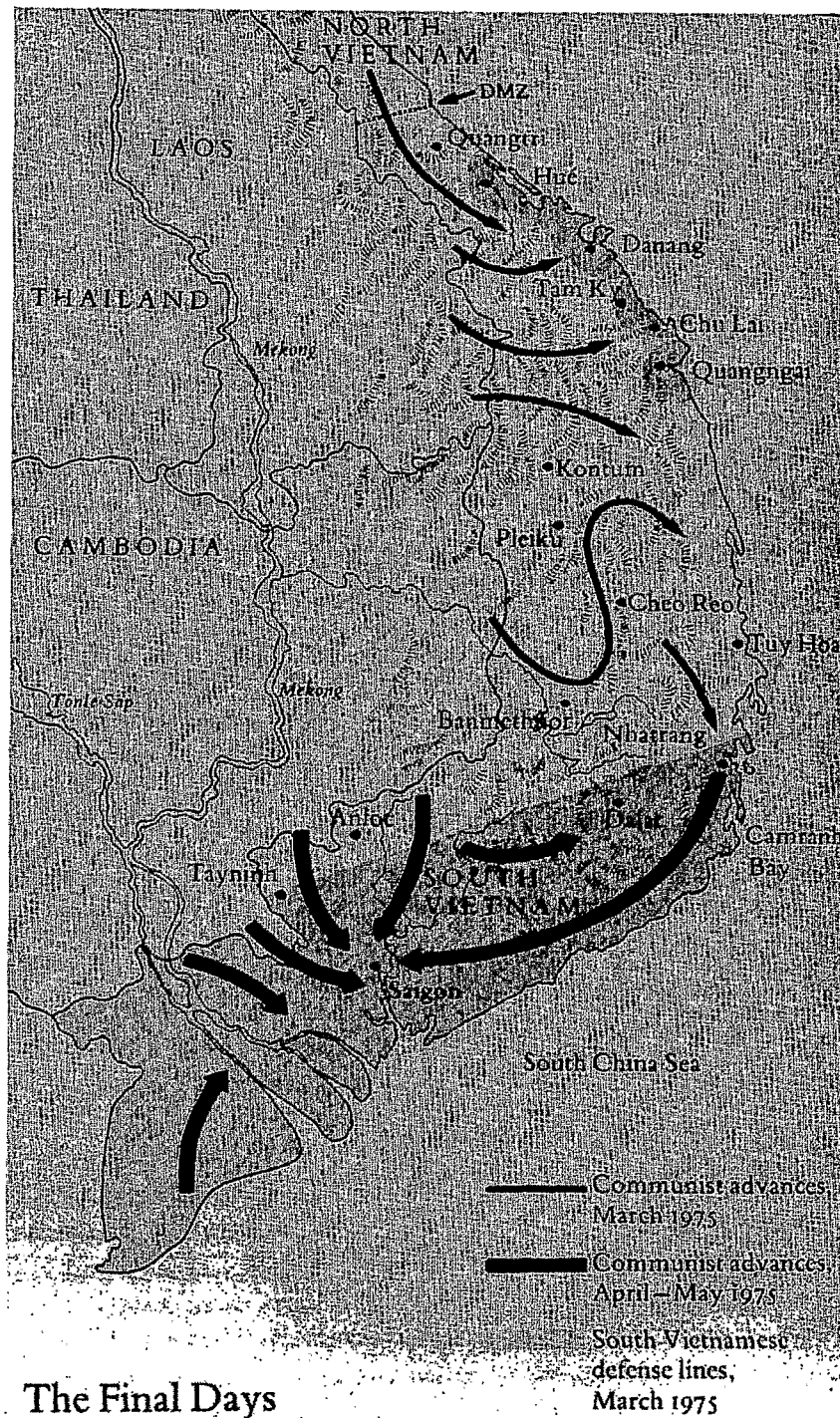
### (U) Hanoi's Final Campaign

(U) The final round of the Vietnam War was apparently planned by Hanoi as early as August of 1974. With American support for the government in South Vietnam beginning to weaken, victory appeared to be just a matter of time. But the timetable was not 1975 - it was 1976. No one in Hanoi really envisioned the imminent collapse of the opposition.<sup>9</sup>

~~(S)~~ Through the fall, NSA was reporting infiltration figures unheard of except prior to the 1972 Easter Offensive. The NVA launched the first attack shortly after the first of the year against Phuoc Long Province in MR 3. After the seizure of the province, Hanoi sat back to judge the American reaction. There was none, so the NVA renewed the offensive in MR 1 and 2 in March.

~~(S)~~ About the first of March, SIGINT indicators pointed to a strong NVA attack on Ban Me Thout in the Central Highlands. The NSA office in Saigon, however, believed that the real objective was Pleiku, and that Ban Me Thout was a diversion, albeit a significant one. [ ] the NSA representative, accompanied by [ ] the DGTS commander, briefed the ARVN MR 2 commander, who refused to believe them. The

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(U) Vietnam

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commander reinforced Ban Me Thout, but it wasn't enough, and he still lost it. Meanwhile, just as SIGINT had indicated, NVA forces fell on Pleiku.<sup>10</sup>

(U) On March 15, President Thieu made the "tactical" decision to abandon the Central Highlands. ARVN troops at Pleiku abruptly abandoned the city, and it was in NVA hands within two days.

(U) This began one of the most awesome and tragic civilian evacuations in modern times. Spurred by the military abandonment and the advancing NVA forces, hundreds of thousands of refugees jammed the single road from Pleiku to the sea, Route 14. About a third of the way to their objective of Tuy Hoa, Route 14 met with Route 7B at a town called Cheo Reo. There, streams of refugees from other towns intermixed, creating gridlock. In the vicinity of the town, NVA forces attacked retreating ARVN forces, creating a bloodbath in which thousands of refugees and soldiers were killed. NVA harassment continued the length of the road, but Cheo Reo was the worst.<sup>11</sup>

~~(S-CCO)~~ The DGTS center in Pleiku kept operating until the final day, and then the center's people joined the fleeing refugees. Of the 87 men and 120 dependents who took to Route 14, no more than half ever reached the coast. The rest remained unaccounted for.<sup>12</sup>

~~(SC)~~ NSA was picking up indications that the North Vietnamese were moving reserve divisions south. The 968th, which had remained in Laos for its entire existence, showed up in the Kontum-Pleiku area, and there were indicators that divisions in the Hanoi area, which had never done more than train men for combat in other organizations, might be moving out. Still, CIA predicted that the South would hold through the dry season.<sup>13</sup>

(U) But military analysts in the Pacific were not so optimistic. USSAG (United States Support Activities Group), which was really MACV in Thailand under a different name, pointed ominously to the movement of reserve divisions, and predicted an all-out effort to take Saigon during the dry season. IPAC (Intelligence Center Pacific) hinted on March 17 that the entire country could fall.<sup>14</sup>

(U) There was no let-up. Quang Tri City, defended with such high casualties in 1968, fell to the NVA on March 20. At the same time, NVA units were besieging Hue. On March 22 they severed the coastal road between Hue and Da Nang. The old imperial capital was a captive.<sup>15</sup>

#### **(U) *The Fall of Da Nang***

(U) With Hue cut off and withering, refugees poured into Da Nang, the last important city in MR 1 still held by the government. By March 25 the city was choked with pedestrian and cart traffic. ARVN units had turned into an armed mob and were commandeering any form of transportation available to get out of the city. Mobs swarmed



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across the airport runway, and each successive World Airways 727 landing there found it more difficult to take off.<sup>16</sup>

(S) On the 26th, [ ] the NSA advisor to the DGTS unit at Da Nang, received a call from the CIA station chief. It was time to get out. [ ] drove his jeep to the air strip, leaving his personal goods behind, and squeezed aboard a jammed 727. He rode the overloaded plane to Saigon with a Vietnamese child on his lap.<sup>17</sup>

(U) The next day the Shell Oil personnel departed, closing the airfield refueling operation. Mobs on the runway made it impossible to land, and that morning an American embassy cargo flight was completely stripped by the mob after it landed. At that point World Airways ceased service to Da Nang.<sup>18</sup>

(U) The next day the last Americans got out of Da Nang via ships in the harbor. On March 29 the owner of World Airways took three 727s from Saigon to Da Nang without authorization from either the Americans or Vietnamese. According to the CIA description:

At Da Nang one 727 landed and was immediately mobbed, surrounded by trucks and was forcefully boarded by GVN military on the airstrip. The plane made emergency takeoff procedures and was rammed by a truck at the left wing or hit a truck on takeoff. The plane was unable to take off from the normal runway as the VN military had it completely blocked with trucks or other vehicles. Accordingly, the plane took off on a taxiway. The pilot stated that once airborne he was unable to retract the wheels and assumed he had major hydraulic casualty. However, one of the other planes that took off (from Saigon) after him came alongside and reported that he had a body in the left wheel well that was jamming the wheel doors.<sup>19</sup>

The World Airways flight (the only one of the three that was actually able to land) arrived in Saigon with 385 passengers (about the right complement for a 747), of whom four were women, three were children, and the rest were ARVN soldiers.

(S-CCO) The Da Nang DGTS station, at 429 people, was one of the largest in the country. The DGTS managed to evacuate two planeloads of equipment and dependents before the city fell. The operators continued operating until the site was overrun. The day before the end, the Da Nang communications operator told Saigon:

Only workers are left at the signal center and we will not be able to get out. We are just waiting to die. We will wait for the VC to come in, hold our hands over our heads for them to cut. We will be here until the last, but the government doesn't think about the workers. Please say something to ease our final hours.<sup>20</sup>

Photos of Da Nang on March 30 (the day the NVA entered the city) showed only a smoking shell of a building where the Da Nang center had been. All the operators were reportedly either killed or captured.<sup>21</sup>

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(U) Fleeing Da Nang

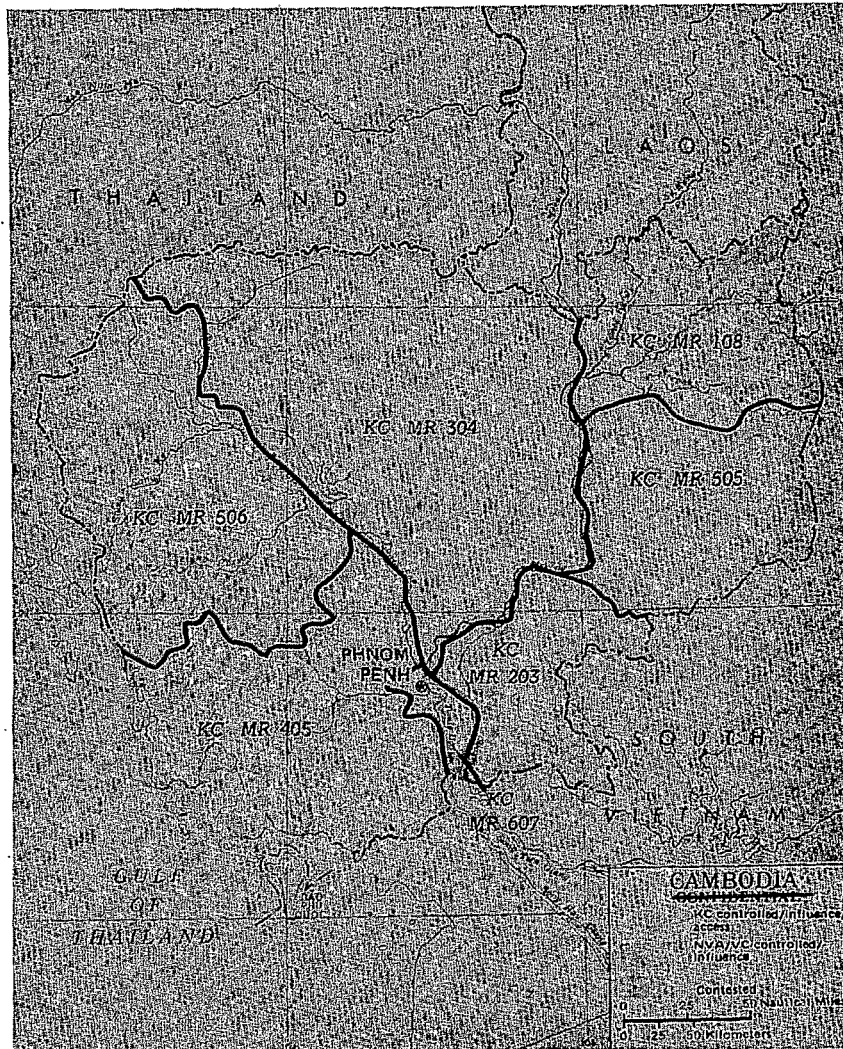
**(U) The Fall of Phnom Penh**

(U) NVA forces raced pell mell down the coast, gobbling up city after city. The advance was dizzying to hunters and hunted alike. Within a week of the fall of Da Nang, all of MR 2 was in NVA hands except for Nha Trang, which was abandoned to the enemy on April 7, but not actually entered until the 9th.<sup>22</sup>

(U) Then a brief quiet descended on the land. NVA forces had outrun their supplies and their military plans. Hanoi began collecting assault forces for the final push to Saigon, and the Saigon government began steeling itself for what had clearly become inevitable.

(U) At that point, American attention refocused on Cambodia. As the NVA advanced down the Vietnamese coast, the Khmer Rouge organization in Cambodia had quietly but effectively squeezed the Lon Nol government into a trap. All that the government held by January of 1975 was a narrow water alley through the center of the country. The

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(U) Cambodia - the Khmer Rouge tighten their grip on Phnom Penh

communist forces held all the countryside, and began pinching off the Mekong waterway through which the capital obtained almost all its supplies. Each year the KC (Khmer Rouge) had done the same thing, but like a bulldog tightening its grip, each year they choked the river closer to the city.

(S) The American mission there was very small, only 140 people. It was well organized under an experienced ambassador, John Gunther Dean. Moreover, it had outstanding intelligence support, almost all of it SIGINT.

Moreover, the small

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ASA ARDF effort out of Thailand showed the tightening of the vise as the various KC headquarters moved closer to the city. But without American commanders to act on the information, there was little the U.S. could do. [redacted]

[redacted] But, as it was New Year's Eve, they were all at parties, and the army made no preparations whatever. Gas tanks weren't filled, guns weren't even loaded.<sup>23</sup>

(S) On April 11, the AFSS unit [redacted] intercepted KC plans for an all-out assault on the city. Admiral Gayler, by then CINCPAC, called Ambassador Dean to say it was time to leave. Dean agreed with him, and Gayler implemented Eagle Pull, the dramatic rescue of embassy personnel by helicopter from a sport field in downtown Phnom Penh. By the end of the day on April 12 the entire operation was over, and Phnom Penh waited for the KC to march in. Most of the cabinet refused evacuation and waited for the doom that would befall them. They were all executed.<sup>24</sup>

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**(U) The Fall of Saigon**

(S) As the NVA repositioned and refurbished for the final assault, an air of unreality settled on the American embassy. Ambassador Graham Martin believed that the government could somehow hold out until the rains began in June. SIGINT, both from the DGTS station in Saigon and from the U.S. SIGINT system, showed the NVA massing around the city. Thieu, who knew the end was near, resigned. In Washington, the White House understood what was happening. But Martin refused to heed the signs. He and his CIA chief of station, Thomas Polgar, believed that the SIGINT was NVA deception. A bill was pending in Congress to send an additional \$700 million in military aid to the government in Saigon, and they held out the hope that this would pass and that it would come in time. The regime in Hanoi, Martin thought, was really getting in position to impose a coalition government, not a military victory.<sup>25</sup>

(S) NSA station chief [redacted] main concern was his people. When the country began falling apart, he had forty-three employees and twenty-two dependents. The dependents he began evacuating on civilian commercial flights, along with the thousands of Vietnamese fleeing the country. Ambassador Martin put the evacuation of the government employees on hold. He feared that the SIGINT system would not support him if they left, and that the DGTS would not work without NSA assistance.<sup>26</sup>

(S) The signs of collapse became more ominous, and [redacted] made almost daily trips to the ambassador's office, pleading for permission to get people out of the country. The exchanges became angry, and [redacted] went to the director of NSA, Lieutenant General Allen, for help. In mid-April, Allen sent a distressed cable to the DCI:

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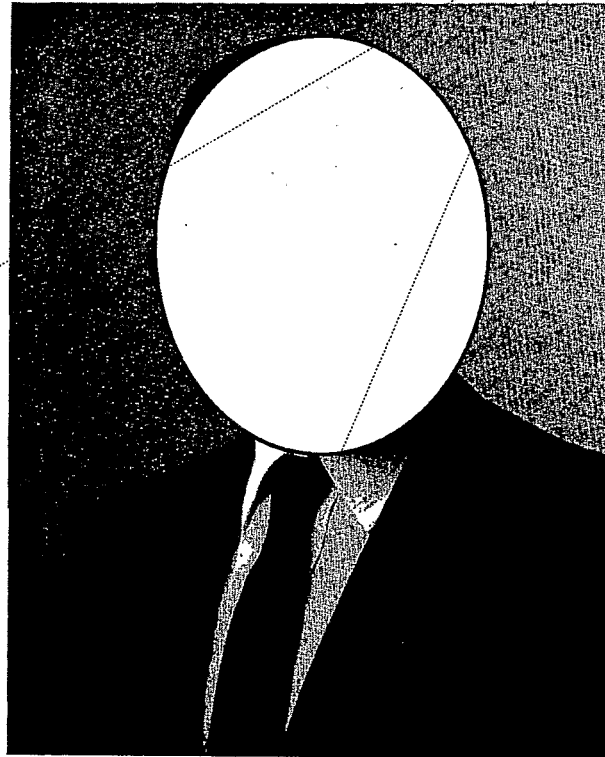
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I am fully aware of the complex political issues involved in any withdrawal of U.S. Government personnel from the RVN. I wish to reiterate, however, that the safety of the cryptologic personnel in the RVN is my paramount concern.<sup>27</sup>

P.L. 86-36

Not even this was sufficient to change minds in the embassy. [redacted] "smuggled" people out of the country by buying them commercial tickets, and his staff gradually shrank to just a few. Those who remained spent almost all their time at work, often sleeping in the office rather than returning to the hotel where they were billeted.<sup>28</sup>

(S) The final assault began on April 26 with the attack and capture of Bien Hoa. On the 28th, [redacted] made a final visit to Martin, with a message from Allen directing him to secure his communications and depart. Still, Martin refused. The next morning, the NVA began rocketing Tan Son Nhut, and the airfield was closed to even military aircraft. The embassy and its people were now caught in a trap, and the only escape possible was by helicopter.<sup>29</sup>



(U) [redacted] the last NSA representative in Saigon.

(S-CCO) The evacuation plan was called Talon Vise (later changed to Frequent Wind). It envisioned the evacuation of all Americans and almost 200,000 of their Vietnamese allies. Evacuees would be airlifted by fixed-wing transport from Tan Son Nhut or picked up at the port of Vung Tau on the coast. Helicopters would be employed to ferry pockets of people from exposed locations to Tan Son Nhut. Politically sensitive Vietnamese, such as those who had participated in the Phoenix program, or SIGINT transcribers (the Dancers), and their families would be afforded special evacuation priority.<sup>30</sup>

(U) But with the ambassador bewitched by clouds of intelligence opiates, there was no time left to implement such an orderly departure. All that was left was to use the helicopter option to try to get the Americans out. Martin, debilitated further by walking pneumonia, stood alone. With shells landing on Tan Son Nhut, the president gave the order, and Admiral Noel Gayler directed the evacuation. Martin was obdurate to the end.

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(U) Graham Martin

(U) Gayler had been assembling a vast armada in the South China Sea. It contained seventy-seven vessels, including five aircraft carriers. On the morning of the 29th, the principal carrier to be involved in the operation, the *Hancock*, downloaded fighters and uploaded choppers.<sup>31</sup>

~~(S-CCO)~~ At NSA, Director Lew Allen had been putting together a SIGINT support effort since mid-April. Most important was the monitoring of North Vietnamese communications to provide warning to the evacuation aircraft, since the NVA had brought SAMs into the vicinity of Saigon. A special AFSS SIGINT support team was flown to Clark Air Base to brief MAC (Military Airlift Command) crews on warning measures, should they be targeted by NVA antiaircraft units. As it turned out, MAC aircraft were not used in Talon Wise, although they did continue to fly into Tan Son Nhut until the morning of the 29th.<sup>32</sup>

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~~(S-CCO)~~ The [redacted] U-2 collection [redacted] served as the primary monitoring system for NVA communications, and also monitored U.S. communications to keep tabs on the progress of the evacuation. This information was passed to Gayler and on to the White House. In addition, RC-135 missions were tasked with both NVA and U.S. communications.<sup>33</sup>

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(U) When, on April 29, President Ford directed the implementation of the evacuation plan, military planes had already evacuated almost 40,000 Americans and South Vietnamese over the preceding eight days. But since the plan called for over 200,000 to be evacuated, this was just a start.<sup>34</sup>

(U) The helicopters began flying from the deck of the *Hancock* on the afternoon of April 29. All through the night, the heavy thump of chopper blades was heard above the embassy. The operators at [ ] monitored the voice frequencies used by the chopper pilots, and sent their reports to Gayler in Hawaii.



(U) Americans and Vietnamese rush for a waiting helicopter at the DAO compound, 29 April

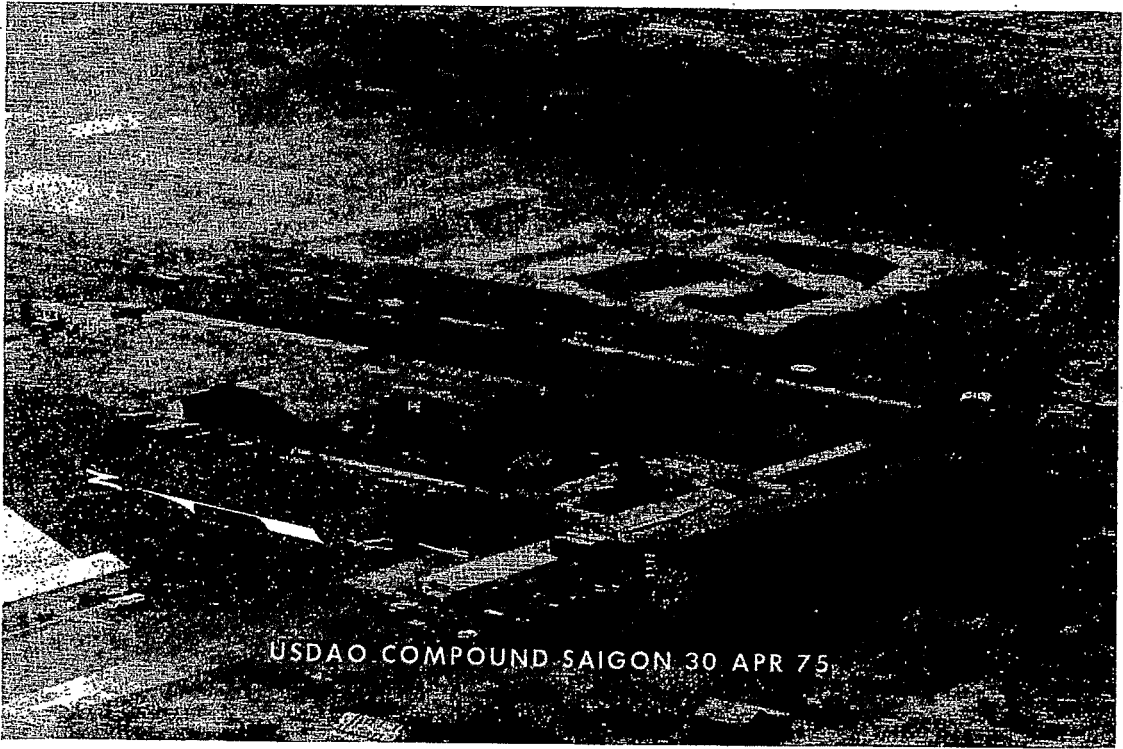
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P.L. 86-36

(C) The remaining NSA contingent found itself marooned at their offices in the DAO compound at Tan Son Nhut. [ ] found that no provision had been made to get him and his people out. He contacted General Smith, the military attaché, who arranged for cars to take [ ] and his people to the embassy. There they boarded helicopters late on the 29th for the ride to the waiting ships.<sup>35</sup>

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(U) Midnight 29 April - hermie charges bring down the roof of the DAO compound

~~HANDLER: [REDACTED] CONTROL SYSTEMS [REDACTED]~~

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(C) At about midnight, Pineapple 6-1, a chopper pilot in the embassy compound, reported that he was in contact with the ambassador, who still refused to leave until the last Americans were out. Four hours later, intercept operators heard chopper pilot Lady Ace 9 tell Martin that the president had directed Martin to leave forthwith. The chopper hovered above the embassy rooftop as smoke from fires in the building made his landing temporarily impossible. Six minutes later an RC-135 operator heard the pilot broadcast: "Lady Ace 9 this is Tiger Tiger Tiger." This was the codeword indicating that the ambassador was on board.



(U) Vietnamese wait outside the gates of the American embassy as a helicopter approaches the compound.

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(U) The choppers continued to pluck people off the roof of the burning embassy for another three hours. The last to leave was not the ambassador - it was the ground security force.<sup>36</sup>

~~(S-CCO)~~ It had been the largest helicopter evacuation in history. Seventy Marine helicopters had airlifted more than 7,000 Americans and Vietnamese from the embassy and the DAO compound. Among those who did not get out, however, were the DGTS operators. Saigon Center operated to the end, and CIA evacuated only about a dozen high-ranking officers, including [redacted] The Dancers, DGTS linguists on duty in Thailand, were evacuated from Thailand to the United States. Their families in Saigon had already left South Vietnam and were waiting for them on Guam.<sup>37</sup>

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#### (U) THE SUMMING UP

~~(S)~~ Not having time for an orderly departure, the Americans left behind vast stockpiles of military equipment. Along with the runways full of planes and parking lots full of trucks, there were large amounts of crypto gear. Deputy Director Benson Buffham estimated that it was the largest loss of COMSEC equipment ever. In practical terms, however, it was not as great a blow as the capture of the *Pueblo*. The crypto principles of most of the equipment had been compromised earlier, and very little actual key was known to be in Vietnamese hands. Spare parts would be almost unobtainable, and Buffham expected that the U.S. would intercept very few NVA transmissions.<sup>38</sup>

~~(S-CCO)~~ The DGTS organization was captured virtually intact. At the time it consisted of more than 100 manual Morse positions, 2,700 people, and seventeen ARDF aircraft. Many of the South Vietnamese SIGINTers undoubtedly perished; others wound up in reeducation camps. In later years a few began trickling into the United States under the orderly departure program. Their story is yet untold.

~~(S-CCO)~~ Their leader, [redacted] made his way to Washington, D.C., and was hired as a linguist by NSA. He lived a quiet life in suburban Washington until his retirement in 1994. He now lives with his family in rural Virginia.

#### (U) THE MAYAGUEZ

(U) As if Southeast Asia had not caused America enough heartache, one last chapter remained to be written. The seizure of the *Mayaguez* had a murky beginning and to the end remained unsatisfying. It also had a cryptologic component which remains confused to this day.

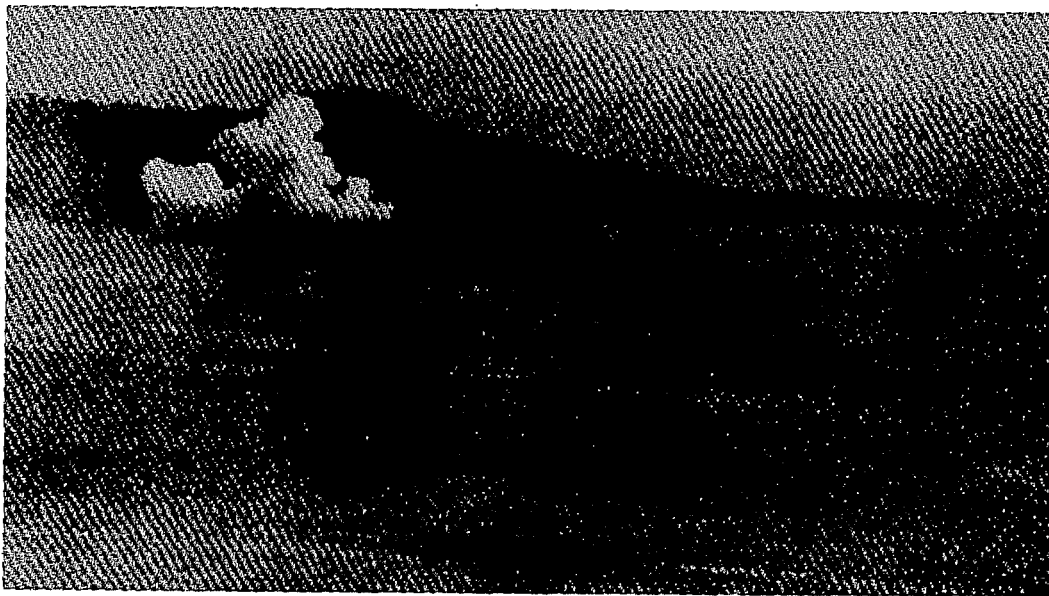
~~(S)~~ The Khmer Rouge regime which rolled into Phnom Penh in mid-March 1975 quickly turned vicious. By early May, the White House was receiving SIGINT reports of widespread executions, of forced exodus to grim countryside reeducation camps, of families separated and of retribution on an unbelievable scale. Secretary of State Henry Kissinger,

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commenting on one such [redacted] KC message, wrote to President Ford, "The magnitude of the KC liquidation effort has heretofore been unclear. It would appear that if similar efforts are being carried out in other parts of the country, this would involve a slaughter of immense proportions."<sup>39</sup>

~~(S)~~ The Cambodian government of Pol Pot took a very aggressive approach to foreign relations, too. Among the territories which KC forces invaded were several small offshore islands which Vietnam and Cambodia both claimed. Among those islands was one named Poulo Wai. SIGINT intercepts of KC communications revealed a determination to hold Poulo Wai and to spread out farther into the offshore waters.



(U) U.S. destroyer off Koh Tang Island

~~(S)~~ Beginning on May 5, NSA began publishing reports of the KC seizure of Thai fishing vessels and attacks on Panamanian and Korean merchantmen plying the waters in the Gulf of Thailand. But the intelligence community focused not on these commercial depredations, but on communist attempts to intercept Vietnamese refugees escaping after the fall of Saigon. Moreover, the U.S. government organization charged with issuing notes to commercial shipping had no links to the intelligence community. No notes were issued.<sup>40</sup>

(U) Into this nest of small-time raiders steamed an American flag container ship, the *Mayaguez*, plying a regular route between Hong Kong, Thailand, and Singapore. The first maydays from the vessel, on May 12, indicated that they were being boarded by Cambodians, and later that they were being towed to an unknown Cambodian port. An

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exploration company based in Jakarta received the broadcasts and notified the American embassy. The embassy issued the initial critic at 0503 EDT on May 12.

(U) The president was briefed on the seizure that morning. It was not a military challenge and was scarcely an impediment to commerce. But the *Mayaguez* seizure clearly represented a political challenge. The evacuation of Saigon had been a profound American defeat in Southeast Asia. Here was a chance to prevent the tiny Cambodian navy from tweaking America's nose. Coming only two weeks after the fall of Saigon, it was an event which found American military forces still in place in Southeast Asia. The president directed that a response force be assembled and the crew recovered. The discussions with the president harked back to the disastrous *Pueblo* seizure. Ford was determined to prevent that scenario at any cost.<sup>41</sup>

(U) Initial Navy aerial reconnaissance ordered by the Pentagon established that the *Mayaguez* itself was anchored a mile off Koh Tang Island, thirty miles off the coast of Cambodia. The central concern of the Ford administration became the location of the crew. If it remained on Koh Tang (where it was, presumably), one sort of rescue operation would be mounted. If the crew was transferred to the mainland, a very different operation would be called for.<sup>42</sup>

~~(S-CCO)~~ Here was where good intelligence was required. NSA still had in place virtually all its intelligence assets from the war in Vietnam, and the Agency directed a total focus on Cambodian communications, [REDACTED] NSA declared a SIGINT alert. Meanwhile, aerial reconnaissance continued to blanket the area. In the early morning of May 14 (Cambodian time), an American patrol craft spotted a thirty-foot boat, accompanied by escort vessels, making a run for the mainland, with eight or nine Caucasians on the deck. Since the least desirable option was for a mainland rescue, a tactical air strike was called in, and the escort vessels were sunk. But the main vessel continued on, and the attacking A-7s held their fire.<sup>43</sup>

~~(SC)~~ An early intercepted message indicated that the crew was to be taken to Koh Tang. This caused the administration to focus on the island. But that was it. There were no subsequent messages about the location of the crew, their destination or the intentions of the Cambodian government, until the very end.<sup>44</sup>

~~(S-CCO)~~ The fragmentary SIGINT, and the lack of anything more definitive, caused the administration to focus on Koh Tang. A complex rescue operation was hastily arranged, and on the morning of May 14, only three days after the initial seizure, 200 Marines assaulted the island. They were met by heavy resistance. The 150 Cambodians on the island were armed with 75-mm recoilless rifles, claymore mines, and rockets, in addition to small arms. Marine helicopters were cut down on the beach, and eighteen Americans were killed. The Marines were pinned down on the island, and they themselves had to be rescued the next morning.<sup>45</sup>

~~(SC)~~ Meanwhile, Navy F-4s struck Ream Airfield inside Cambodia, based on SIGINT intercepted by the USAFSS unit at Ramasun Station that the KC planned to move

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**TOP SECRET UMBRA**

Cambodian combat aircraft there. They destroyed seventeen aircraft on the ground and put the airfield out of commission.<sup>46</sup>

~~(S)~~ On May 14, as the Marine assault was going on, there was a flurry of messages from various KC entities referencing response to the American attacks. Early on the 15th (in Cambodia) a message (probably from Phnom Penh) ordered a KC operational authority to let the Americans "take the ship and leave" and to "let the Americans go." Soon thereafter a KC gunboat appeared near the north end of Koh Tang showing a white flag. Four minutes later the destroyer USS *Wilson* scooped up the entire crew, and *l'affaire Mayaguez* was over, except for the extraction of the Marines on the beach, which was difficult and dangerous to the end.<sup>47</sup>

(U) The Ford administration claimed credit for a win. The crew was back safe and sound, although at the cost of eighteen Marines dead. President Ford went on television to explain the American response, and a Gallup poll taken shortly after showed the approval rating for the operation at 51 percent. To an administration which had been badly battered by its handling of the pardon of President Nixon, this was good news.

~~(S)~~ A month later the Vietnamese completed what the Americans had started. Intercepts revealed that the Vietnamese had wiped out the Cambodian garrison on Poulou Wai.<sup>48</sup>

~~(S-CCO)~~ Although the crew was recovered and the vessel released, the *Mayaguez* incident has been counted as an intelligence failure. DIA and IPAC intelligence estimates of KC strength on Koh Tang were accurate but did not reach the deployed forces. Although this deficiency was cited in report after report, no one seemed to know why the information did not reach the users.<sup>49</sup> But since the only reliable information on Cambodia at the time was SIGINT, classification difficulties are readily suspect.

~~(S-CCO)~~ There were other problems relating to the affair. The response of intelligence agencies in Washington was slow, and the NOIWON system was not used. While SIGINT classification undoubtedly hampered the dissemination of critical intelligence, in the opposite direction tactical commanders refused to share details of the military operation with NSA - details which would have improved intelligence responsiveness.<sup>50</sup>

~~(S)~~ Why didn't SIGINT reveal the location of the crew? Reviewing the action some weeks later, an NSA analyst came up with the answer. Simply put, the operation was carried out by a local commander, without checking with higher authority. Khmer Rouge local commanders had long exercised such authority, and it is reasonable to suppose that it did not halt simply because peace had broken out in Southeast Asia. The first high-level SIGINT came from Phnom Penh on the 15th and was passed to Ta Mok, the regional commander, directing that the crew be released. There was no prior direction from higher headquarters because headquarters had not directed the action in the first place, and it got involved only when the military consequences had become serious. In a radio broadcast the following September, Ieng Sary, the Cambodian deputy premier, admitted as much.<sup>51</sup> So in the end SIGINT, the only good source on Cambodia, came up short.

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Notes

1. (U) Interview with [redacted] 2 December 1992, by Charles Baker and Tom Johnson, OH 6-92, NSA.
2. (U) CCH Series VI.HH.26.1
3. (U) Ibid.
4. (U) George Herring, *America's Longest War: The United States and Vietnam, 1950-1975* (Philadelphia: Temple University Press, 1986), 231.
5. (U) [redacted] Reminiscences about DGTS, CCH Series XI.S. Robert J. Hanyok, "The Relevant Truths: SIGINT Issues of the Indochina War, 1950-75," Part 2, *Cryptologic Quarterly* (Fall 1997) 16:3, 1-50.
6. (U) Interview, [redacted] 23 January 1986, by Robert D. Farley and Tom Johnson, OH 4-86, NSA; [redacted] "NSA in Vietnam: Proud and Bitter Memories," *Cryptolog* (October 1975), 3-6. Hanyok, "The Relevant Truths."
7. (U) Herring, *America's Longest War*.
8. (U) CCH, National Defense University collection on Vietnam, box 301.
9. (U) CCH Series VIII.30.
10. (U) [redacted] interview.
11. (U) Stanley Karnow, *Vietnam: A History* (New York: Penguin Books, 1983).
12. (U) CCH Series VI.HH.9.1; Hanyok, "Relevant Truths," 41.
13. (U) CCH Series VI.HH.26.2.
14. (U) Ibid.
15. (U) CCH Series VIII.30.
16. (U) Ibid.
17. (U) [redacted] et al., interview.
18. (U) CCH NDU collection, Box 320.
19. (U) CCH NDU collection, Box 323.
20. (U) CCH Series VI.HH.11.19.
21. (U) Ibid, [redacted] et al., interview; Hanyok, "Relevant Truths," 41.
22. (U) CCH Series VIII.30.
23. (U) [redacted] et al., interview; CCH Series VI.HH.26.10; NSA Archives, Accession Number 23500, Loc. CBOG 36.
24. (U) CCH Series VI.HH.27.10; 26.4.
25. (U) [redacted] interview; Karnow.
26. (U) [redacted] interview; CCH Series VI.HH.9.1.
27. (U) CCH Series VI.HH.9.1.
28. (U) [redacted] interview.

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P.L.  
86-36

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

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29. (U) CCH Series VI.HH.9.1; Karnow.
30. (U) CCH Series VIII.30.
31. (U) CCH Series VI.HH.26.11.
32. (U) CCH Series VIII.30.
33. (U) CCH Series VIII.30; VI.HH.26.11; 26.9.
34. (U) CCH Series VIII.30.
35. (U) [ ] interview.
36. (U) CCH Series VIII.30.
37. (U) [ ] interview; B-WAR, 6-12 May 1975. Karnow.
38. (U) CCH Series VIII.30.
39. (U) National Security Files, Gerald R. Ford Presidential Library, Ann Arbor, Michigan; "Southeast Asia/Vietnam/Cambodia," CCH Series XVI.
40. (U) CCH Series VIII.25.
41. (U) CCH Series VIII.25; John F. Guilmartin, Jr., *A Very Short War: The Mayaguez and the Battle of Koh Tang* (College Station, Texas: Texas A and M Press, 1995), 36-37.
42. (U) CCH Series 25, "USAFSS Support to the Recovery of the SS Mayaguez."
43. (U) CCH Series VIII.25; Guilmartin, *A Very Short War*.
44. (U) Ibid.
45. (U) Guilmartin, *A Very Short War*.
46. (U) CCH Series VIII.25.
47. (U) Ibid.
48. (U) Ibid.
49. (U) Guilmartin, *A Very Short War*; CCH Series VIII.25, GAO report entitled "The Seizure of the Mayaguez - A Case Study in Crisis Management."
50. (U) CCH Series VIII.25, CIA postmortem.
51. (U) CCH Series VIII.25; Guilmartin, *A Very Short War*.

P. L. 86-36

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**(U) Chapter 15****Downsizing**

~~(S)~~ Cryptology had waxed fat during the war years. It did not seem so to those who struggled for dollars and manpower to help fight the war in Vietnam, nor to those in other parts of the cryptologic system who desperately tried to maintain their hold on resources that seemed inexorably to slip into the pit of Vietnam. But in fact, the peak of the cryptologic system was reached in the late war years. After that, there came the reckoning.

~~(S)~~ The peak years in overall field deployment came from 1967 to 1970. After that, it looked like the cryptologic system was going off a ski jump (see Table 1). The downside lasted for a decade - field site deployment did not finally level out until 1981 - and the loss of field sites was matched by an overall decline in manpower. The cryptologic system began the 1970s at approximately 89,000 people; it ended at about 50,000, a drop of 44 percent. The funding profile, unlike that of personnel and field sites, remained fairly steady over the period and was actually higher in 1975 [redacted] than it had been in 1969 [redacted]. But the decade was one of runaway inflation, so a steady stream of dollars did not equate to the same level of resources as before.<sup>1</sup>

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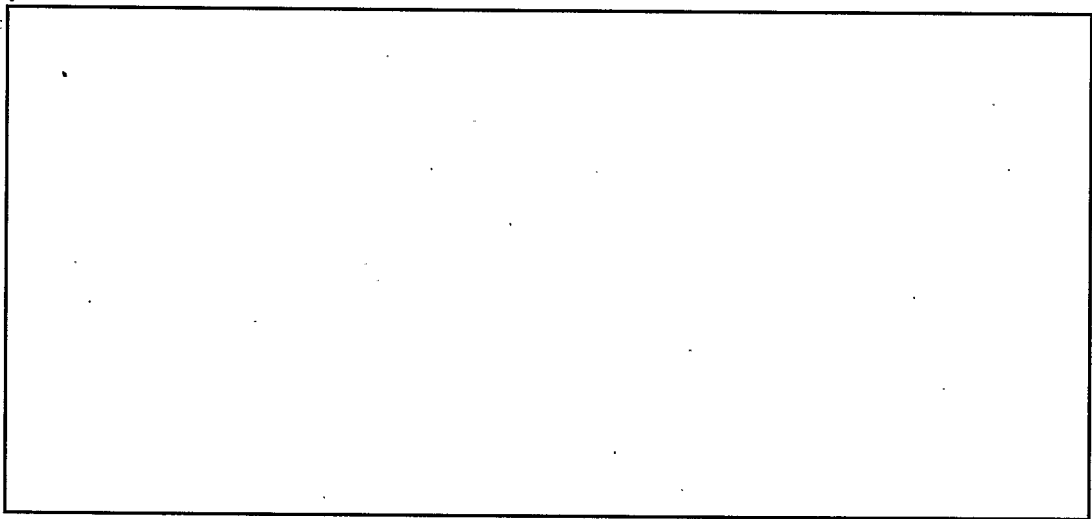
**(U) THE GREAT RIF SCARE**

~~(C)~~ At NSA, the work force shrank from 19,290 in fiscal year 1970 to 16,542 in fiscal year 1979, a reduction of 14 percent.<sup>2</sup> Looking back, this doesn't seem so drastic, but in 1971 no one knew how far the cutbacks would go, just that Congress had decreed a huge cutback in the federal work force, called the General Austerity in Government Expenditures Act, and that the Department of Defense would absorb the brunt. To maintain some sort of fairness, cuts would be across the board, and NSA would give up its "fair share" of manpower, regardless of mission or need.

~~(C)~~ Soon after Congress levied the cuts, in September of 1971 Admiral Gayler, the DIRNSA, issued a memorandum to the work force confronting the rumors swirling through the halls. Yes, a RIF (reduction in force) might be necessary, and it was certain that promotions would get scarce. But a RIF would be an absolute last-gasp measure. He hoped that retirements and attrition would turn the trick. This was suspect, however, because NSA's attrition was notoriously low - about one-third of the federal average. With a closed-loop personnel system and unique, nontransferrable skills, NSA employees could not go out and look for other federal jobs. (By the same token, employees of other agencies could not come looking for jobs at NSA.) What finally forestalled the RIF, however, was a device called "discontinued service retirements." NSA began offering these immediately, and they were hugely successful. In 1972 the retirement rate doubled that of the previous

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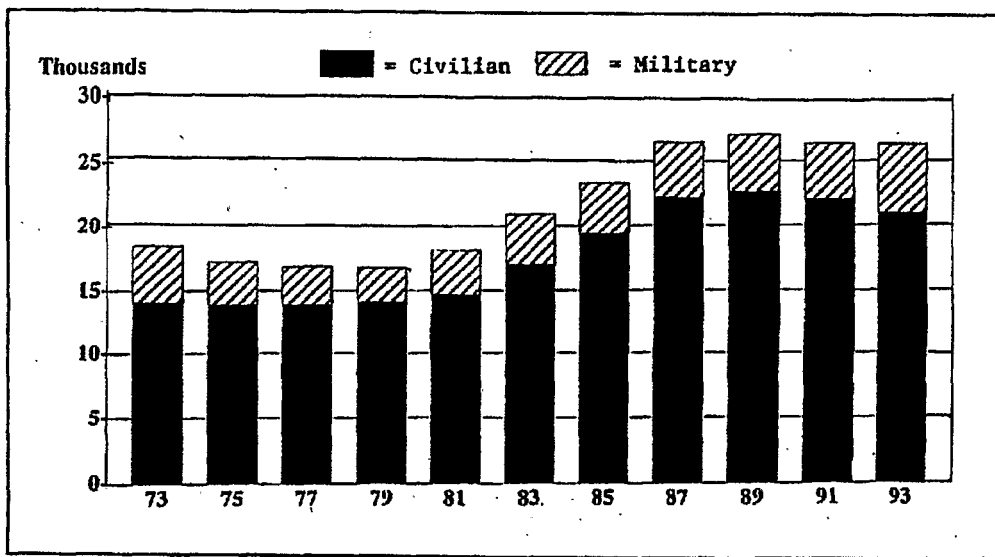


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year. In June of 1973, moreover, the Civil Service Commission authorized DoD to offer immediate annuities to individuals with twenty-five years of experience, regardless of age, or who were at least fifty years old with twenty years of service. In addition, a 6.1 percent cost-of-living increase was offered to those retiring before July 1. This did it - retirements in 1973 increased by 45 percent over the already-high level of the previous year. In the end, the RIF was never necessary.<sup>3</sup>

(C) NSA's manpower bottomed out in 1975, as Table 2 shows, and remained steady through the remainder of the decade, except for the military component, which continued to shrink slightly. It began its upward swoop in 1981 and topped out in 1989, the nominal end of the Cold War.

~~(C)~~Table 2<sup>4</sup>  
NSA's Manpower History, 1973-1993



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(U) However, promotions were difficult to get throughout the decade. The problem was the grade structure. NSA's average grade had marched upward from 8.96 in 1965 to 10.2 in 1972 (see Table 3). NSA was advancing faster than the federal average. In 1965 its average tied it for ninth place, while in 1972 it was in fourth. The grade problem led to a promotion freeze. Though it lasted only a few months, it damaged work force morale almost as much as the talk of RIFs.

(C) While NSA experienced a modest downsizing, the Service Cryptologic Agencies (SCA) were devastated. Of the 39,000 cryptologic billets lost, almost 36,000 were military. Some [ ] military billets associated with direct support and training were transferred into non-CCP (Consolidated Cryptologic Program) areas, so the net loss to the cryptologic system was "only" [ ]. The Army was hardest hit, losing [ ] billets from its CCP structure. Security Service lost [ ] percent of its billets, while NSG lost more than [ ] percent.<sup>5</sup>

(U) Table 3<sup>6</sup>  
NSA's Average Grade, 1965-1972

Year	NSA's Average	All-Federal Average
1965	8.96	8.3
1966	8.67	8.3
1967	9.0	8.4
1968	9.2	8.5
1969	9.7	8.8
1970	9.9	8.9
1971	10.07	8.9
1972	10.2	8.9

(U) THE CLEMENTS CUTS

(C) NSA was in the middle of a desperate downsizing effort when, in 1973, it was hit with a round of budget cuts which became known as the "Clements cuts." The real author of the directive was one James Vance, who worked for Dr. Albert Hall, assistant secretary of defense for intelligence and DIRNSA's immediate boss. Vance contended that cryptology was overfed and underworked, and he embarked on a detailed study of the cryptologic system. The upshot was a recommendation to Hall that cryptology be hit with an additional three percent cut. The Vance recommendation wound up in the office of Assistant Secretary of Defense William P. Clements. Clements imposed a total CCP billet reduction of 12,999 to be completed by fiscal year 1978.<sup>7</sup> (Since the cryptologic budget already showed a large reduction during that period, the real additional manpower cut was "only" 5,110 jobs.)

(C) Clements specified that reductions were to come from

1. Management efficiencies. The crux of the problem, as viewed from the DoD level, was a bloated management system with overlapping authorities - basically, "too many bureaucrats." The answer would be to squeeze out the fat, without cutting into bone.

2. Technological efficiencies. As will be seen later, NSA was looking at a raft of modernization proposals, chief of which was remoting (see p. 38), that would reduce manpower without substantial mission reductions.

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3. Mission reductions. This was a last option. At Clements's level, people felt that NSA could cut without reducing the mission.

~~(C)~~ Lieutenant General Sam Phillips, who would soon be leaving NSA, answered that NSA recognized the "bureaucracy problem" and had just completed an internal reorganization that cut 649 spaces. Phillips felt that further efficiencies could be accomplished, especially through technology, but he cautioned Clements not to be too hopeful that NSA could do it without any mission cuts. He convened a panel to work through the reductions and come up with a plan.<sup>8</sup>

(U) The study group had tough sledding. The first reaction was a decree from the production side of NSA that it would not take a reduction until all support billets worldwide had been cut, whereupon the support organizations replied that they could not cut support until they saw the operational reductions. The SCA representatives were similarly obdurate.<sup>9</sup> It was enough to make a budgeteer tear his hair out.

~~(S-CCO)~~ They slugged away during the summer and fall of 1973. When, in October, the results were due to Clements, Lieutenant General Lew Allen had become director. By this time the committee had forged some numbers which sounded a little like a congressional budget-cutting exercise, but which were plausible on paper. Allen told Clements that

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P.L. 86-36

1. Managerial efficiencies could absorb some of the needed reductions. The committee recommended cutting all deputy jobs below division level, consolidating some organizations that were split (such as A7 and A8), restricting hiring to one third of projections, virtually eliminating the analytic effort on Southeast Asia, reducing staff functions, and slimming down NSA overseas liaison offices. Overseas, support and managerial billets could be deleted by forcing closer integration of collocated SIGINT sites under the Single Service Executive Agent concept. A new concept in position tasking called COPES (Collection Operations Position Evaluation Standard) could theoretically reduce manual Morse positions by 25 percent. Since there were more than [ ] Morse positions worldwide, this would have amounted to a significant savings. The SIGINT system would have to rely more on Second and Third Parties. Worldwide logistics would be shaped into a more efficient mechanism, and some logistics operations would be contracted out. Some sites, [ ] could be staffed by contractors. Army Security Agency and USAFSS had both built up theater-level administrative headquarters that could be eliminated without effect on the mission.

2. Technological innovations represented a higher risk option. The remoting program, [ ] was still unproven, but Allen banked heavily on its success to save cryptology from the worst of the Clements cuts. Only the first site, [ ] was far enough along to count on. Other new programs with interesting and obfuscatory names like [ ] offered potential savings, but their contributions remained to be seen.

3. Despite opposition from Vance, Hall, and Clements, Allen relied on mission reductions to make the mythical Clements's manpower ceilings. Some stations, like the Navy site at [redacted] would be closed outright. The ASA trio of [redacted] [redacted] would be closed and the mission transferred [redacted]. The Air Force site at [redacted] would be cut, the operators moved to [redacted] and Single Service Executive Agent management would be applied to the new triservice station. [redacted] Back at Fort Meade, NSA would stop doing [redacted].

(U) Some economies were logical yet unattainable. The creation of Central Security Service (CSS) the year before had created duplicate staffs at the NSA level. General Phillips had quietly scotched the operational effect of CSS, and the vestigial staffs had quietly taken on dual functions for the sake of economy, but the whole CSS exercise had made it more difficult to slim down because of the perceived need to keep up the appearance of a functioning CSS. The most far-reaching CSS proposal had been to bring the SCA headquarters to Fort Meade and collocate them with NSA, where, it was assumed, economies in the billet structure would be easier to effect. It had not happened and was not likely to happen in the future. The SCAs had successfully fended off collocation with "Mother NSA."<sup>11</sup>

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~~(S-CCO)~~ Lew Allen had replied with some well-thought-out planning options. Some, such as the [redacted] Single Service Executive Agency, and heavier reliance on Third Parties, came to pass. The elaborate and expensive remoting option was implemented in later years, although not quite the way Allen envisioned it. But other options like major reductions in the Air Force's Rivet Joint airborne collection program fell to operational reality (and determined opposition within the parent services). Still others, like contractorization, simply transferred the cost to another budget category while yielding only minor savings.

~~(S-CCO)~~ While NSA struggled to protect its resources from the budget axe, its mission emphasis changed dramatically. [redacted] The real cuts had come at the expense of other production elements. [redacted] while G Group positions were down from 15 percent to only 8 percent.<sup>12</sup>

(U) THE FIELD SITES

~~(C)~~ In 1970 the collection site system stood at its highest level ever. [redacted] But the impending withdrawal from Southeast Asia, and the budgetary pressures that were moving DoD toward contraction, were about to hit.

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~~(C)~~ The collection site posture went into sudden freefall, and by the end of the decade only [redacted] sites remained. ASA was particularly hard hit, contracting from [redacted] [redacted] The Air Force lost [redacted] while the Navy, with a small-site posture and emphasis on worldwide DF, lost [redacted]

~~(S-CCO)~~ [redacted] each service lost sites to a base-consolidation movement. By 1975 all Southeast Asia sites were closed except for Clark Air Base in the Philippines. In Thailand, the closure of Ramasun Station resulted from a political forceout by the nervous Thai government.

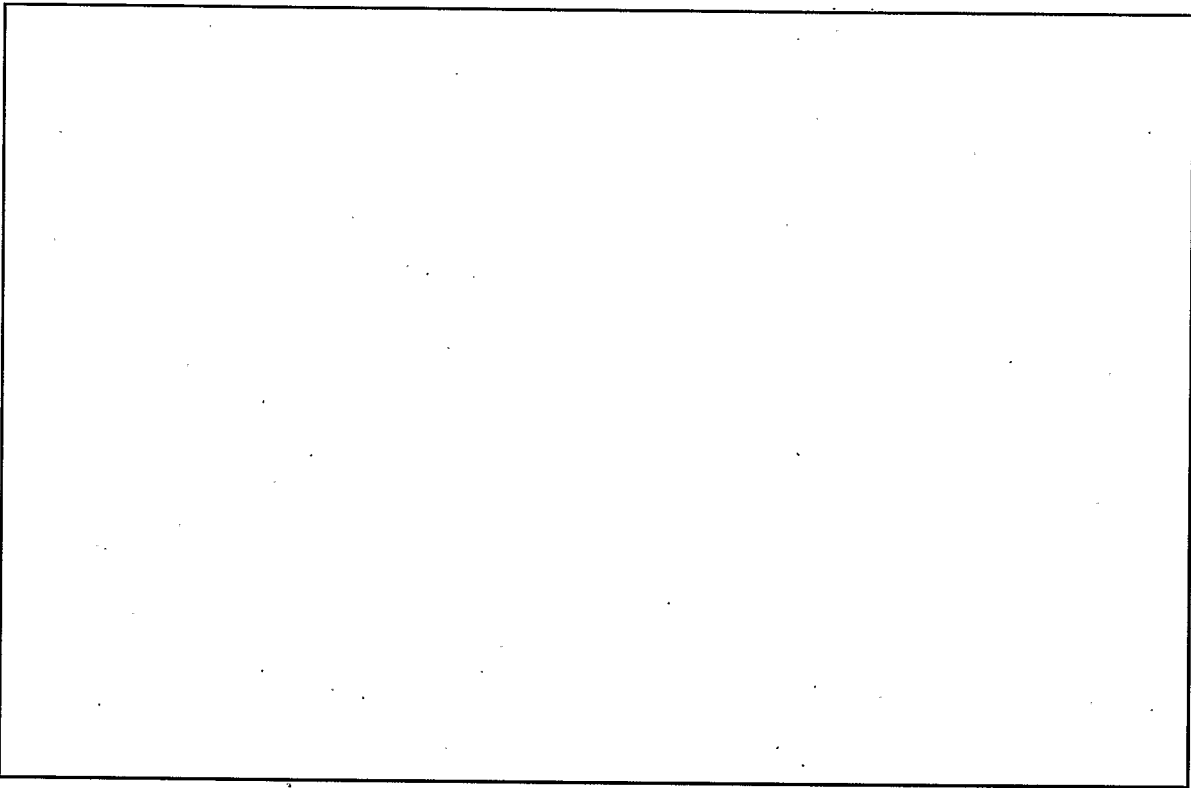
[redacted] a massive base consolidation movement, which hit cryptologic and noncryptologic units with equal fervor, resulted in the closure of [redacted]

~~(C)~~ The closures resulted from a complex of budgetary pressures from Congress and difficulties with the host countries. The period after the Vietnam War was one of exceptional instability in the Third World, and cryptologic sites, long held hostage to foreign aid by host governments, were battered about quite unmercifully. If they survived at all, it was usually in an altered, and less favorable, condition.

[redacted]

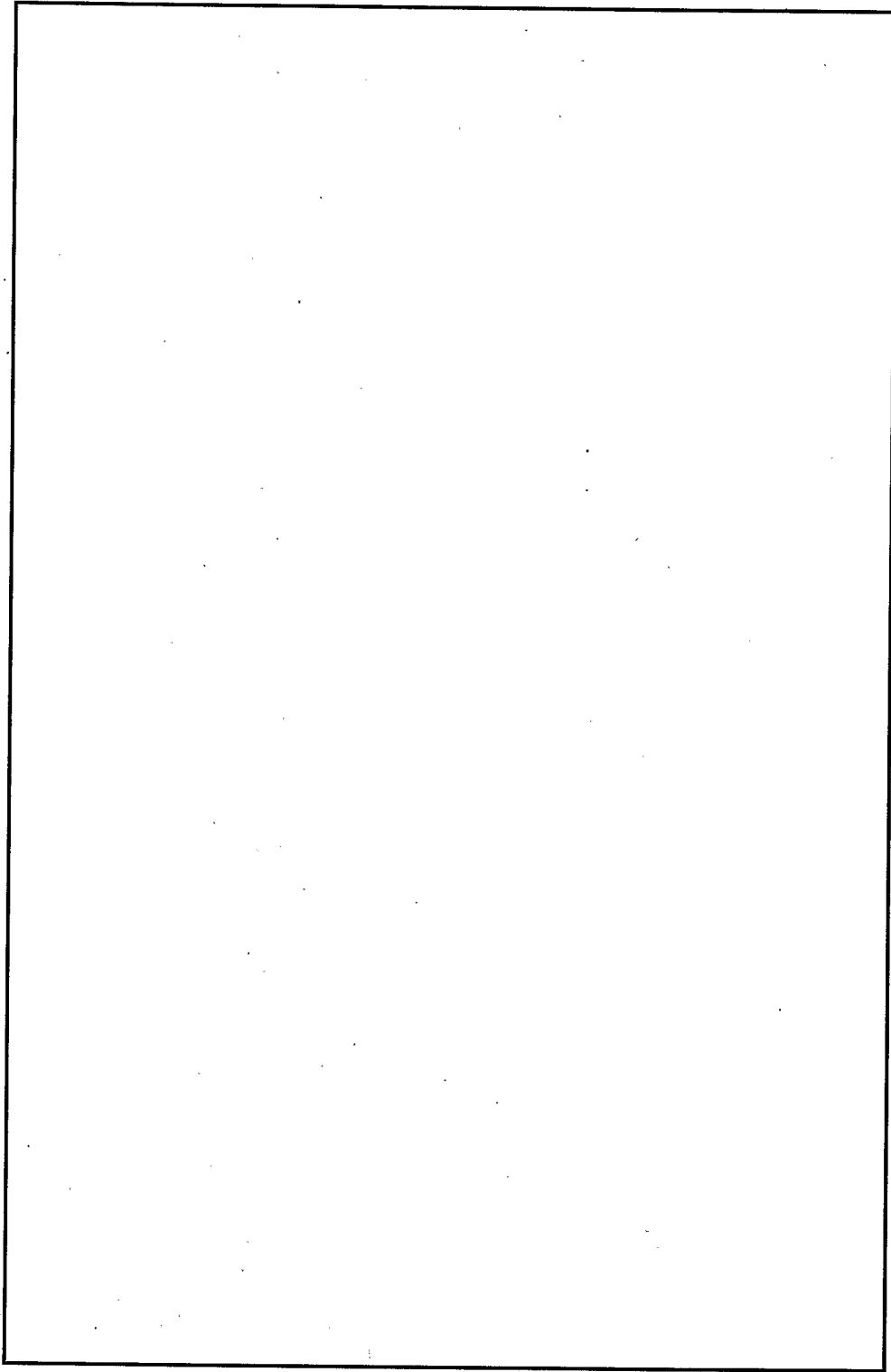
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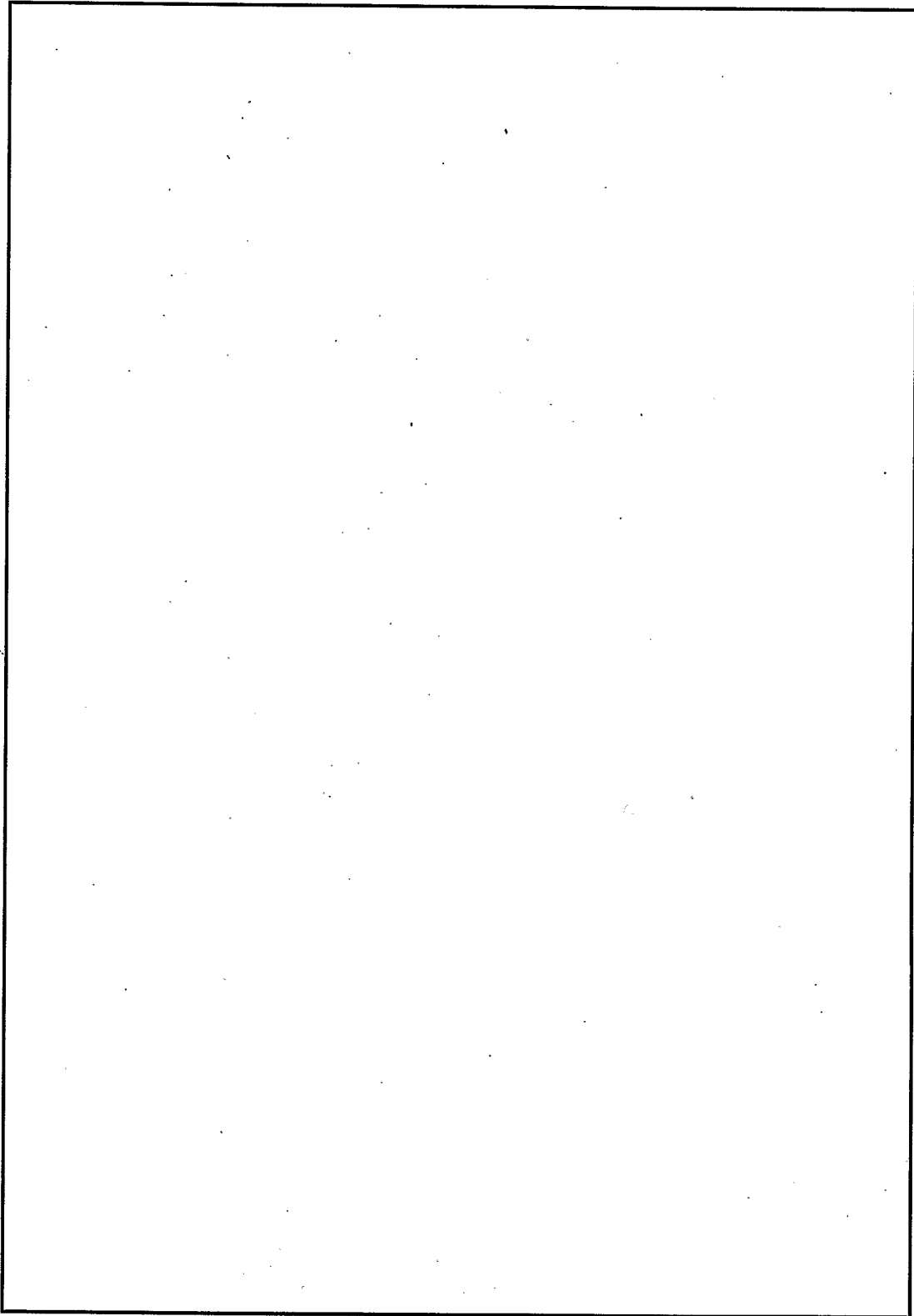
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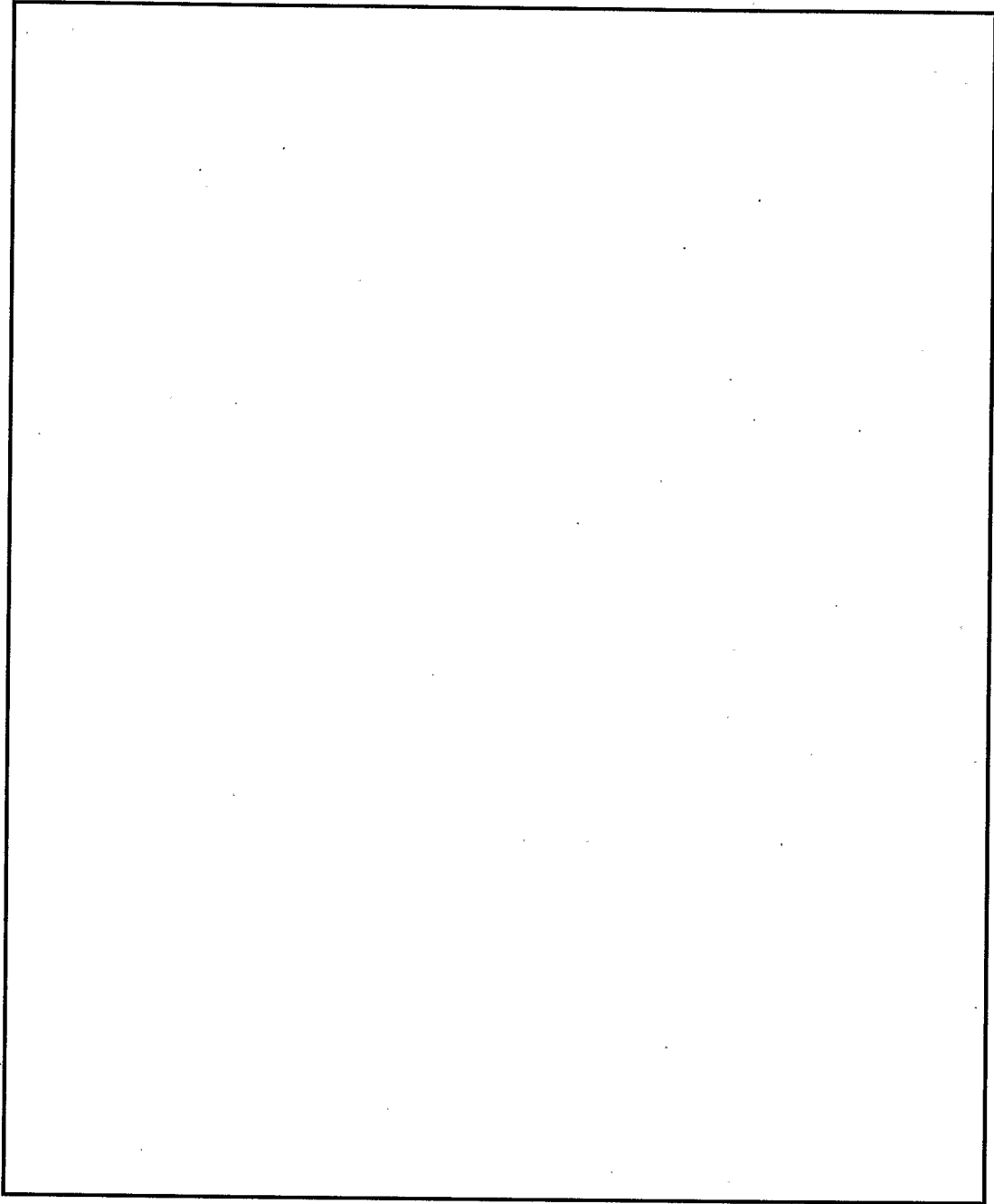
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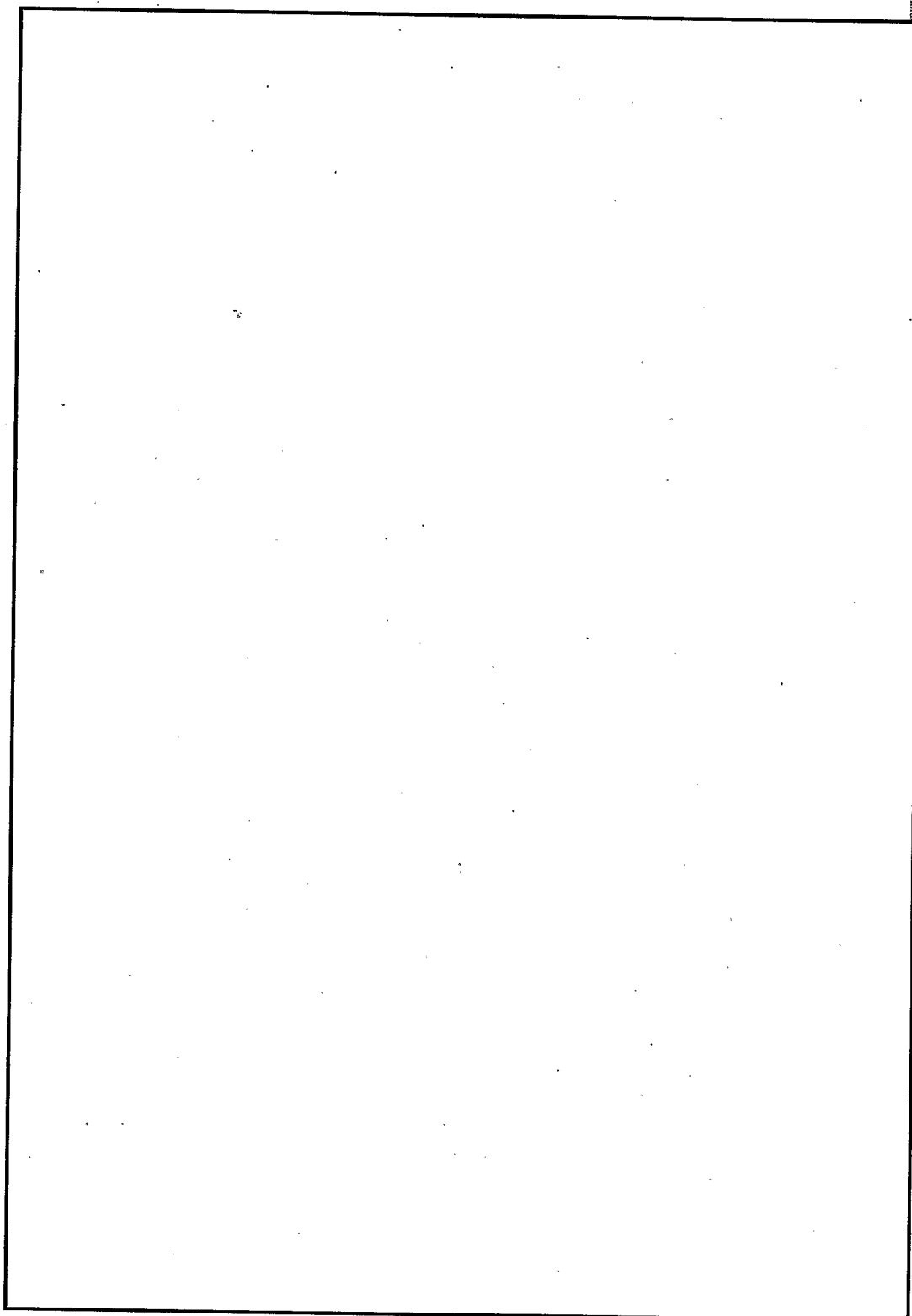


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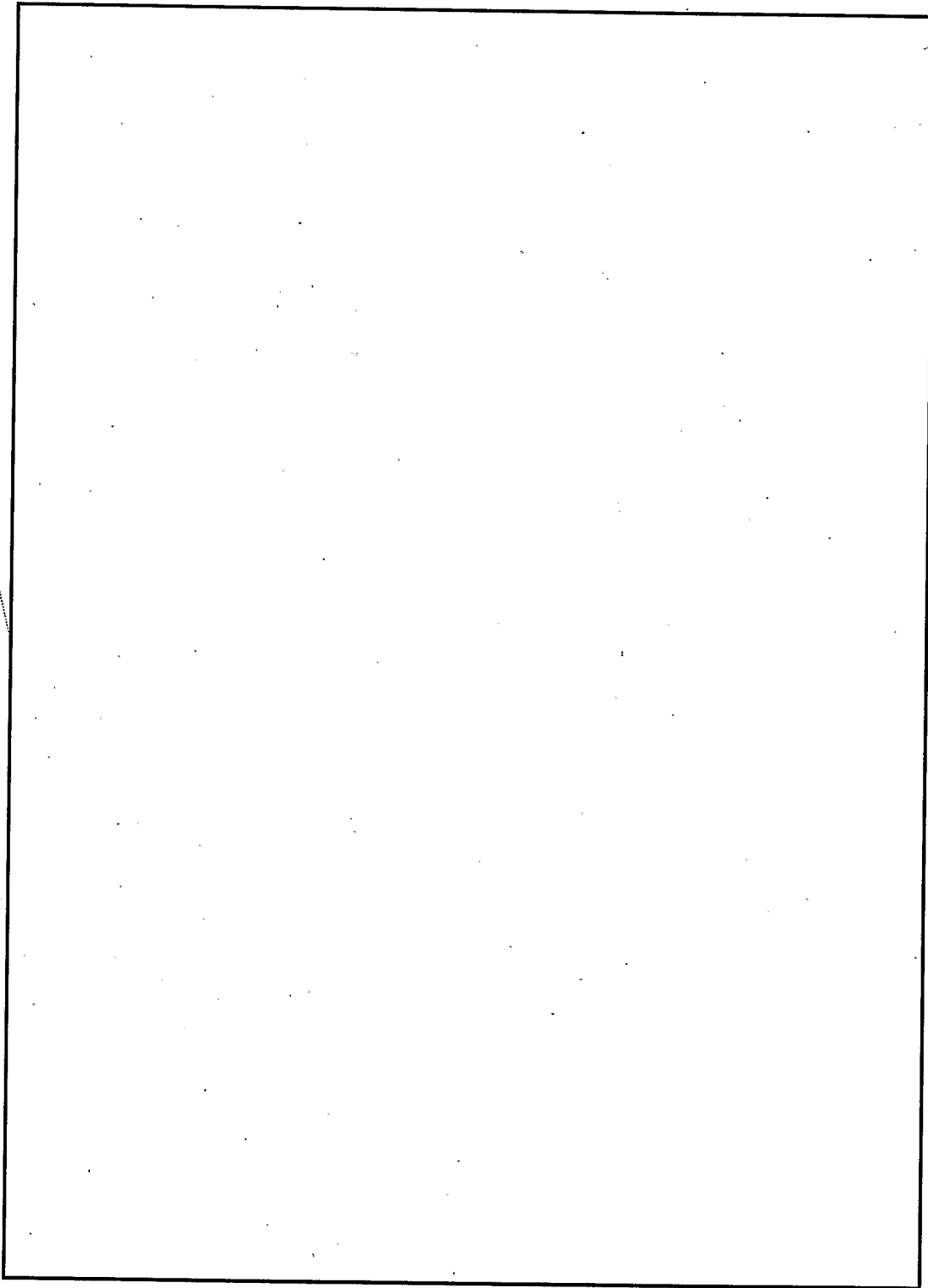


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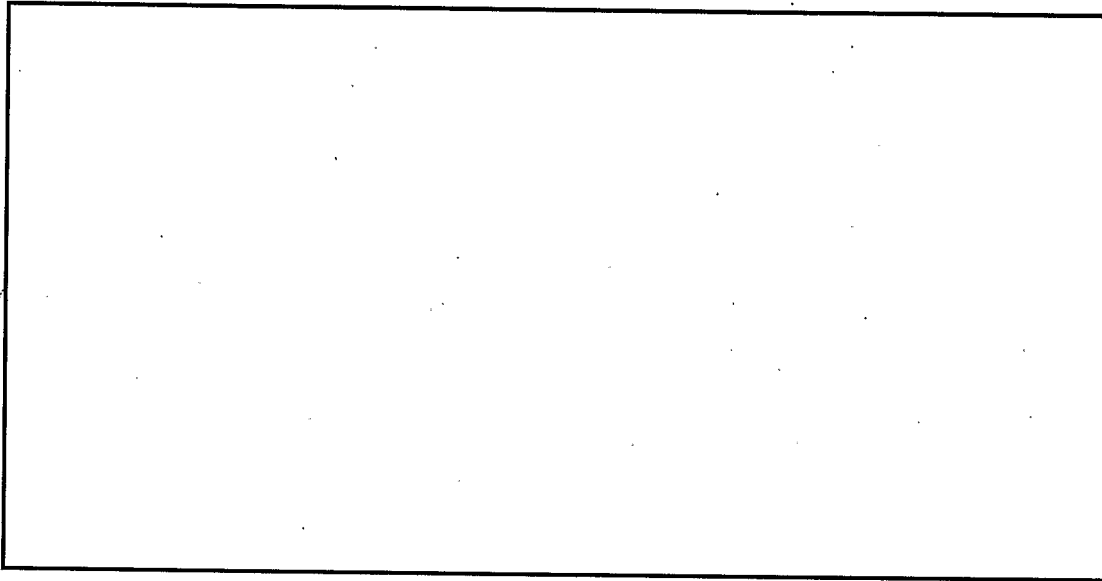
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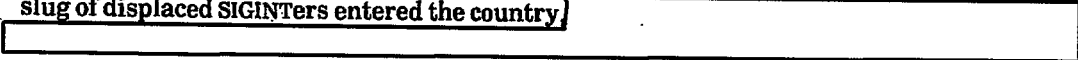
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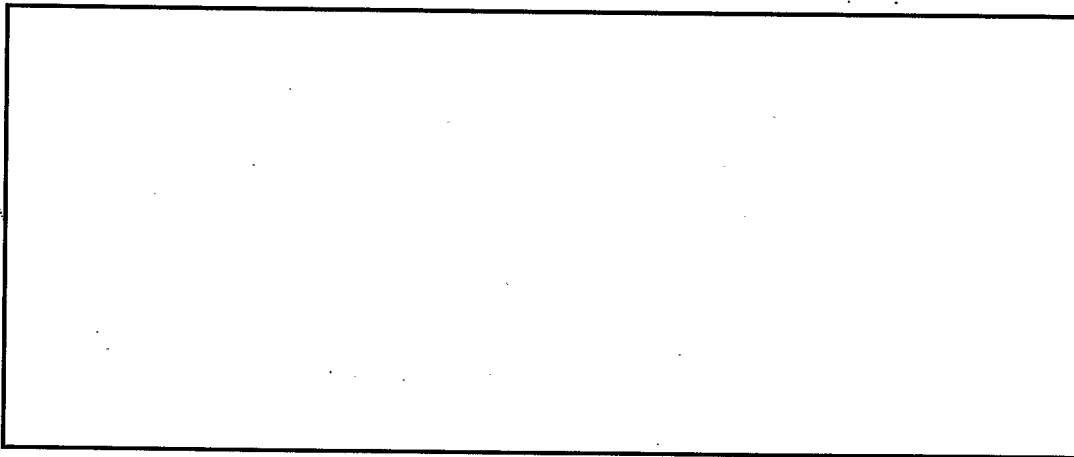
**(U) Thailand**

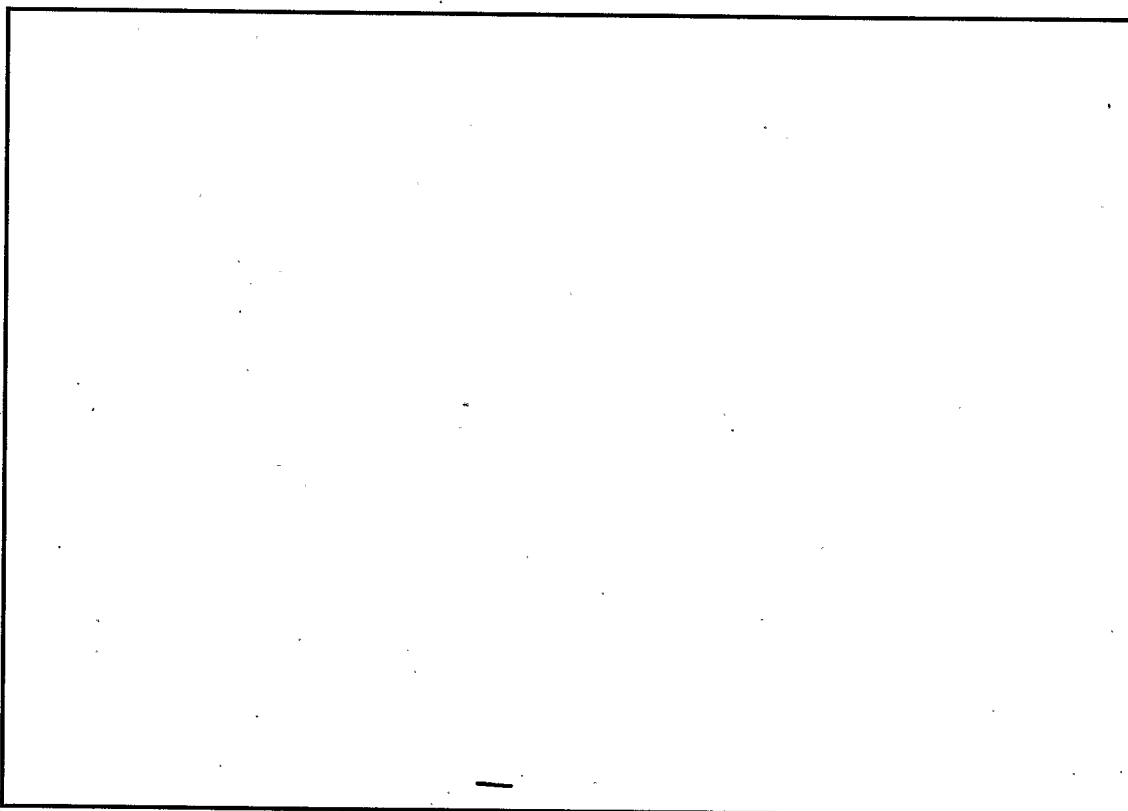
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(U) During the years of war in Southeast Asia, NSA had used Thailand as a principal base of cryptologic operations. The original ceiling of 1,000 cryptologists, while being a nice round number, soon ceased having any relationship to reality, and over the years NSA had brought more SIGINTers into Thailand, taking care of the increases with post-facto authorizations by the Thai government. After the 1973 Vietnam cease-fire, a large slug of displaced SIGINTers entered the country

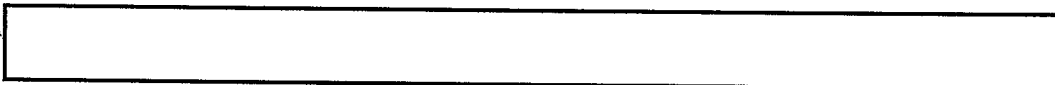


(U) With the fall of Saigon in April of 1975, the end of the American presence in Southeast Asia was only a matter of time. U.S. forces began leaving the country soon after, and the formidable base structure that had come into being during wartime quickly imploded. So where did that leave the cryptologists?

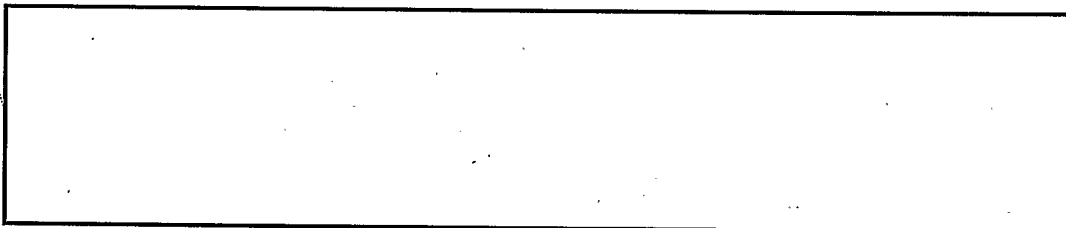




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(U) Negotiations with the Thais consumed the whole of 1975, but with no resolution. The Royal Thai Government would clearly have been relieved to see the last of American forces, which by late in the year was made up of the cryptologists and virtually no one else. The American embassy was on the side of the Thais, since the loss of the last American military forces would remove a thorn in the side of American-Thai relations.



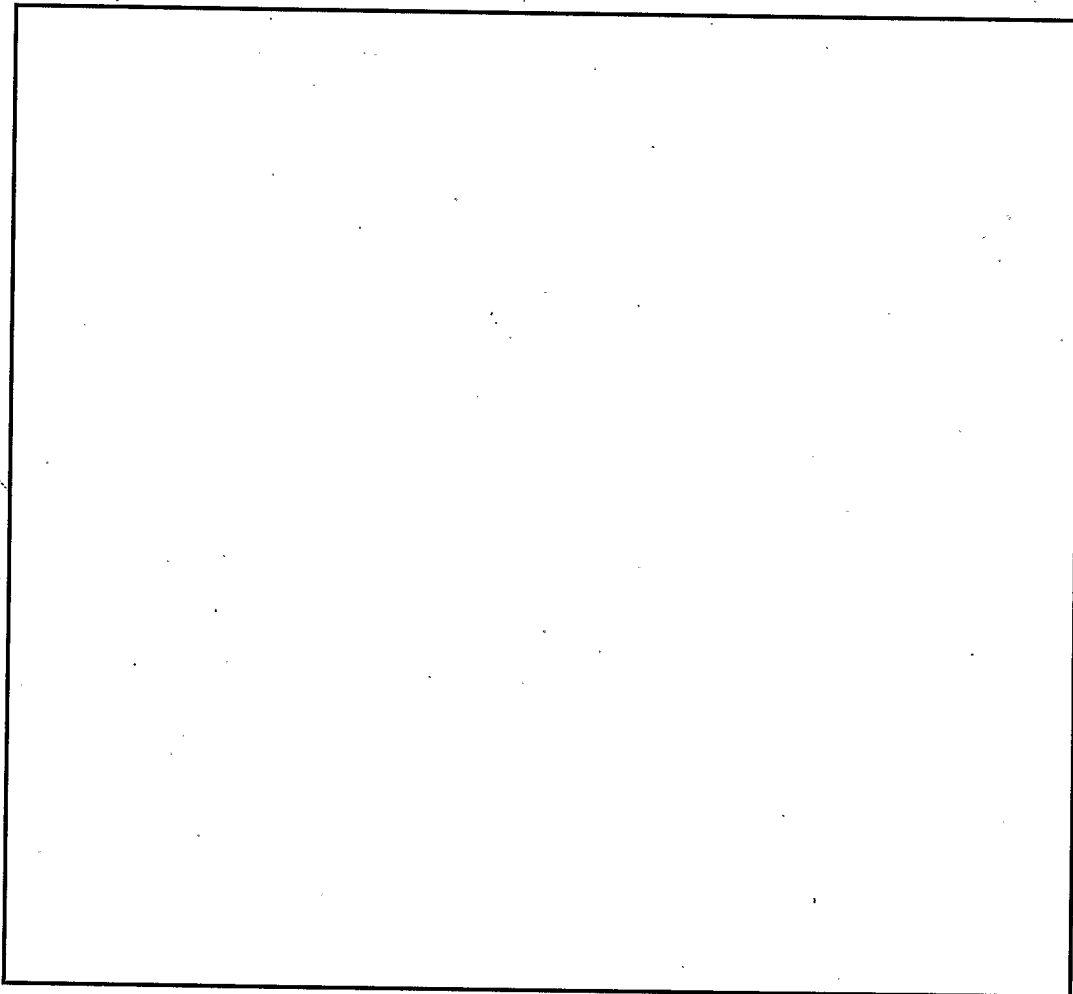
(U) But in the end it wasn't enough. The Thai government was getting fierce diplomatic pressure from the PRC, with whom they were negotiating an improved relationship. Moreover, the Thai military-run government was being squeezed by an internal communist insurgency in the bush and an urban leftist student movement emanating from the universities. With the communists victorious all across Southeast

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Asia, everyone, it seemed, wanted to be on the winning side. America did not appear to be the winning side.

(U) Udorn, the nearest large town to Ramasun Station, had a university, and it was full of restive students. In 1975 they got a cause, the infamous Leuchai incident. Leuchai, who managed the officer's club accounts, got into trouble with the base commander over the disposition of some monies and was summarily fired. But Leuchai had friends, and they brought out the students from the university. The base commander at Ramasun was confronted with daily demonstrations at the main gate. One day the military police, apparently thinking that the base area was sovereign American territory, arrested Leuchai, and the demonstrations got larger. In the end, Leuchai was released, the American ambassador was upset, and the Thai government, with newly stiffened spine, was ready to order the Americans out of Ramasun.<sup>28</sup>

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**(U) Closures and Consolidations**

~~(S-CCO)~~ In [redacted] base closures all resulted from budget cuts. The [redacted] consolidation plan had actually originated from a study in 1967 which showed the economies that could be achieved by closing [redacted] and moving the people and mission to a single location. ASA organized the original [redacted] cadre in 1968, and the station was officially up and running in January 1972. Two years later the Security Service site [redacted] was closed, and the people and mission joined the triservice operation [redacted]

[redacted]

[redacted]

[redacted]

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(U) The Airborne Communications Reconnaissance Program (ACRP) also slimmed down. In the 1960s it had consisted of a welter of strategic and tactical programs under various jurisdictions and controls. An Air Staff study in 1971 showed clearly that the program could be more economically managed if it were consolidated as a single program under a single manager. The outcome of the study was the RIVET JOINT program. Under it, the worldwide ACRP programs were consolidated into a single airframe, the RC-135. Twelve airframes were modified for both COMINT and ELINT collection by E-Systems in Greenville, Texas. The Air Staff recommended that the new Airborne SIGINT Collection Program - ASRP - be jointly managed by SAC and USAFSS. Moreover, the new program operated under the Air Force's MOB-FOB concept. That is, there would be a main operating base - in this case Offutt in Omaha, SAC headquarters - and forward operating bases in each theater. The crews and airframes would be based at Offutt and would deploy to the forward bases on TDY for missions. The new RIVET JOINT marked the first successful attempt to rationalize and centralize a large number of programs that had grown like weeds during the Cold War.<sup>34</sup>

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**(U) Tactical Systems**

(U) The war in Vietnam had displayed the inadequacies of the tactical SIGINT systems that had rusted away during the era of nuclear dominance. Vietnam produced a spate of development programs to fix the problem.

(C) The Army came up with several entries. [redacted] was an airborne communications intercept, DF, and jamming system aboard RU-21 dual-engine aircraft that had proved so useful to the ARDF program. [redacted] supported tactical commanders at brigade, division, and corps levels. A second program, [redacted] was a modernized version of the ARDF program. [redacted] The Army, being decentralized, fragmented its SIGINT effort.<sup>35</sup>

(C) The Air Force, being farthest behind the curve, had to develop a system from scratch. Their entry was [redacted] a complete tactical SIGINT support system based in mobile shelters. The collection system, [redacted] was mostly airborne - two mobile shelters stuffed into a slightly modified C-130. Processing and reporting were done in tents and shelters located well back of the combat zone. As with Air Force doctrine generally, this system was highly centralized. [redacted]

(C) The Navy was least affected by the commotion in Vietnam. What was needed was simply an updating of shipboard SIGINT support that had existed since World War II. The new program was called [redacted] an automated system designed to work against mobile naval emitters. [redacted]

(C) Even NSA came up with a "tactical" system. The [redacted] program, an ELINT innovation, permitted NSA to deploy ELINT intercept equipment [redacted]

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P.L. 86-36

**(U) REMOTING**

[redacted]

(S-CCO) The origins of cryptologic remoting were in 1962 and stemmed from an idea attributed to [redacted] an NSA engineer. The first communications satellite, Telstar, had just been launched and, with it, a new era in communications. [redacted] in a paper entitled "A Proposal for Utilization of Satellite Relays to Provide an Early Warning and Extended SIGINT Capability within the ZI," proposed that NSA look into the possibility of remoting signals intercepted in one location to another. The technology, he felt, could be developed to send large chunks of the RF spectrum from an overseas location to a location in the United States. [redacted] justified the effort that would be required on the basis of improved timeliness, reduction of SIGINT people overseas, and cost-cutting.<sup>39</sup>

(S) The proposal generated interest, and in 1964 NSA conducted experiments to see if what [redacted] proposed was really possible. [redacted]

It worked, and everyone was ecstatic. But for several years, that was it. The idea languished, awaiting sponsorship.<sup>40</sup>

(S-CCO) [redacted] idea was revived in 1967 when K Group (which at that time dealt with collection and signals analysis) established a study group headed by [redacted]



Within a year [redacted] had produced a preliminary concept for remoting [redacted] [redacted] back to a location at NSA. (U) [redacted]

[redacted] sites were small, and the [redacted] group simply discarded them from the study because the expense of installing the operational and communications equipment for such a small site would not be feasible. The group took it as a given that the technology was there - what was needed was practical application.<sup>41</sup>

(S) The [redacted] idea did not have many sponsors in the early days. In particular, Dr. Albert Hall, assistant secretary of defense for intelligence, was known to oppose it as too expensive and technologically risky. But within NSA Dr. Robert Hermann adopted it as his own, and he set out to get sponsors. He created an "Industrial Advisory Board" to study the issue and enlisted important people from private industry to help him. His first ally outside of NSA was William Perry of ESD, who would later become secretary of defense. Within NSA, he had the support of Oliver Kirby, the assistant director for production. With this level of support, Hermann embarked on a major feasibility study.<sup>42</sup>

(S-CCO) The original [redacted] study, published in 1969, proposed to remote [redacted] [redacted] to collection centers in the United States. Candidate locations were [redacted]

[redacted] The follow-on system development plan produced the following year planned for an initial system, called [redacted] in which [redacted] in the U.S. The presumed success of the pilot would result in a wave of support, and by 1975 [redacted]

[redacted] The savings would be staggering. Overall CCP [redacted]

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P.L. 86-36

economies would range [redacted] could be eliminated. Some [redacted] cryptologists overseas would come back. But the up-front costs were equally huge [redacted] for the system through 1978 and [redacted] to acquire dedicated communications satellites that were presumed to be required.<sup>43</sup>

(S) [redacted] produced arguments galore. The biggest dispute was over the [redacted] approaches. [redacted] had originally envisioned remoting large portions of [redacted] to the States,

[redacted]

(C) The competing technology came to be called the long screwdriver approach. In this method, the operator sitting in the U.S. would remotely tune a receiver in an overseas location.

[redacted]

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P.L. 86-36

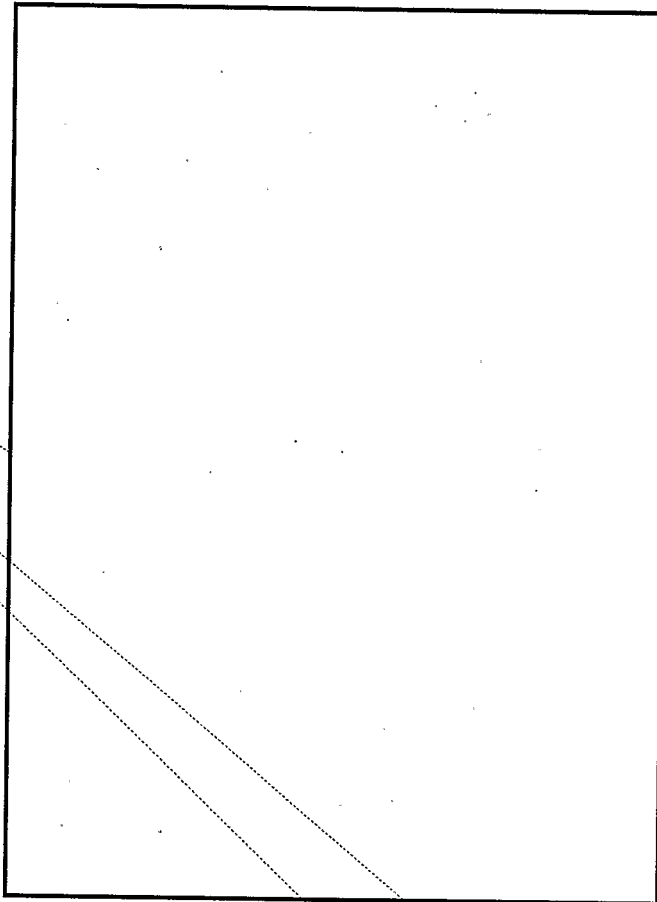
(S-CCO) [redacted] also produced arguments over management. Theoretically, every intercepted signal in the world could be collected into a single facility, if not a single room. Where would such a facility be? Was there enough room at Fort Meade? How would it be managed? What would the relationship be between collection and processing? Would operators accept being jerked out of their overseas bases and dumped in the high-cost Washington area? What kind of morale problems would result? Many elements of the Production organization lobbied for a [redacted] simulation facility to test out all these problems - a fly-before-buy approach. The engineering side naturally focused on the technical hurdles and ignored the management implications. A [redacted] simulation center was planned, but was never implemented. NSA bought the technology without testing the management problems first.<sup>44</sup>

(C) Ultimately, NSA succumbed to cost considerations and went for the long screwdriver technology. Even under the [redacted] program, however, communications requirements were stupendous. For instance, remoting the [redacted] This was why NSA became the largest single user of DoD communications satellite capacity.<sup>45</sup>

(S-CCO) Dr. Hall continued to hold onto monies that NSA wanted [redacted] Hermann's approach was radical - rather than scale back on the program to reduce the threat, he sent Hall a new proposal [redacted] virtually wiping out the SCE component of the cryptologic system. All CONUS operator billets could be civilianized, less a 25 percent residual for tactical support. Financial

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savings from pulling people out of overseas locations and putting them in a single collection facility would be huge, both in direct operational costs and in logistics and overhead. Hermann's forceful approach finally got a tentative go-ahead from Hall.<sup>46</sup>



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P.L. 86-36

(U)

(U) When the Clements cuts hit NSA in 1973, the  concept seemed a heaven-sent solution to the budget crisis. Lew Allen became the director in August 1973, and he barely had time to put his hat down before confronting the issue. Remoting seemed to be the answer, and he promptly convened a panel to consider it. He called it the  Task Force.

(U) Allen came from the high-tech side of the Air Force, and he was well connected with private industry, which he considered an essential partner in solving big problems. The task force was composed of only four NSA people, plus representatives from fourteen companies, including such industry giants as Lockheed, Hughes, and IBM. Lew Allen

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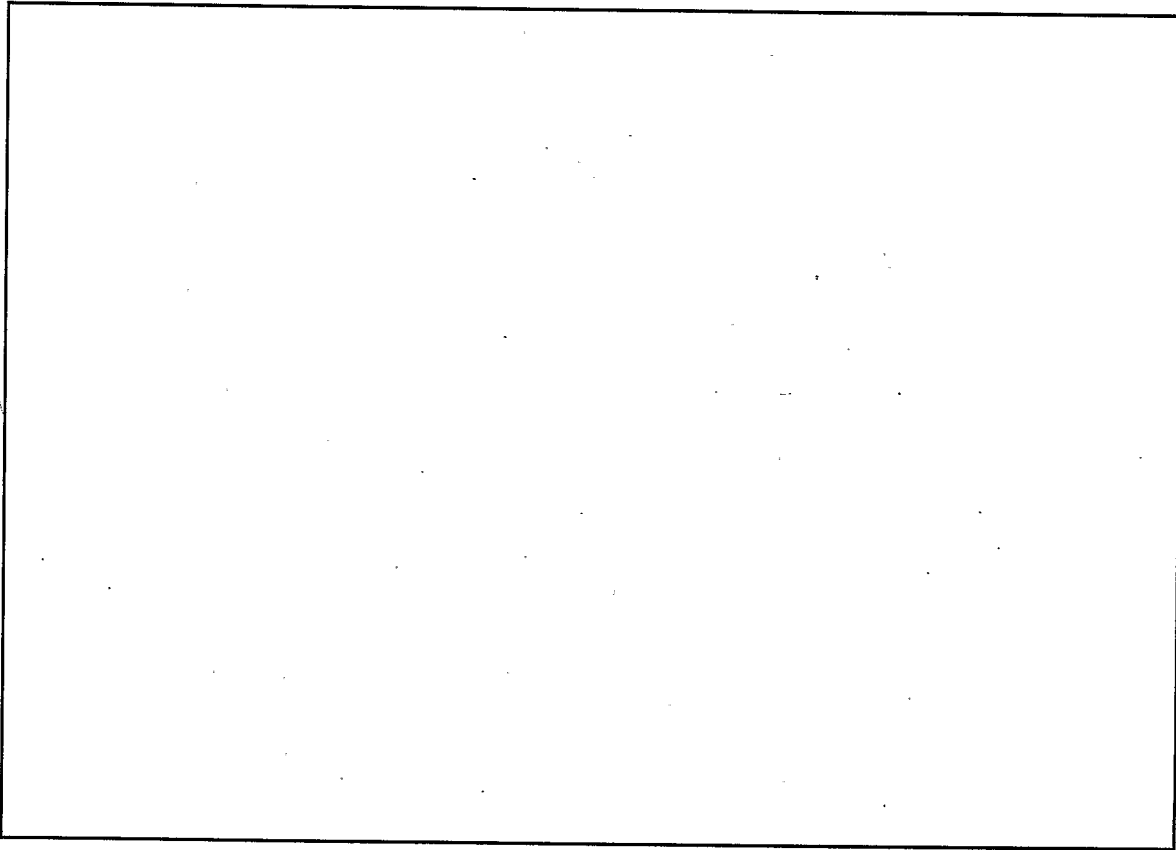
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understood that the cryptologic community could not work its way out of this jam without help.<sup>48</sup>

~~(S-CCO)~~ He instructed the group to consider only [redacted] They had two options: modernize [redacted] or use remoting. (Standing pat was not an option.) The objective was clear - they were to devise a SIGINT system that was much less costly than the one that existed.

~~(S-CCO)~~ The task force cast aside casual tinkering and recommended radical surgery. Although they did consider modernizing the overseas sites, they ended up recommending that the whole lot be remoted. [redacted] Task Force recommended that every site remaining [redacted] be remoted to Fort Meade [redacted]

~~(C)~~ Savings under the modernization option would be significant, but using the remoting concept they would far exceed the 3 percent cut mandated by Clements (see Table 5). Of course, DoD would have to wait a few years for the return. The entire remoting scheme would cost [redacted] to be spread over a period of years from fiscal year 1976 to fiscal year 1981. Although each year's personnel savings would be significant, the procurement costs would not be completely amortized until fiscal year 1983 - fully ten years down the road.

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~~(C)~~ Full remoting would require that [redacted] data would pass [redacted] back to Fort Meade; [redacted]

[redacted] To remote such huge volumes of data, the panel recommended that NSA purchase its own satellites rather than rent from the Defense Communications Satellite System (DCSS). Purchase would be more expensive, of course, but the amortization difference would only amount to less than a year.<sup>50</sup>

~~(S-CCO)~~ Table 5<sup>51</sup>  
The [redacted] Plan Costs

	Current	Remoting	[redacted] modernization
Number of positions	[redacted]		
Personnel			
Annual CCP cost			
Estimated cost of remoting			

~~(S-CCO)~~ The organization at Fort Meade would be a nightmare. Here, the panel only hinted at solutions, but did originate the concept of the "problem center," which was to

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have a long life. At the Fort, signals would be shunted to areas that worked certain problems - for instance, all [redacted] would go to one area. This would permit customized processing operations and would reduce duplication. For instance, the problem center [redacted] would not require a timely reporting mechanism, while the problem center (or "PC") [redacted] would not need equipment [redacted] for transfer to the computer complex in the basement.<sup>52</sup>

(C) Consolidation at NSA would permit the introduction of many efficiencies that might be unaffordable in a dispersed system. The panel foresaw the automation of search through the employment of automated scan systems [redacted]

[redacted]

[redacted]

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86-36

(U) [redacted]

(C) What emerged from the private sector's blue-sky planning was an implementation plan; [redacted] It represented what the cryptologic community could get cranked into the CCP, and it was much different from the [redacted] system. Under it, NSA scaled the system back to [redacted] a far more realistic plan, more in line with the original [redacted] planning (see Table 6).

[redacted]

(S) Out of the [redacted] billets at the [redacted] affected sites, [redacted] would remain overseas to do tactical support, Peacetime Aerial Reconnaissance Program, and other operations that would be difficult (if not impossible) to perform from Fort Meade. Some [redacted] people would

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be moved back to the collection operation center at NSA, and the billet savings would be only [redacted]. The plan allowed for some modernization at the residual overseas sites, but offered specifics in only one case - the Navy site [redacted] which would stay largely untouched by remoting [redacted]. At Fort Meade, the "problem center" organizational scheme was adopted from the [redacted] plan.

(C) While the [redacted] plan remained through the end of the decade, harsh realities soon intruded. Remoting would incur very high initial costs, and the ever-present Dr. Hall was willing to proceed initially with only one site. [redacted]

(U) Not even [redacted] survived intact. Pieces of it were eventually implemented, but they resulted from pressures and events not even anticipated when the plan was written. The name survived, but the eventual system could not have been recognized by the original planners.

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(U) [redacted]

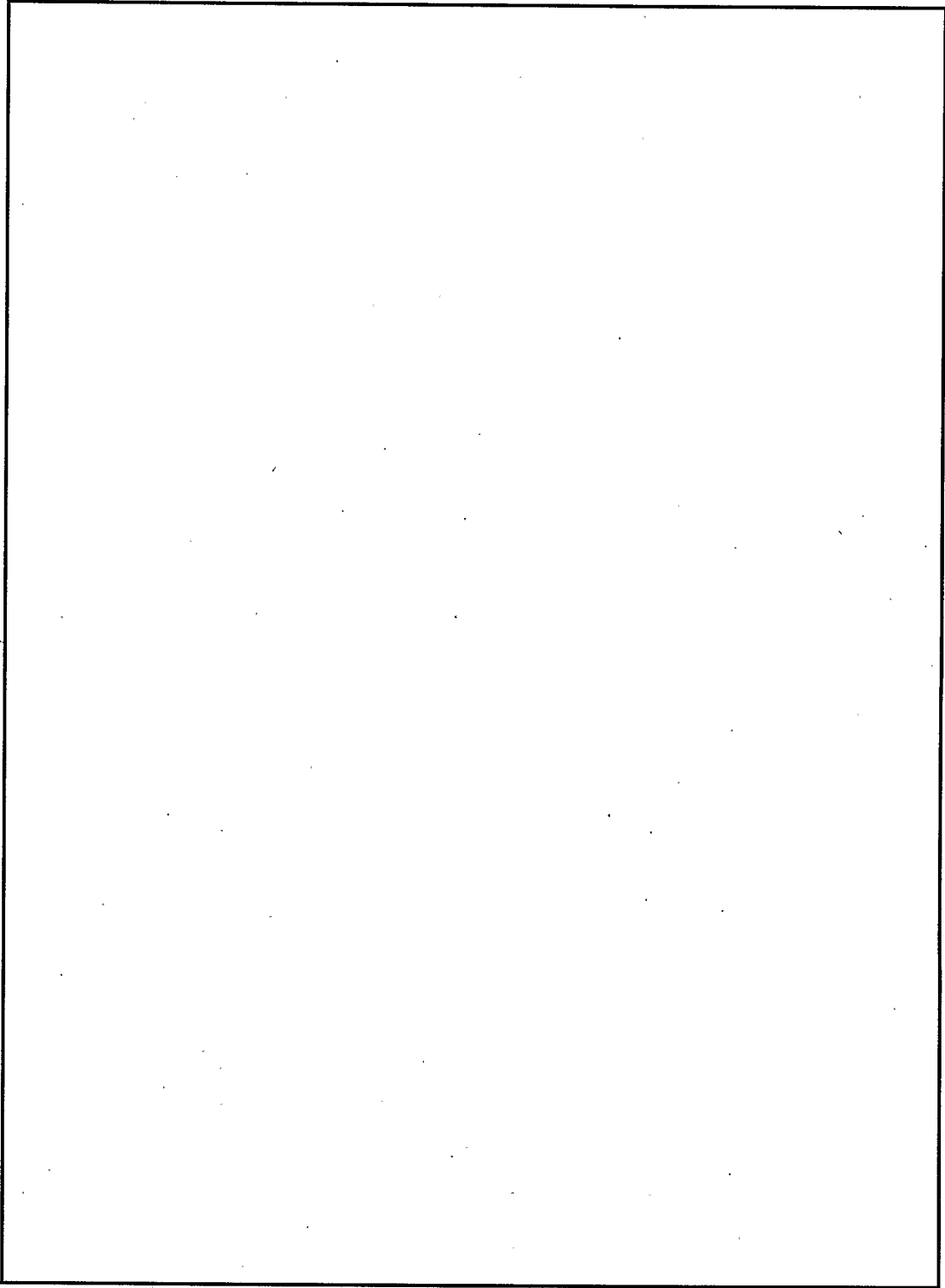
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(S) The first remoted site had nothing to do with the grandiose plans originating from the [redacted] planning efforts [redacted]. Instead, [redacted] became the guinea pig for the whole system.

P.L. 86-36

[redacted]



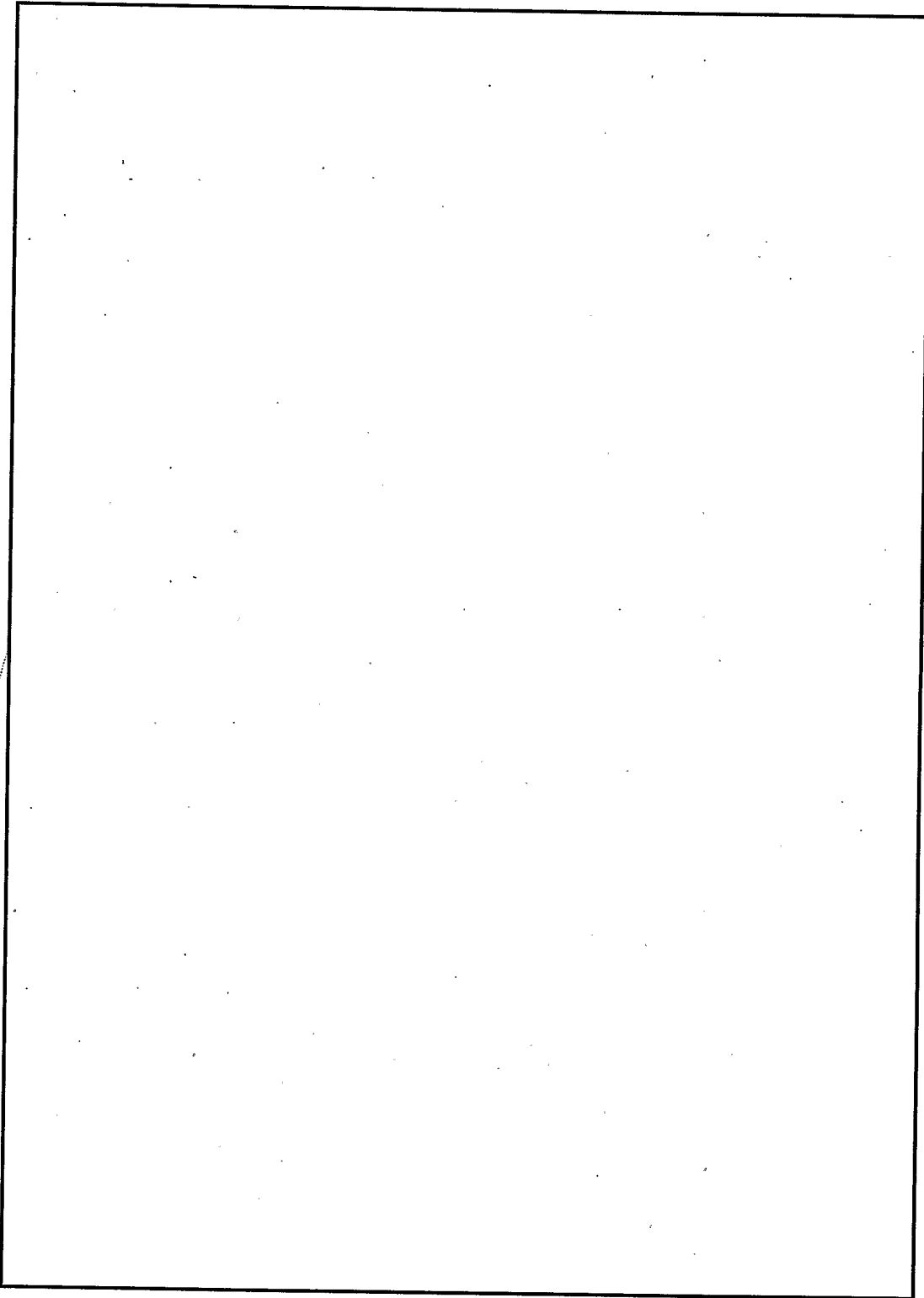


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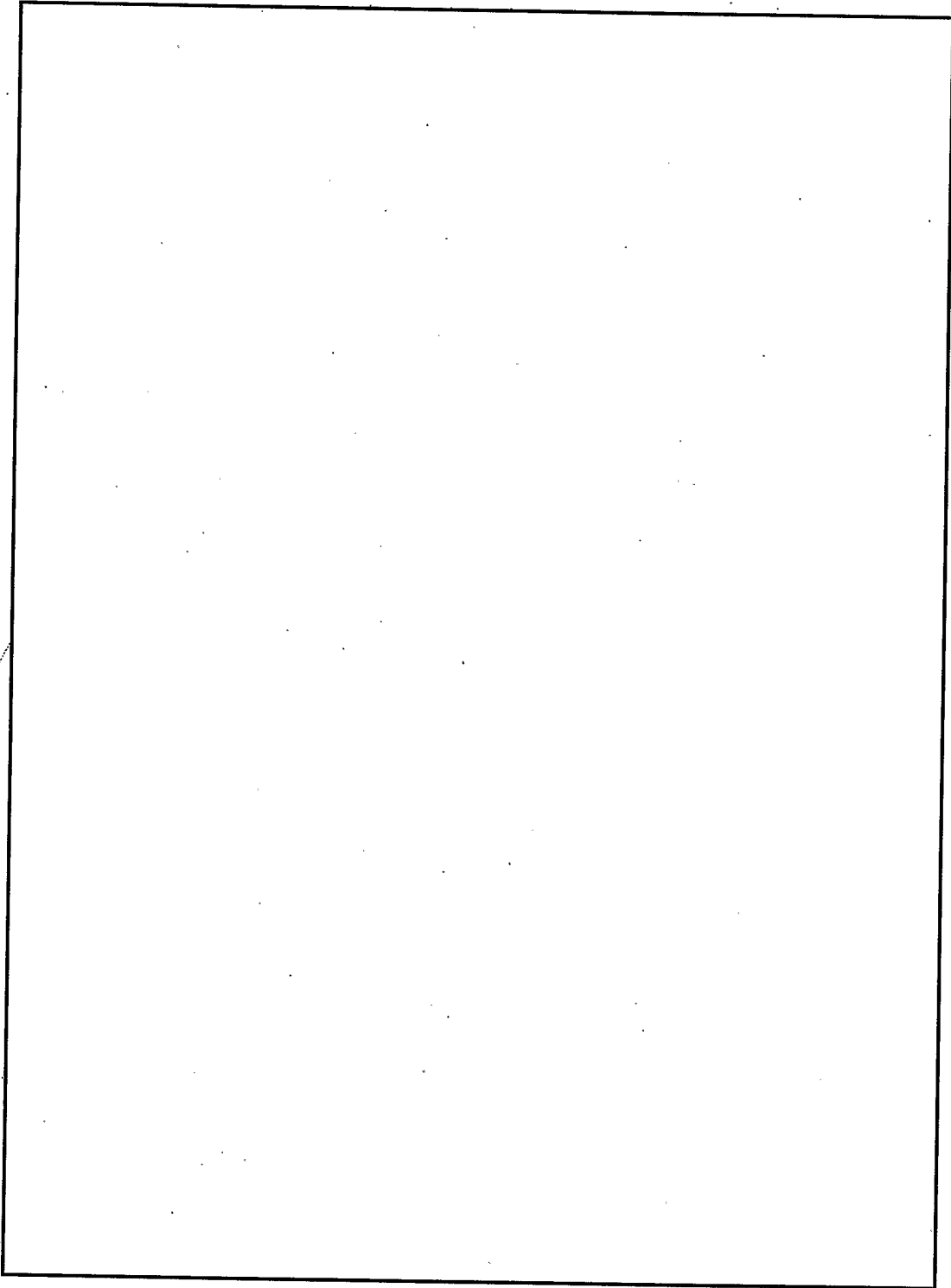
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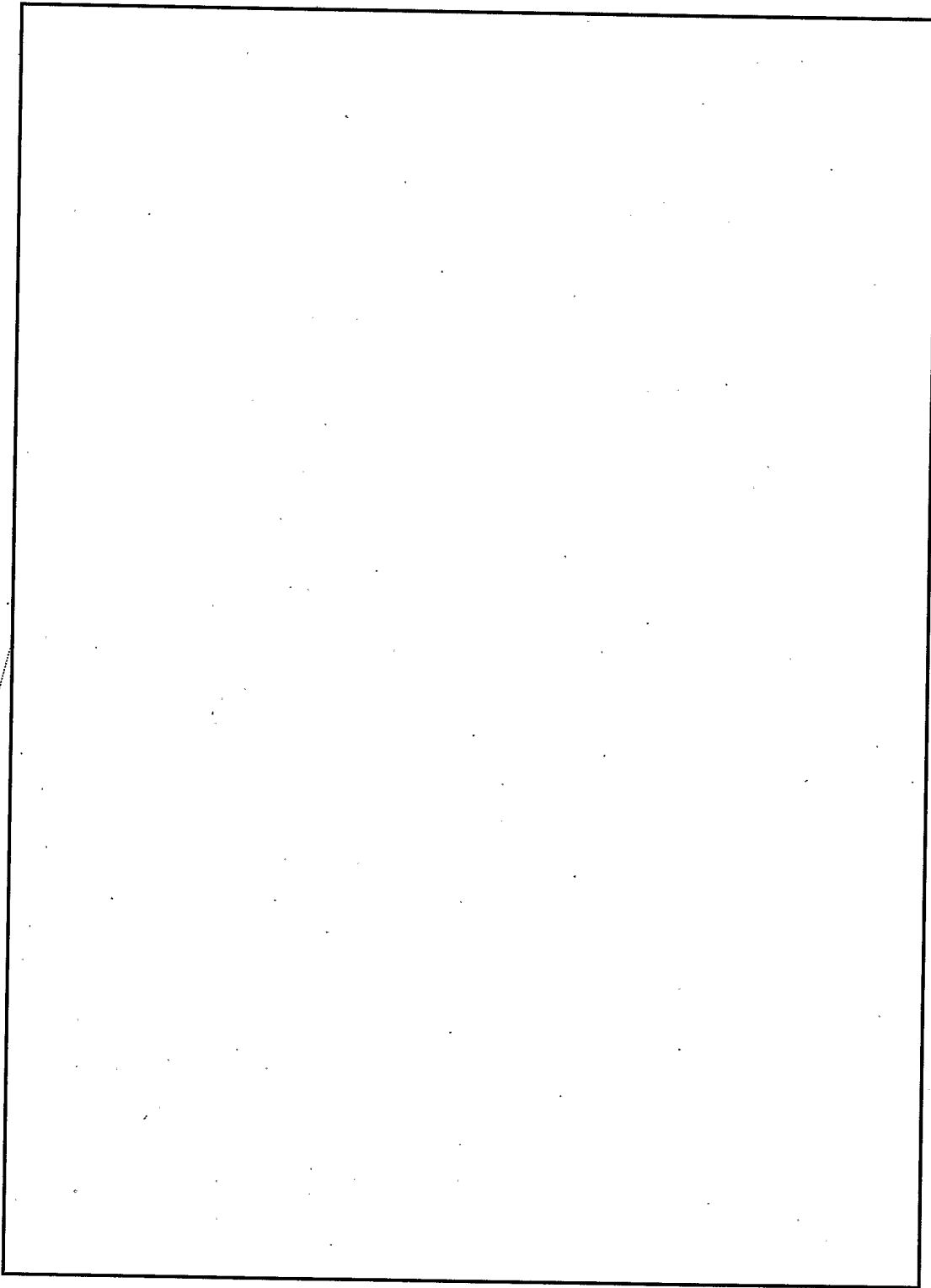
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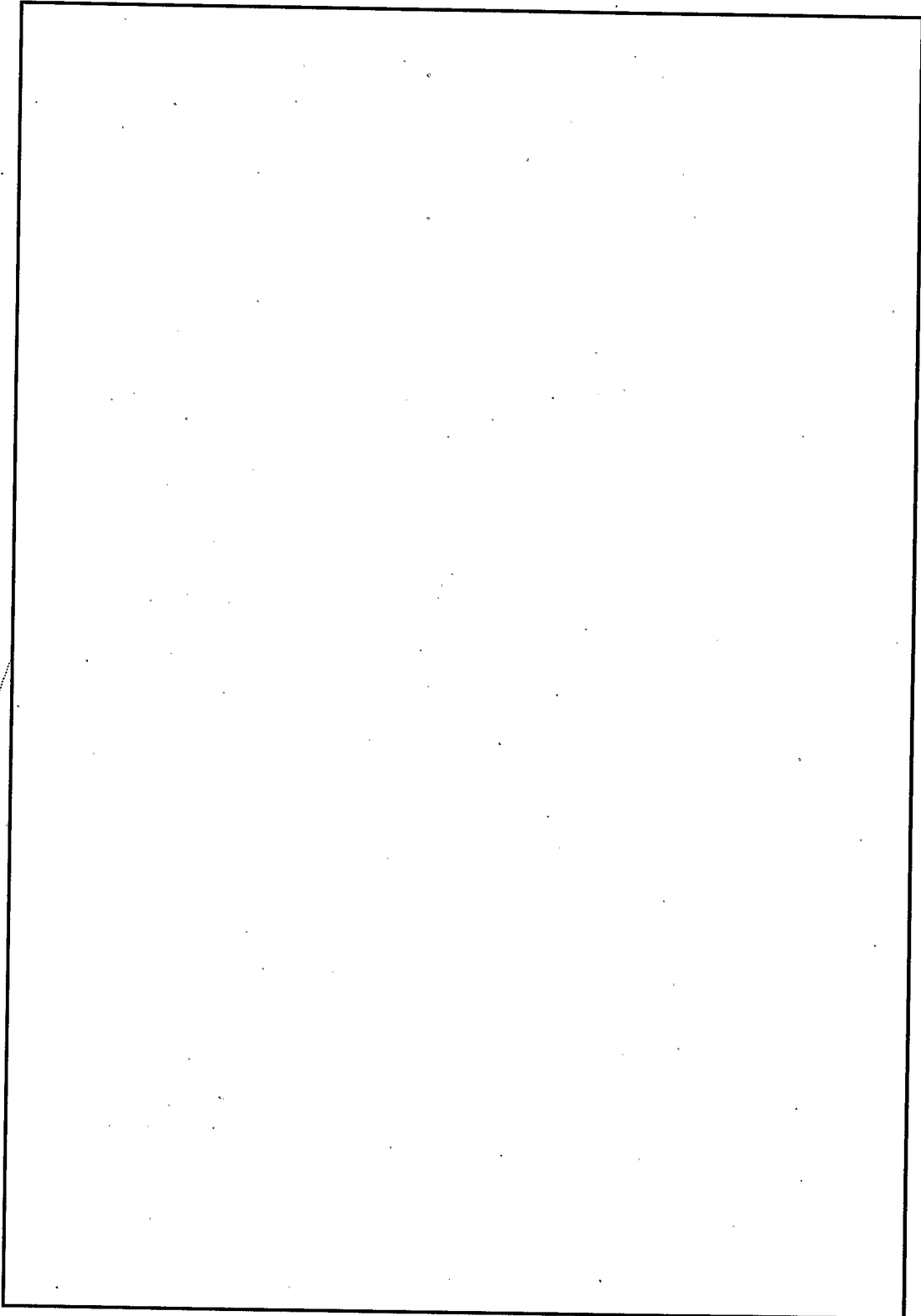


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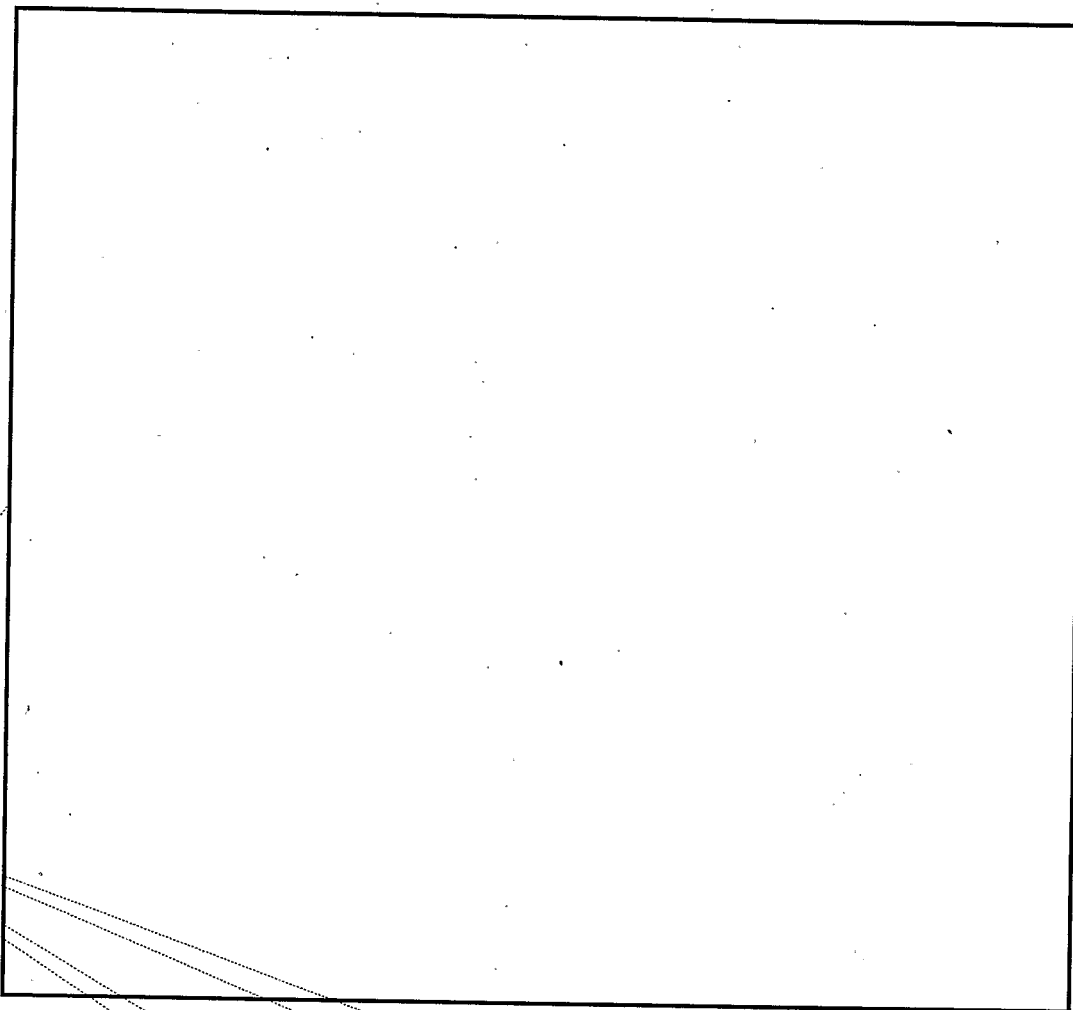
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**(U) Remoting the Small Sites**

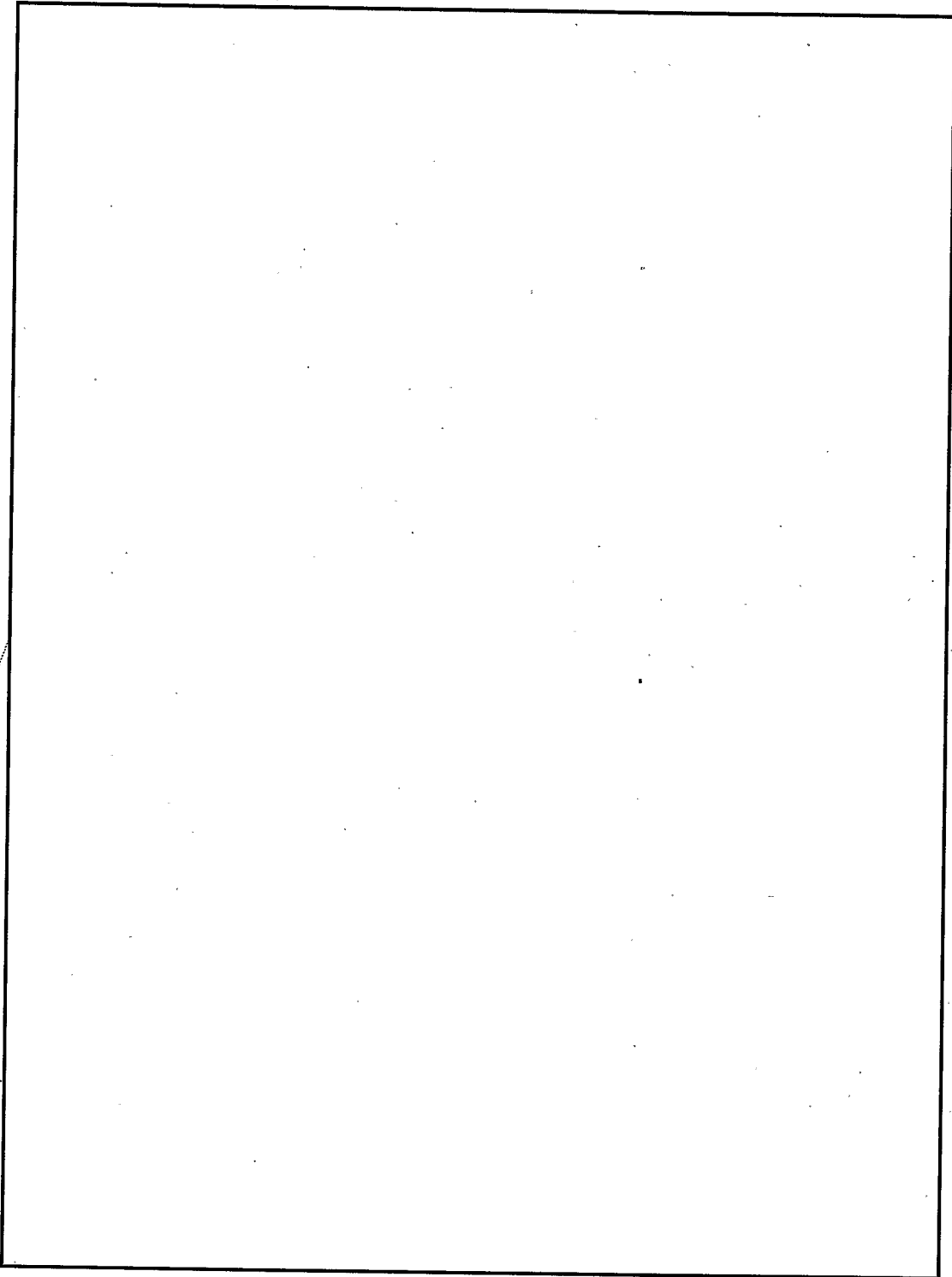
~~(C)~~ [redacted] was never intended for the small sites [redacted]. It had become a truism early in the project that the cost of earth terminals and ancillary equipment would make such a proposition uneconomical. [redacted] [redacted] all presupposed that [redacted] would become candidates for remoting.

~~(C-CCO)~~ The implementation of remoting stood this assumption on its head. As it turned out, the big payoff was in small-site remoting. Part of this resulted from the decline in earth terminal costs, but mostly it related to the importance of the mission. The small sites, with their [redacted] highly selective focus [redacted] became the high value items in the system.

~~(TS-CCO-TK)~~ The first step was data linking, in which operators at overseas sites intercepted signals and plugged the receiver outputs into communications channels.

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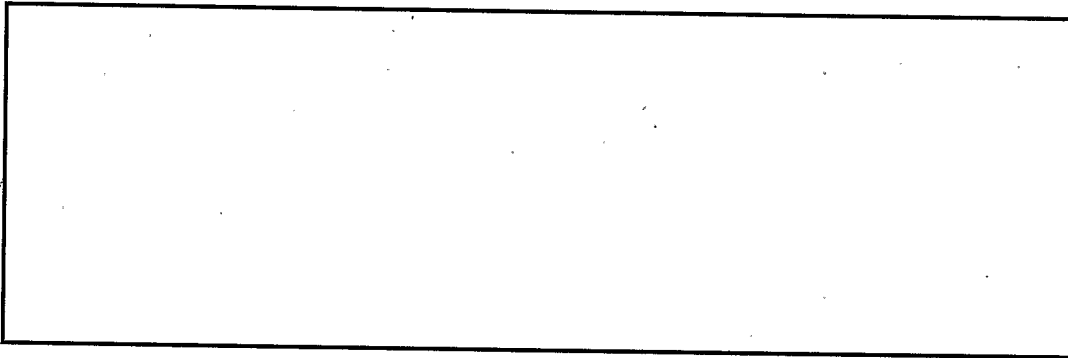
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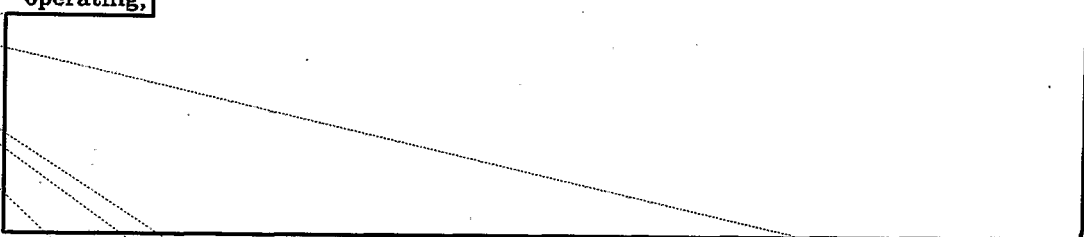
~~TOP SECRET UMBRA~~



~~(TS-CCO)~~ The advantage of data linking was speed - critical signals could be intercepted, forwarded and processed in something approaching near real time. It did not remove the operator at the distant end, nor did it reduce the number of people in the system. The operational payoff could be significant [redacted] but these operations did not help with overseas visibility, international balance of payments, or CCP reductions.

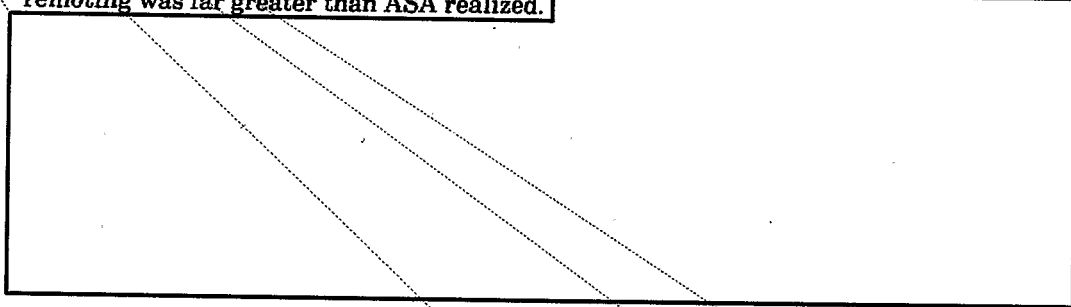
~~(S)~~ The next system was a true remoting operation. [redacted] an Army-sponsored project, sprang from the dismal budget-cutting days of the late 1960s, when ASA was strapped for cash and looking for a way to reduce expenses. The [redacted] sites, although top producers, had been a financial drain for years. They were expensive to keep operating.

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P.L.  
86-36

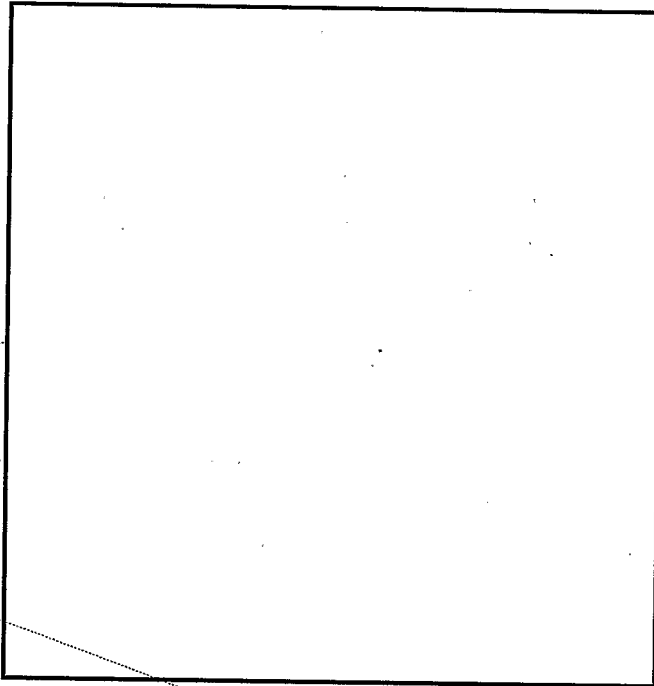
~~(TS-CCO)~~ NSA recognized immediately that the potential payoff for [redacted] remoting was far greater than ASA realized.



~~(TS-CCO)~~ In a lengthy memo in late 1971, Major General John Morrison, NSA's ADP (assistant director for production, i.e., DDO), laid out the prospects. [redacted] collection had to be data linked back to NSA. ASA's [redacted] was a good idea, but it got the material only part of the way home. NSA needed a data link to get [redacted] to Fort Meade.<sup>79</sup>

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EO  
1.4.(c)  
P.L.  
86-36

(S) NSA's engineers became involved [redacted] from its inception, and in October of 1970 the ASA project manager, Colonel Vernon Robbins, formally invited NSA into the development process. ASA resources were strapped, and only NSA could provide the expertise to steer such a large project. NSA's Richard Bernard was named the deputy project manager.<sup>80</sup>

(S-CCO) The combined ASA/NSA project planning committee selected Radiation (later called Harris) Corporation as the prime contractor and let a contract for \$25 million. The committee had to scale back an early proposal [redacted]

[redacted] Although NSA and Harris became ensnared in the almost inevitable cost overrun disputes, the system succeeded technically and operationally.<sup>81</sup>

(TS-CCO) For NSA, the payoff was the data link. [redacted]

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**(U) Guardrail**

~~(S)~~ Once remoting was available, everybody wanted it. The earliest field applications were in Southeast Asia, where NSA began remoting signals from isolated mountaintops during the later stages of the war in Vietnam. Called EXPLORER, this program got people out of danger zones and back into defensible base areas, while leaving the equipment (antennas, receivers, and communications) in exposed locations. The aptly named Black Widow Mountain along the Cambodian border was the most famous of the remoting operations.

~~(S)~~ Remoting was next employed to fix serious SIGINT support problems. The problems arose from the disparity between tactical systems available to field commanders and strategic systems tailored for national-level support. By the early 1970s, strategic SIGINT had far outrun what was available tactically. In September of 1970,

complained to Admiral Gayler (then DIRNSA) that his SIGINT support assets were not what they should be.

His mobile collection equipment was antiquated.

Moreover, the intercept vans, were too slow to get out of the way in case of attack.

Communications were clearly inadequate.

~~(C)~~ knew about the systems that had been devised for Southeast Asia, and he wanted them. He wanted airborne systems that did not have to retreat over roads that were vulnerable to interdiction. He wanted communications to get the intercept back to safe areas where they could be processed. And most of all, he wanted ARDF.<sup>83</sup>

~~(S)~~ At NSA, Gayler instigated a planning whirlwind. He sent an NSA team to look at the situation. The team devised a radical solution - an airborne remoting operation similar in concept to the in Southeast Asia. When the matter came to a head in a JCS meeting in January of the following year, NSA was ready with the solution. The Agency called it GUARDRAIL.<sup>84</sup>

~~(C)~~ GUARDRAIL would

NSA, ASA, and USAFSS jointly put up the money to run the GUARDRAIL I test.

~~(S-CCO)~~ The first test was only partly successful.

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P.L.  
86-36

HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY



(U) Guardrail aircraft

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[REDACTED]

~~(S-CCO)~~ GUARDRAIL II was a spectacular success.

[REDACTED]

~~(S)~~ Early GUARDRAIL was an Army-specific asset. Despite the fact that air-related intelligence dominated the collection "take," the Air Force participated reluctantly, and then only after considerable prodding at the JCS level. One Air Force problem was survivability. The U-21 was a propeller-driven utility aircraft [REDACTED]

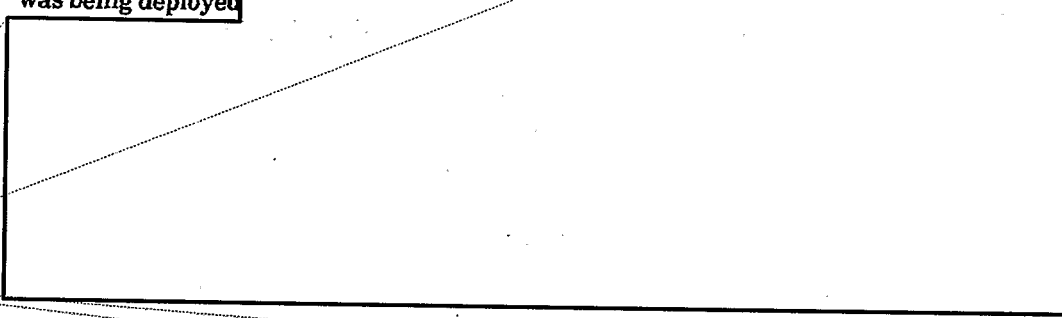
[REDACTED] The U-2 would be a far better platform.<sup>88</sup> It may also have been

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that the Air Force feared Army dominance and wanted to use Air Force money to fund its own systems.

~~(C)~~ GUARDRAIL II became the final system. Even prior to its deployment, the Army, [redacted] and NSA had all agreed that it would be left behind to provide tactical support. There were no plans to fund a production system.<sup>89</sup>

~~(S-CCO)~~ While GUARDRAIL I was being tested [redacted] a separate SIGINT operation was being deployed [redacted]



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P.L.  
86-36

~~(C)~~ This changed radically in 1972. Major General John Morrison proposed an [redacted] to do the same work [redacted] that GUARDRAIL was doing [redacted]. At a stroke, NSA would be satisfying the constant demands of American commanders [redacted] to improve SIGINT support and add a DF capability.<sup>91</sup>

~~(S-CCO)~~ The final system, called GUARDRAIL IV, looked a lot like GUARDRAIL [redacted] but it did not solve the strategic-tactical interface problem. It used U-21s, [redacted]

[redacted] It remained an integral part of the strategic SIGINT system. Once again, the Air Force entered the system reluctantly. Its concerns probably related to a fear that GUARDRAIL IV threatened the continued viability of the RIVET JOINT fleet, rather than to any criticism of the way the program operated technically or conceptually.<sup>92</sup>

**(U) REORGANIZATION**

(U) The war in Vietnam produced wide dissatisfaction with the performance of intelligence. This was in some ways unwarranted. It had performed better than in Korea, and the problems that beset intelligence early in the war were on the way toward solution by the time Richard Nixon became president in 1969. But the perceptions persisted and led to demands for change.

**(U) The Fitzhugh Panel**

(U) When Nixon assumed office, he called for a reexamination of the total Defense effort, appointing a blue ribbon defense panel to recommend changes. The panel conducted the broadest review of the Defense Department since the Hoover Commission of the mid-1950s. Part of that effort was a Panel on Command Control and Defense Intelligence

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

chaired by Gilbert W. Fitzhugh. This committee consisted primarily of industry figures and lawyers and was clearly intended to represent a totally dispassionate view of Defense intelligence.<sup>93</sup>

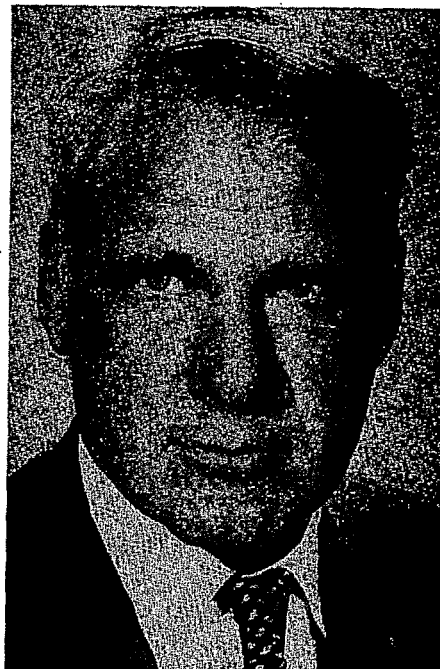
(U) The committee discovered that management was fragmented (not the first time someone had discovered that salient fact), uncoordinated, and not well focused. There appeared to be no effective control of intelligence requirements, a great deal more information was collected than was required, and consumers were overwhelmed by a welter of disjointed reports from all corners of the intelligence structure. DoD had never developed a substantial corps of intelligence professionals. (The only exception appeared to be NSA, which had obtained special legislation.)

(U) Fitzhugh recommended that the Office of the Secretary of Defense focus intelligence management under a single deputy, called the assistant secretary of defense for intelligence. (At the time, intelligence was loaded onto the assistant secretary of defense for administration as an additional duty.) Under him there would be a Defense Security Command (consciously modeled after the NSA structure), which would enjoy broad authority to supervise DIA, NSA, and all other Defense intelligence.<sup>94</sup> Such changes might have been logical but politically fell very wide of the mark. The Fitzhugh Panel had little ultimate influence over the course of actual events.

**(U) The Schlesinger Study**

(U) The Fitzhugh Panel had no sooner submitted its report than the president commissioned another study. But there were differences. This new study, chaired by James Schlesinger, head of OMB, dealt exclusively with intelligence, while Fitzhugh had also looked at command and control. More important, Schlesinger examined all of intelligence, while Fitzhugh had looked only at the Defense Department.<sup>95</sup>

(U) Not surprisingly (considering what job he held), Schlesinger concluded that intelligence centralization could best be effected by giving the DCI broader budget authority. Nixon invested then-DCI Richard Helms with a broad grant of authority to review all governmental intelligence activities in order to rationalize programs and priorities within



(U) James Schlesinger

HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY

the budgetary structure. But Nixon and Helms did not get on, and the president never followed this up with specific authorities for his DCI. Helms was left to study, to coordinate, to cajole, but he was no closer to reigning in the disparate parts of intelligence, particularly those in Defense. He never did get what the Schlesinger study promised him.<sup>96</sup>

(U) Helms did accomplish one thing, however, that had long-range effects. He created a small staff, composed of a cross-section of the intelligence community, to look at the budgets of the respective (and disrespectful) agencies. This staff still existed at Langley in 1973 when Schlesinger became DCI. The new intelligence chief's intentions went awry as he struggled to contain the damage from Watergate by reorganizing CIA, but he definitely intended to grant that staff more power. William Colby, his successor in the job, pushed the status and authority of Schlesinger's small staff, which had become known as the IC (Intelligence Community) Staff. At the time, President Ford issued a new executive order putting teeth in the IC Staff's authority to control the budgets of the warring intelligence agencies, and in 1978 President Carter issued the executive order which gave the DCI "full and exclusive authority for approval of the National Foreign Intelligence Program budget." By then the IC Staff had moved into its own quarters in downtown Washington, and thus attained its own facility, with its own identity.<sup>97</sup>

(U) CSS

(U) The cryptologic reorganization that occurred in the early 1970s was the culmination of two decades of conflict between NSA and the JCS over control of cryptologic assets and operations. As NSA gained more authority and as the cryptologic system became more centralized, Pentagon officials became less and less pleased. A decade of war in Vietnam had produced, among other things, an internal war over cryptology. NSA's attempts in the 1960s to further centralize the business were bitterly opposed within the JCS, which had embarked on efforts to fragment SIGINT by shaving off small areas that they could call by different names (electronic warfare - EW, electronic support measures - ESM, etc.) and rid itself of the codewords that controlled dissemination. By the time James Schlesinger looked at the organization of intelligence, the deep fissures between NSA and the armed services had become almost unbridgeable.

(U) Schlesinger intended to solve the problem for all time, in NSA's favor. Clearly driven by budgetary concerns, he proposed to stamp out any JCS control over, and even involvement in, the SIGINT business. The dispute over the control of cryptology that had continued since the end of World War II would come to an abrupt end.

(U) The "end of the war" came on November 5, 1971, when Richard Nixon announced the conclusions of the Schlesinger Study. Buried in the text of this "Nixon letter" was the announcement that, by the first day of the following year, there would be a "unified National Cryptologic Command" under the director, NSA, for the conduct of United States government communications intelligence and electronic intelligence activities.<sup>98</sup>

(U) And then controversy erupted. What was a National Cryptologic Command (NCC)? What did the president intend it to do, and what were its authorities? Was this really the end of SCA independence? What would the new organization control? What was meant by "command"?

(U) Many, both within NSA and without, felt that it meant the death of the SCAs, and a new organization chart was even prepared showing all service collection activities directly under DIRNSA. One view was that the chief of the NCC would also serve as DIRNSA. In one role he would control the national cryptologic system as before; in the other, he would command the SCAs through the JCS chain of command. Most agreed that the SCA theater headquarters would expire and that their functions would be effectively assumed by existing NSA theater organizations. The opinion of Admiral Gayler counted the most, and Gayler viewed his role as akin to that of a Unified & Specified (U&S) commander, with total control over assets within his purview.

~~(S-CCO)~~ In the Pentagon, near panic ensued. Theoretically, the NCC would control all SIGINT collection. This could include the Navy's VQ squadrons, the Air Force's EC-47, and the Army's U-21 ARDF capability, [redacted] the overhead mission ground stations, tactical ELINT (including the Third Party programs that the Air Force had guarded for so many years) [redacted]. Under its NCC hat, NSA might begin managing Army and Air Force tactical SIGINT programs rendering support to field commanders. At the very least, the struggle to control EW and ESM programs would be resolved in NSA's favor.

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(U) DIA predicted that NSA would swing hard toward satisfying national requirements and would cease paying any attention to the satisfaction of the SIGINT requirements of tactical commanders. The independence of the SCAs would end, and, worst of all, tactical ELINT units would find themselves answering to NSA through the NCC.<sup>99</sup>

~~(S)~~ Within NSA a certain smugness settled in. The war was over, the battle was won, and to the victor belonged the spoils. The spoils consisted of those SIGINT assets that had formerly been controlled by rival factions: primarily the armed services and CIA. As November faded into December, plans were being laid to assume control of the outlying assets that NSA had never owned. This was a big win - a major revolution in the way cryptology was handled.

(U) But things began to go awry even before the end of the year. On December 23, Secretary of Defense Melvin Laird informed Gayler that the new organization would not be a command - it would be called the Central Security Service. Implicit in the new name was a diminished world view. "Services," after all, could not exactly "command." Laird instructed Gayler to come up with an organizational plan and to create the new organization by February 1, 1972, a slippage of one month from Nixon's original deadline.<sup>100</sup>

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(U) Concurrently, a new NSCID 6 was being written. Issued in February of 1972, it gave NSA significant new powers - and failed to give it others that, in the heady days of November 1971, folks at Fort Meade assumed they would get.

(C) The directive officially established CSS, which would be collection oriented, and would "include SIGINT functions previously performed by various Military Departments and other United States governmental elements engaged in SIGINT activities." It did not define these functions, nor did it refer to CIA, which by omission managed to hang onto its SIGINT system. The mobile SIGINT system remained under military control, thus answering one of the biggest questions which had arisen from the Nixon Letter. But in NSA's favor, NSCID 6 resolved the EW issue by placing it under NSA control. And on the administrative front, NSCID 6 gave the director authority over tasking, logistics, research and development, security, and career management of personnel.<sup>101</sup>

(U) Following Laird's decision on December 23, Gayler created a series of internal panels to flesh out the CSS plan. Progress was uneven because no one seemed to agree what it should be or how it should function. Gayler gave the task of managing the disputatious committees to Paul Neff, a World War II cryptologic veteran who had held key positions in NSA's policy councils for many years. Neff's most vital assistants were Major General John Morrison for operations and Frank Austin for training. Much of the action fell into their bailiwicks.<sup>102</sup>

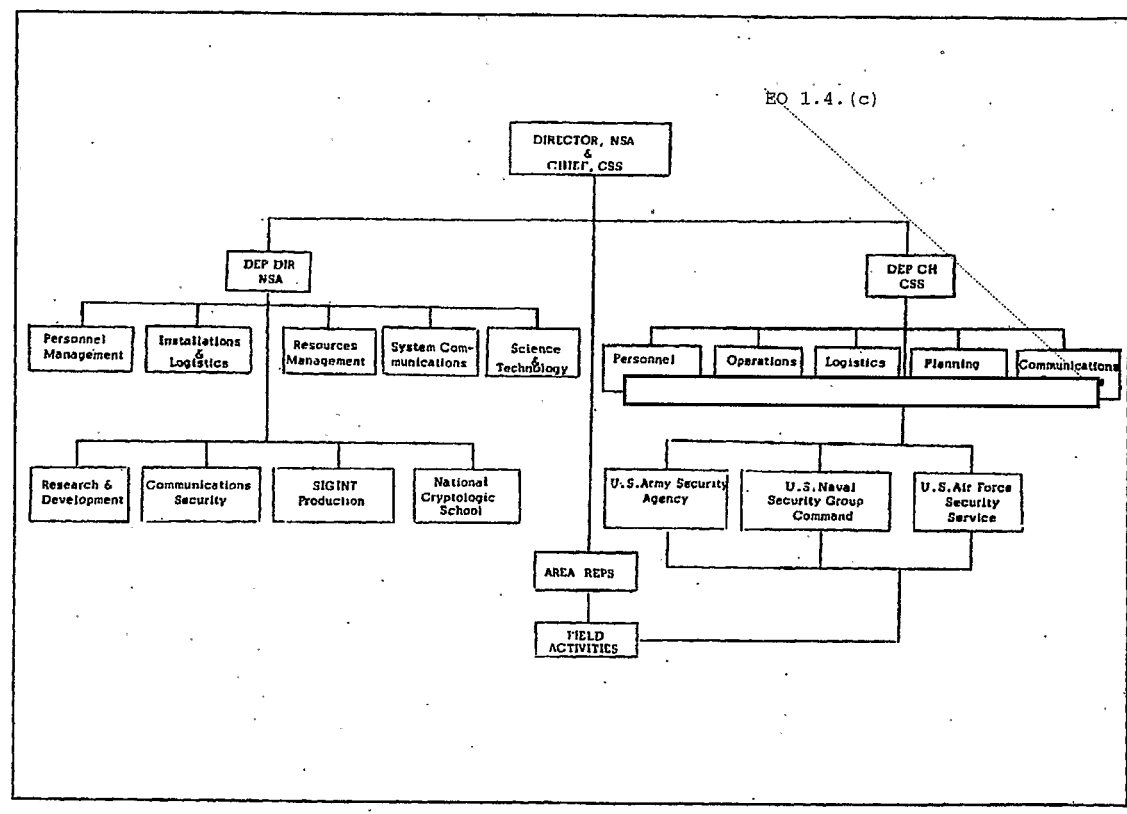
(U) Under severe time constraints (the plan was due to Laird by February 1), the committees solved the easy problems and left the tough ones for later. The new cryptologic system would be unitary, with centralized control and decentralized execution (hardly a new or controversial concept). It would be composed of NSA and the SCAs as they then existed, thus putting off the question of the system acquiring assets then controlled by the JCS and CIA. The SCAs would provide men, equipment, and facilities - CSS would operate the system.

(U) CSS would be headed by DIRNSA in a dual-hat role, and it would be assisted by a staff of its own. Composed of some 205 billets (75 from operations), it looked just like the NSA staff (see Table 7). All the staff heads were dual-hatted with their respective NSA jobs - thus John Morrison was both head of NSA production and chief of CSS operations, while Frank Austin headed NSA's training school and CSS's training organization.<sup>103</sup>

(U) The CSS plan produced serious fissures between Gayler and the SCA commanders, who viewed the new organization as the the death knell of the independent SCAs. So they fought back, and the struggle spilled over into almost every aspect of cryptologic organization. They fought the training plan because the role of training and equipping servicemen for cryptologic duty had always been central to their being. They fought NSA's encroachment into R&D and logistics in direct proportion to the size of their respective staffs in those functions.<sup>104</sup>



(U) Table 7  
NSA/CSS Organizational Structure



FOR OFFICIAL USE ONLY - CONTAINS INFORMATION OF A CONFIDENTIAL NATURE

~~(FOUO)~~ A struggle ensued over cryptologic organization in the theaters. Gayler wanted SCA theater offices to collocate with the senior NSA/CSS headquarters, but eventually agreed that they could collocate instead with the component command headquarters. The senior SCA commander would be responsible for the SCA and CSS functions, and most of his people would do the same. Gayler also wanted component command level CSGs to be NSA elements, and went toe to toe with Major General Carl Stapleton of USAFSS over this issue. Stapleton won, and all component command CSGs became part of their parent SCA. The chief was the senior SCA representative in the theater.<sup>105</sup>



(U) Major General Carl Stapleton

(U) They enlisted U&S commanders to defend their interests. Admiral McCain, CINCPAC (which would soon become Admiral Gayler's own command), predicted the beginning of the end of responsive SIGINT support:

In summary, the proposed plan is viewed as placing in concrete the sterile, inherently unresponsive centralization philosophy to which field commanders have so long been opposed. The centralization of SIGINT has not been tested in a major conflict. The concentration of analytical functions at the national level will soon cause a decline in the ability of the uniformed cryptologic activities to function responsibly in a support role in combat operations especially when access to a national database is denied and integration with other intelligence data is vital. The proposal is a long step backward in the Armed Services quest for more responsive intelligence....<sup>106</sup>

~~(C)~~ The most contentious issues related to resources, and it was here that NSA had eyes bigger than its stomach. In the first heady days of CSS planning, many in the Agency envisioned swallowing every SIGINT collection asset worldwide, the theater ELINT centers, and even scientific and technical centers like the Air Force's Foreign Technology Division.

~~(S)~~ In April of 1972, Admiral Gayler convened a panel (which he himself chaired) to survey the field. The most cursory study revealed a very wide field indeed. For instance, NSA discovered that [redacted] had ELINT collection gear, [redacted] [redacted] The list of CIA sites was very long, and the theater ELINT centers were very well-entrenched tactical assets.

~~(C)~~ When the smoke cleared from the battlefield, NSA had won operational control over some of the assets under contention, most notably Air Force SIGINT platforms doing national jobs. But theater ELINT centers remained under theater control; programs designed for purely tactical jobs stayed with their parent services; the Navy held onto its

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entire fleet of airborne SIGINT reconnaissance aircraft; and the Army kept its electronic warfare companies. CIA assets were not even filtered into the mix, and NSA's relationship with Langley remained on hold.<sup>107</sup> When confronted with determined service opposition, Gayler had elected to smooth the waters.

(U) One of the key aspects of the CSS reorganization was to collocate the headquarters at Fort Meade, and a new DIRNSA, General Samuel Phillips, began looking at this in the fall of 1972. The move was superficially attractive because of the money that could be saved, and it would certainly permit further dual-hatting of SCA and NSA staffs. The idea did not begin to burn itself out until a study group quantified the amount of space needed: 550,000 square feet, to be exact, at a cost of \$30 million. NSA, chronically short of space, was busy expanding into the Baltimore suburbs and could offer no space to the SCEs. It might be possible to get some office space on Fort Meade from 1st Army, but it was still inadequate, even if it could have been converted into cryptologic work space (a very doubtful proposition indeed). So the idea was virtually dead anyway when Major General Stapleton confronted Phillips with the most determined opposition that any aspect of CSS had faced. It was obvious that the Air Force would never agree, and the plan was dropped.<sup>108</sup> As Phillips later said, rather laconically, in a message to the theater cryptologic chiefs, "... there is specific and determined opposition by the SCA chiefs to such collocation. It is the expressed view of the SCA chiefs that proximity to their service headquarters is more important than collocation with NSA/CSS."<sup>109</sup> It was the understatement of the year.

(U) At the Defense Department, Dr. Albert Hall told his chief of resources management, Lieutenant General Phillip Davidson, to keep watch over the implementation of CSS. By January of 1973, Davidson's watchdog, Robert E. "Red" Morrison, was ready to throw in the towel. Morrison wrote to Hall that the CSS staff concept had not worked. Agency employees had not accepted the dual-hat idea and were not ready to relinquish their carefully garnered authority. According to Morrison, "... the 'dual-hat' concept has served mainly as a way to keep the status quo." NSA had never transferred authority over tactical SIGINT assets to CSS, and field commanders had reciprocated with suspicion and mistrust of the CSS mechanism. CSS had cost NSA over 200 billets and had produced nothing in return.

(U) At NSA, Sam Phillips had seen enough. Lacking any semblance of DoD support, and unwilling to make the drastic changes in CSS authority that would be necessary to keep the concept functioning, Phillips killed it. The date of death was listed as April 16, 1973. On that date, Phillips eliminated the CSS staff, transferring authority instead to a new deputy director for field management and evaluation (DDF), who also became deputy chief, CSS. He dropped the idea of dual-hatting and instead transferred authority for CSS activities to existing NSA positions, elevating them at the same time to deputy director status. Thus assistant director for production became deputy director for operations, communications security became ruled by a deputy director, and Phillips created the post of deputy director for research and engineering, with authority over both NSA and SCA

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research efforts. Other staff chiefs were elevated to assistant directors; all had additional responsibilities for CSS management.<sup>110</sup>

(U) In 1976, when a new director, Lew Allen, went looking for CSS, he found only a paper organization. Associated with CSS, his resource people could find only General Allen himself (he was named on paper as chief of CSS); the DDF incumbent, who served as the deputy CSS; and a military staff of fewer than ten people.<sup>111</sup>

(U) The CSS exercise benefited the cryptologic system by further centralizing such functions as research and development, personnel administration, and certain aspects of logistics. In these areas, NSA's staff authority expanded into areas that were of common concern to NSA and the services. The biggest changes were in training, where Frank Austin, the dynamic leader of the National Cryptologic School, presided over a long-term centralization of training functions, and a rationalization of the system to the point where the individual SCAs served as executive agents to separate aspects of a now-joint training system. And, though the meetings were often stormy, the SCA chiefs were brought into closer contact with Gayler and his staff. Gayler institutionalized this into Wednesday morning breakfasts with his SCA chiefs, and thus brought a more direct and personal atmosphere into what had been a remote and long-distance relationship.<sup>112</sup>

(U) So in certain respects, the addition of "CSS" to the NSA logo marked a permanent change in the way business was done. But the larger changes that had been so keenly anticipated in the fall of 1971 would have required steamroller tactics worthy of Brownell at his best. The JCS had been bested by Brownell in 1952 because he had the backing of the president. Twenty years later the president was not engaged, and the JCS won.<sup>113</sup>

#### **(U) *The Murphy Commission***

(U) The period following the Vietnam War was extraordinarily fruitful with reorganization studies. Those which touched cryptology bent the process in a new direction. One such was the Murphy Commission.

(U) The Murphy Commission was set up by Congress rather than by the president. Its main purpose was to examine the process by which American foreign policy was set. The chairman, former ambassador Robert D. Murphy (then chairman of Corning Glass), was to report back to Congress by June 1975. Murphy was looking at foreign policy at a time when Henry Kissinger occupied positions as both secretary of state and national security advisor, and perhaps this was the reason that Murphy concentrated on national security and intelligence issues. Of the four subcommittees, the one on national security and intelligence, chaired by Murphy himself, dealt with NSA.

(U) It was hardly surprising that Murphy should echo the climate of the times. Following Schlesinger (and a host of others before him), he recommended splitting the job of DCI into two people - the political advisor to the president should work downtown, while the administrator of CIA, who would be his deputy, would manage the agency itself. He advocated giving the DCI further control over the intelligence budget (meaning, in

essence, authority over the Defense component thereof). And he predictably proclaimed that the secretary of state and national security advisor roles should never again reside in the same person.

(U) As for NSA, Murphy remarked rather quizzically that NSA was the only national cryptologic agency in the West that reported through the defense rather than the foreign affairs institution. This tended to bias the satisfaction of requirements in favor of military needs. But, having examined the pros and cons of that arrangement, Murphy opted to leave cryptology within Defense. He recommended, however, that the Agency report to an executive committee composed of the DCI and the assistant secretary of defense for intelligence, to broaden its responsiveness. Moreover, he favored changing the rule by which the director be strictly a military officer. The rule, he felt, should be the same as at CIA - civilian or military did not matter as long as the director and his or her deputy were not both military officers.

(U) The key thrust of the Murphy report, however, was in the direction of further centralization of the process. The SCAs should be abolished, and NSA should take on the job of cryptology unhindered and unassisted. This would at once simplify the process and eliminate the bickering that had characterized NSA-SCA relationships since the day NSA was established.<sup>114</sup>

**(U) The Hermann Study**

(U) In the long run, the most influential study was one that was not even completed, let alone published and promulgated. In 1975 Dr. Robert Hermann asked Lew Allen for the opportunity to study SIGINT support to military commanders. Hermann formed a committee of just three people: himself, [redacted] and William Black. Together, they formulated an elegant and timeless statement of the problem that confronted cryptologic organization.

P.L. 86-36

(U) To Hermann, the central dilemma emanated from the abortive establishment of CSS. NSA had been given theoretical control of the complete cryptologic process by which military commanders obtained cryptologic support, but the enforcement mechanism had never been implemented.

The most recent NSCID-6 . . . provided for very broad NSA responsibilities and authorities well beyond present practices. . . the 1971 Presidential Memorandum from which the directive was written specifically includes 'tactical intelligence' within the scope of the national level responsibility. However, *the Presidential memorandum and NSCID-6 are not being enforced and are probably not enforceable.* . . . The political forces which generated NSCID-6 did not develop the near term enforcement means necessary to persuade an unwilling management structure. . . . This has been a major cause of stagnation in the development of adequate SIGINT support to military operations as well as inhibiting the general development of SIGINT support for other purposes. . . . [Emphasis added]<sup>115</sup>

~~(FOUO)~~ Hermann pointed to a cascade of changes to the SIGINT system which had irreversibly altered the way business was done. He referred to an "electronic explosion" in

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

the signals environment which tactical commanders were increasingly occupied with and were exploiting to their own advantage. Electronic warfare, electronic support measures, and other terms were being applied to signals in order to get them out from behind the codewords that restrained their dissemination and exploitation. According to Hermann, "The notion that all 'SIGINT' activity is naturally a part of a coherent SIGINT system organized separately to support all national interests and organizations at every echelon is probably unsound. SIGINT is clearly not the most natural primary management dimension for an increasing number of activities." While NSA held to the rigid codeword protection mechanisms that had been built up since 1952, these barriers were becoming increasingly anachronistic. The SCAs, confronted with a two-way tug on their loyalties, increasingly opted for allegiance to their own services. They no longer hungered to expand the large field site system, no longer viewed their future as lying within a national cryptologic structure. According to the study, "... the traditional role of the SCA as the field collection arm of the national SIGINT system is eroding and is even now, not a viable mission."

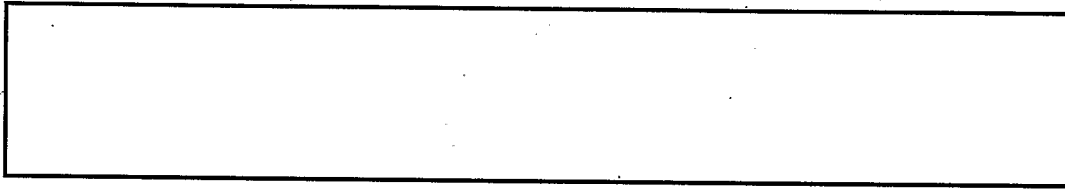
~~(FOUO)~~ To solve the dilemma, Hermann recommended a revolutionary strategy. The SCAs should cease being cryptologic agencies and should become what he called Service Signal Warfare Agencies (SSWAs). They should be integrated with the commands they supported, and their main job would be to provide signal warfare functions such as ECM, ECCM, tactical SIGINT/electronic support measures, MIJI (meaconing, intrusion, jamming, or interference), and radar surveillance. Except in unusual cases, they would no longer staff large fixed sites.

~~(S)~~ The existing classification system should be completely scrapped. According to Hermann, "... we now provide SI, TK, or EARPOP protection for sources that we no longer hold to be sufficiently sensitive to require these caveats. The reason for protection is historical not deliberate." Cryptologists had cast aside the fine gradations which had evolved during World War II to permit wider dissemination of less-sensitive SIGINT and more restrictive handling of the products of cryptanalysis. In effect, everything was handled at a minimum Category II level, and the advantages of the World War II Y Service system had been lost. He pointed to the handling of clear text speech intercept (then normally protected as Category II material) as an example of how not to protect information. Other sources [redacted] were scarcely more sensitive. Signals externals should not be held in COMINT channels unless clear justification was provided.

~~(S)~~ Even more radical was his proposal for the handling of TK information. According to the study, "There is very little justification today for providing SI access without TK. There is no justification for providing TK SIGINT access without Byeman access." (The Byeman compartment was created to protect technical and contractual details of overhead systems.) The study proposed that overhead SIGINT should be completely removed from the TK compartment and should be handled as ordinary SIGINT information and that Byeman should be eliminated except as it related to the relationship with contractors.

~~(S-CCO)~~ Hermann recommended new initiatives for SIGINT support to NATO, long a cryptologic planning backwater. [redacted]

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~



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~~(S-CCO)~~ The planning group was keenly aware of the developing gulf between SIGINT available in the field and that available at NSA [redacted]

[redacted] Because of processing mechanisms and dissemination restrictions, information of vital concern to the field commander piled up at NSA. This was being compounded by the accelerating dominance of overhead SIGINT. Even large field sites were becoming increasingly irrelevant unless the information they produced was combined (at NSA) with overhead [redacted]. In most cases the tactical commander was not even aware of the existence of this information.

~~(S)~~ Though he had no solutions, Hermann did articulate the dilemma and recommended that a mechanism be established to provide field commanders with support from national systems. That mechanism would necessarily involve more direct NSA control of overhead SIGINT resources, and Hermann recommended that the director take full control of SIGINT satellites in order to facilitate support to field commanders. This was an issue of hot dispute, and Hermann himself opposed this proposal when NSA placed it on his desk in the 1980s, when he was then director of the National Reconnaissance Office.

(U) According to Hermann, NSA should develop a strong planning office for support to military operations. Not only should it be centralized, but it should begin directing the entire process, rather than simply reviewing work already done by the SCAs.

~~(S)~~ Following the study, Hermann himself went off to NATO to serve as a special assistant to SACEUR for intelligence support planning. The rudiments of the existing system of SIGINT support to NATO owe much to his planning. Although he never returned to NSA, his ideas lived on, and most were eventually implemented. NSA soon had an office that did support military operations, as Hermann had recommended. The idea of establishing a planning function to improve national support to tactical commanders got off the ground the next year, officially initiated by a memo from George Bush (then the DCI) to the secretary of defense. It became known as TENCAP. The SCAs eventually evolved into organizations more akin to what Hermann had recommended - more attuned to tactical support in all modes of the signals spectrum, less inclined to staff large fieldsites at NSA's bidding. The boundaries between SI and TK crumbled, and eventually, though the TK compartment held up, everyone involved in national-level cryptology had the clearance. The SIGINT compartment system was not changed significantly. Though proposal followed proposal, especially relating to eliminating the codeword protection for reports based on plaintext voice intercept, the Cold War ended with the restrictions still in place.<sup>116</sup>

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

**(U) The Ursano Study**

(U) Robert Hermann's thinking dovetailed nicely with the direction that the Army was moving. That direction came out in very stark terms in 1975 as a result of the Intelligence Organization and Stationing Study (IOSS).

(U) IOSS resulted from a memo from the secretary of the army, Howard Callaway, to Army chief of staff Frederick Weyand in late 1974. Commenting about Army intelligence, Callaway said, "We maintain considerable information which is of questionable value and seldom used," a fact that "really makes me wonder about how much money we are wasting and raises serious questions as to the cost-effectiveness of our intelligence system." What was on Callaway's mind was apparently money. The Army was continuing to take monstrous post-Vietnam cuts, and Callaway was looking at intelligence as a place to save money.<sup>117</sup>

(U) The man Weyand appointed to study the issue, Major General James J. Ursano, was unencumbered by any experience with, or knowledge of, the intelligence function. At the time, he was Weyand's director for management. His study group was not very high powered, nor did it contain much expertise in the discipline.<sup>118</sup> It was a completely outsider's look.



**(U) Major General James J. Ursano**



(U) It did not take long for the Ursano group to find out how fragmented and overlapping Army intelligence really was. Intelligence production was being carried out by a vast welter of rival organizations with competing agendas. The Army expended much effort toward HUMINT and comparatively little on SIGINT, which was found to be isolated and neglected. ASA came under severe criticism. Since the creation of CSS, ASA amounted only to another bureaucratic layer. The elimination of its field headquarters in both the Pacific and Europe gave it an unmanageable span of control. It devoted too much of its effort to field station operations, too little to tactical support. It had monopolized electronic warfare and held everything under a cloak of secrecy which inhibited real tactical support. In the field, the Army G2 had to manage two separate intelligence systems, SIGINT and everything else, and staff to integrate the two sides was in short supply.<sup>119</sup>

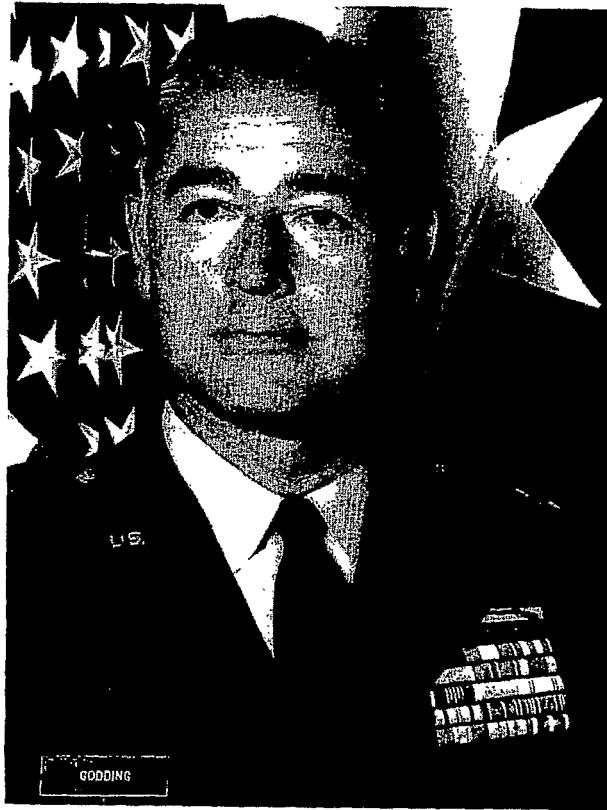
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(U) Ursano looked at the vertical cryptologic command line which had been instituted following World War II and which had been reinforced with every subsequent study of Army intelligence. For once, someone took the opposite tack. Verticality must end, and ASA must rejoin the Army.<sup>120</sup>

(U) Ursano's central and most important recommendation was to dismantle ASA. A new organization would be created, called INSCOM (Intelligence and Security Command), which would integrate all Army intelligence functions. Combining SIGINT and HUMINT, Ursano recommended the amalgamation of USAINTA (U.S. Army Intelligence Agency) with strategic SIGINT. INSCOM would continue to manage [redacted] field stations, to supply billets to NSA and other centralized cryptologic activities, and to provide SIGINT support to echelons above corps. Tactical assets (corps and below) would join the supported command echelon.

~~(S-CCO)~~ INSCOM would be an interesting mix of SIGINT, HUMINT, and counterintelligence organizations. Joining the new command would be the military intelligence groups [redacted] and to this were added groups in CONUS (CONUS MI Group) [redacted] TAREX, which had existed as a SIGINT-related effort since the waning days of World War II, would join the intelligence groups. There would be a unified Intelligence and Threat Analysis Center (ITAC) for all-source analysis. But, in sum, the new organization would be considerably smaller than ASA had been, primarily because of the loss of the tactical units. Training functions would be absorbed by other commands, and the training school at Fort Devens would belong to the Army Intelligence Center and School at Fort Huachuca, Arizona.<sup>121</sup>

(U) To virtually no one's surprise, Major General George Godding, the incumbent ASA commander, opposed the dissolution of his agency. Godding's reasoning, however, should have sounded bells somewhere in the Army staff. ASA should be retained because of the unique cryptologic expertise which had been developed and nurtured over a period of many years. Ursano's solution ignored that aspect of the problem.<sup>122</sup>



(U) Major General George Godding

(U) The proposals caught NSA seemingly by surprise. When routed for comments, the Ursano proposals elicited little reaction. Each staff element viewed the problem from its own very narrow perspective, and each concluded that the matter was an Army problem, not one which should interest NSA. At the Directorate level, Norman Boardman of the director's policy staff understood the implications: "It is our general feeling that the loading of all army intelligence, security, and EW functions onto ASA, with a new name, and the stripping of specialized support functions . . . can do nothing but downgrade the quality and timeliness of SIGINT support to the army and army tactical commanders. . . ." <sup>123</sup> But NSA did not take a hard line, and its response to the Ursano proposals was less than warlike. And so INSCOM officially came into existence on January 1, 1977, without NSA having taken a strong stand one way or the other.

~~(S-CCQ)~~ When Vice Admiral Bobby Inman became director in July of 1977, he hit the roof. Noting that the CSS concept assumed central control of cryptologic assets, and that ASA was the organization that was to control the Army's component to that structure, he pointed out acerbically that divestiture of cryptologic assets at corps and below abrogated that agreement and fragmented the system. Moreover, cryptologic training, considered an

essential aspect of maintaining a skilled cryptologic work force, had been removed from INSCOM's authority. TAREX, formerly an exclusive cryptologic preserve, now appeared to be a SIGINT-HUMINT amalgam. "Throughout the plan SIGINT operational relationships and functions are described that impact directly on NSA/CSS. These relationships and functions have not been coordinated with this Agency." <sup>124</sup> In fact, they had been coordinated - but with Lew Allen, not with Inman. And that train was much too far down the track for one angry admiral to turn it around.

(U) The central problem of the INSCOM decision was one of expertise. The Army no longer had a unique cryptologic organization. It had been diluted by other disciplines and other interests. The cryptologic focus was lost and was replaced by a picture gone all dim and mushy. To participate in cryptology, the Army would have had to increase its emphasis on technical specialization. It chose to go the other direction.

**(U) The Creation of ESC**

~~(C)~~ In its own way, the Air Force chose the same path, but at a slower rate. The Air Force Security Service had begun to lose its SIGINT focus in the late 1960s. When the Air Force Special Communications Center (AFSCC) SIGINT mission was moved to NSA in 1968, the organization survived by acquiring a new role. The mission, straight out of Vietnam, was to do electronic warfare analysis of tactical combat. Such analysis involved a variety of analytic skills, of which SIGINT was the largest component and was thus a natural for USAFSS. AFSCC could employ all the SIGINT and COMSEC skills of a seasoned work force in a new role of direct concern to Air Force commanders.

(U) As the command shrank in size during the 1970s, the electronic warfare analysis being done in AFSCC grew proportionately larger. Like ASA, USAFSS slowly eased out of the business of providing manpower to large fixed sites. Security Service sites which survived became smaller, and the command began shedding its management of air bases around the world. In 1978, USAFSS gave away its last remaining bases to other Air Force commands: Goodfellow AFB went to Air Training Command, [redacted]

[redacted] were turned over to USAFE, and PACAF began managing [redacted] With its intermediate headquarters in Germany and Hawaii closed, the command ended the decade with just under 12,000 people, down from a peak size of over 28,000. <sup>125</sup>

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~~(C)~~ General Lew Allen, who had become Air Force chief of staff, was intensely unhappy with the Air Force approach to, and use of, electronic warfare. His experience as DIRNSA had taught him how SIGINT could affect the modern battlefield. He had an especially keen appreciation for TEABALL, the command and control facility that had operated so effectively in Southeast Asia based on SIGINT support, and he wanted the new organization to create other such mechanisms. So he formed a high-level steering group to look at the problem. <sup>126</sup>

(U) In April of 1978 the Air Force announced that it would disestablish Security Service and consolidate intelligence functions within a new intelligence center at Kelly Air Force Base. This would involve USAFSS, the Foreign Technology Division at Wright-

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Patterson Air Force Base in Ohio, AFTAC (which monitored nuclear testing around the world), and Air Force Intelligence Service. The concept was clear, but the details were fuzzy; the affected organizations spent the summer thrashing out the implementation.<sup>126</sup>

(U) The grand Air Force Intelligence Center study became subsumed under two other high priority Air Force concerns: how to organize electronic warfare and what to do with a growing responsibility called C3CM (command, control, and communications countermeasures). All three functions were closely related, and Allen wanted an organization that combined all three. As it happened, USAFSS had the majority role in intelligence and C3CM and was a major player in electronic warfare. So whatever happened would surely center on the USAFSS complex at Kelly AFB.

(U) In January of 1979 a general officers board recommended to Allen that, not surprisingly, a new electronic warfare command be created, and that it be composed of all three USAFSS missions. Like ASA, USAFSS would continue as a major command. Unlike ASA, however, it would not swallow the other intelligence disciplines, at least not yet. USAFSS reopened its doors in August of 1979 under a new name, Electronic Security Command. Its commander, Major General Doyle Larson, was known to be a Lew Allen confidant. When he appointed Larson, Allen told him *not* to emulate INSCOM, but to insure that all elements of electronic combat were integrated into a single structure. Together, they were moving the Air Force away from a major role in cryptology, toward a closer tie with Air Force tactical combat.<sup>127</sup>



(U) Major General Doyle Larson

### Notes

1. (U) Deputy Director (DDIR), NSA, correspondence files, NSA retired records, 96026, box 1, part 2, Overview of Soviet Cryptology.
2. (U) NSA, *Quarterly Management Report (QMR)*, FY 1980, 2nd Quarter.
3. (U) Robert J. Hanyok, "Scaling Down NSA," *NSA Newsletter*, January 1995.
4. (U) *QMR*, 93/2, 5.
5. (U) *QMR*, 80/1.
6. (U) CCH Series VII.H.61.2.
7. (U) Interview, General (USAF, Ret.) Lew Allen, 17 June 1996, by Tom Johnson, OH 29-96, NSA.
8. (U) CCH Series XII.H.19.
9. (U) Interview William T. Kvetkas, 10/17 July, 17 Aug 1996, by Tom Johnson., OH 25-96, NSA.
10. (U) CCH Series XII.H.19.
11. (U) CCH Series XII.H.19; NSA Archives acc nr 27210, CBOK 68.  
[Redacted]
13. (U) NSA retired records, 44699, 84-228.
14. (U) Interview, Colonel Cecil B. Fulford, 23 November 1987, by Robert D. Farley and Tom Johnson, OH 30-87, NSA.
15. (U) NSA retired records 44669, 84-228; NSA Archives acc nr 27263, CBUB 11.
16. (U) Fulford interview; NSA retired records 44669, 84-228.
17. (U) Ibid.  
[Redacted]
19. (U) NSA retired records 10017, 83-473; 44669, 84-228 [Redacted] "A Historical Overview."  
[Redacted]
21. (U) NSA retired records, 44670, 77-397.
22. (U) Ibid.  
[Redacted]
24. (U) NSA retired records, 44760, 74-295; Allen interview; Williams interview.
25. (U) NSA retired records, 28515, 84-245.
26. (U) National Security Files, Gerald R. Ford Presidential Library, Ann Arbor, Michigan, in CCH Series XVI.H., "Southeast Asia/Vietnam/Cambodia"; CCH Series VI.HH.26.15.  
[Redacted]
28. (U) Interview [Redacted] 23 December 1992, by Charles Baker and Tom Johnson, OH 8-92, NSA.

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P.L. 86-36

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

29. (U) [redacted] interview.

[redacted]

31. (U) CCH Series VII.Q.1.15 [redacted] "A Chronology of Significant Events in the History of Electronic Security Command, 1948-1988, command history available in CCH Series X.J.

[redacted]

33. (U) [redacted] et al., "A Chronology."

34. (U) "A History of the USAFSS Airborne SIGINT Reconnaissance Program (ASRP), 1950-1977," 20 September 1977, available in CCH Series X.J; Interview, Gordon W. Sommers, by [redacted] and James E. Pierson, January 1990, available at Air Intelligence Agency, San Antonio, Texas; [redacted] et al., "A Chronology."

35. (U) NSA Archives, acc nr 33631, H01-0108-3.

36. (U) Ibid.

37. (U) Ibid.

38. (U) Ibid.

[redacted]

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42. (U) Interview, Dr. Robert J. Hermann, 2 September 1994, by Tom Johnson, OH 45-94, NSA.

[redacted]

44. (U) Ibid.

45. (U) NSA Archives, acc nr 31614, H0-1-0308-5.

[redacted]

47. (U) NSA Archives, acc nr 31614, H01-0308-5.

48. (U) [redacted] Task Force Report, 10 December 1973, in CCH Series VI.BB.1.4

49. (U) NSA Archives acc nr 32545, H01-0101-2.

50. (U) Ibid.

51. (U) [redacted] Task Force Report.

52. (U) Ibid.

53. (U) Ibid.

54. (U) NSA retired records, 44959, 80-302.

55. (U) Ibid.

[redacted]

57. (U) Ibid.

58. (U) Ibid.

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

[Redacted]

60. (U) [Redacted] interview.

[Redacted]

67. (U) NSA Archives, acc nr 12163, G12-0601-3.

68. (U) Interview [Redacted] 19 February 1997, by Tom Johnson; Files in possession of Mr. [Redacted]

69. (U) [Redacted] interview.

70. (U) NSA retired records, 44959, 80-302.

71. (U) Ibid.

[Redacted]

73. (U) [Redacted] et al., "A Chronology"; NSA retired records, 44959, 80-302.

EO 1.4.(c)  
P.L. 86-36

74. (U) NSA Archives, acc nr 39074, H02-0103-5.

[Redacted]

76. (U) NSA retired records, 44959, 80-302; NSA Archives, 34420Z, H0-1-0109-6; Interview [Redacted] by Tom Johnson, 19 February 1997, OH 4-97.

77. (U) NSA retired records 44959, 80-302.

78. (U) NSA Archives acc nr 18802, CBTH 77; Interview, Richard L. Bernard, by Tom Johnson, 4 June 1996 and 13 January 1997, OH 15-94, NSA.

79. (U) Ibid.

80. (U) NSA Archives, acc nr 4200, CBUD 78; Bernard interview.

81. (U) [Redacted] NSA Archives acc nr 18802, CBTH 77; NSA retired records 44959, 80-302.

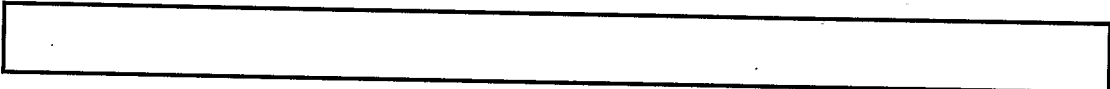
82. (U) NSA Archives 22965, H18-0104-3.

83. (U) NSA Archives acc nr 16514, CBRG 35.



84. (U) [Redacted] "Guardrail: A Joint Tactical SIGINT Support System," *Cryptologic Spectrum*, Spring 1975, 15-18.

[Redacted]

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~



EO 1.4.(c)  
P.L. 86-36

87. (U) Fact sheet, undated, NSA Archives.
88. (U) NSA Archives, acc nr 16524, CBRG 36; acc nr 2737, CBUC 73.
89. (U) CCH Series XI.R; NSA Archives acc nr 16524, CBRG 37; acc nr 2737, CBUC 73.
90. (U) NSA Archives acc nr 16512, CBRG 35; acc nr 16512, CBRG 51; acc nr 2897, CBUC 52.
91. (U) NSA Archives, acc nr 2737, CBUC 73.
92. (U) NSA Archives, acc nr 167524, CBRG 36; acc nr 18970, CBTB 48.
93. (U) "Report of the Blue Ribbon Defense Panel [the Fitzhugh Panel report]," 1 July 1970, in CCH Series VIC.1.31.
94. (U) Ibid.
95. (U) Thomas Powers, *The Man Who Kept the Secrets: Richard Helms and the CIA* (New York: Alfred A. Knopf, 1979), 207-08. S. D. Breckenridge, *The CIA and the U.S. Intelligence System* (Boulder, CO: Westview Press, 1986), 59-61.
96. (U) Breckenridge, 59-61.
97. (U) Interview, Donald M. Showers (RADM, USN, Ret.), by  5 May 1992; Breckenridge, 61.
98. (U) The Creation of Central Security Service - Background papers and memo files, in CCH Series VI.QQ.1.1-1.5.
99. (U) Ibid.
100. (U) Ibid.
101. (U) Ibid.
102. (U) Interview, John R. Harney, by Robert D. Farley and Tom Johnson, 17 December 1987, Oral History 32-87, NSA.
103. (U) *The Creation of Central Security Service*. . . .
104. (U) Interview, Carl W. Stapleton (Maj Gen, USAF, Ret.), by Lt Col William H. Buchholtz, unk date in 1986, USAFSS interview available at AIA, Kelly AFB, San Antonio.
105. (U) *The Creation of Central Security Service*. . . .; Stapleton interview.
106. (U) *The Creation of Central Security Service* . . . .
107. (U) Ibid.
108. (U) CCH Series VIII.H.48; *The Creation of Central Security Service*. . . .; Interview, Gordon W. Sommers, by  and James E. Pierson, January 1990, available at AIA, Kelly AFB, Texas.
109. (U) DIRNSA msg 10 Nov 1972 in CCH Series XII.H.48.
110. (U) CCH Series XII.H.48.
111. (U) Ibid.
112. (U) Harney interview; CCH Series XII.H.48; Stapleton interview.

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~



~~TOP SECRET UMBRA~~

113. (U) The DIRNSA, VADM Noel Gayler, was also hoping for a fourth star, and was loathe to jeopardize advancement by seriously tangling with his potential benefactors, according to Major General Carl Stapleton; See Stapleton interview.
114. (U) Murphy Commission Report, Committee II - Intelligence, in CCH Series VI.C.1.23; Ray S. Cline, *The CIA Under Reagan, Bush and Casey* (Washington, D.C.: Acropolis Books, 1981), 261-62.
115. (U) "SIGINT Support to Military Operations" [the Hermann Study], 28 April 1975, in NSA records center 28792, 80-079.
116. (U) Hermann study; Interview, Robert J. Hermann, by Tom Johnson and Charles Baker, 2 September 1994, OH 45-94, NSA; Tencap information is from Angelo Codevilla, *Informing Statecraft: Intelligence for a New Century* (New York: The Free Press, 1992), 118-19.
117. (U) CCH Series XII.H.57.2; Callaway quote is from draft chapter 10 of a forthcoming history of Army intelligence, a joint Center for Military History-INSCOM project.
118. (U) CCH Series XII.H.57.2.
119. (U) Jack Finnegan, "IOSS And After," unpublished manuscript in HQ INSCOM files, 1987.
120. (U) Draft Army history.
121. (U) Finnegan, "IOSS And After."
122. (U) CCH Series XII.H.57.2
123. (U) Ibid.
124. (U) Ibid.
125. (U) "History of the Electronic Security Command, 1 January - 31 December 1979," available at AIA, Kelly AFB, Texas. Holub, et al., "A Chronology of Significant Events...."
126. (U) "History of the Electronic Security Command, 1 January-31 December 1979."
127. (U) Sommers interview, "History of the Electronic Security Command, 1 January-31 December 1979." Interview, Doyle Larson (Maj Gen, USAF, Ret), by Tom Johnson, OH 15-97, NSA.

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

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## (U) Chapter 16

### Cryptology and the Watergate Era

#### (U) BACKGROUND TO SCANDAL

(U) The greatest political scandal in American history originated with an obscure note in the Metro section of the *Washington Post* on Sunday, June 18, 1972. In it, two Metro section reporters, Bob Woodward and Carl Bernstein, covered what appeared to be an amateurish break-in at the Democratic National Headquarters in the Watergate Hotel in downtown Washington.

(U) The Nixon administration managed to cover over the political effects of the break-in until after the elections in November. But when Congress returned in January, it was ready to investigate. In February 1973, the Senate voted to establish a Select Committee, commonly referred to as the Ervin Committee after Senator Sam Ervin, Democratic senator from North Carolina, to hold hearings. At the time, no one associated with the committee knew where they would get information, since the administration was keeping a tight lip, and the Watergate burglars weren't talking. But on March 23, one of the burglars, James McCord, turned state's evidence. The federal judge, John Sirica, had been pressuring the defendants by threatening lengthy prison terms if they did not cooperate. Now McCord was cooperating, and the entire thing began to unravel. The president, concerned with getting on with his second term, tried to shush the whole thing.



(U) President Nixon and his inner circle, 1973

(U) The scandal, of course, would not shush. Instead, it mushroomed, swallowing first Nixon's White House staff, then much of his cabinet, and finally the president himself. On August 8, 1974, Nixon resigned and Gerald Ford moved into the White House.

(U) In a real sense, Watergate resulted from Vietnam. President Nixon was obsessed with the disorder and demonstrations that hurled the Johnson administration down and

played a large role in the defeat of Hubert Humphrey in 1968. One of the central incidents of the disorderly 1960s was Daniel Ellsberg's decision to publish a collection of the Johnson administration's papers on the war, which came to be known as the Pentagon Papers. Nixon ordered an investigation of Ellsberg, and two of his White House confidants, Egil "Bud" Krogh and David Young, put together a clandestine unit, which they called the "Plumbers" because the objective was to plug leaks. The group obtained the assistance of White House Special Counsel Charles Colson, who brought in some experts in clandestine surveillance formerly from CIA and FBI, among them Howard Hunt and G. Gordon Liddy. The Plumbers broke into the office of Ellsberg's psychiatrist, Lewis Fielding. The unit itself was eventually disbanded, but the individuals were retained by the Committee to Re-Elect the President (CREEP), and they eventually bugged the office of Lawrence O'Brien, chairman of the Democratic National Committee, in the Watergate complex.<sup>1</sup>

~~(TS-TK)~~ For a time, cryptology was a bystander in this turmoil, but the antiwar demonstrations eventually touched NSA's business. In 1966, Stanford University students picketed Stanford Electronic Laboratories, where Lockheed Missile and Space Corporation (LMSC) was designing [redacted] satellite payloads. When students occupied the building, James DeBroekert of LMSC smuggled one of the payloads out of the building, through Moffett Naval Air Station and over to Building 190 where the rest of the Lockheed [redacted] effort resided. This very close call [redacted] had a happy ending only because the students never really knew what they were picketing.<sup>2</sup>

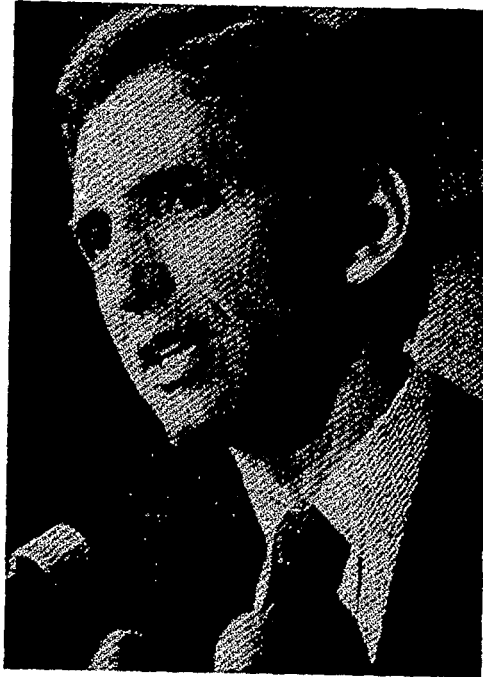
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~~(S)~~ Next year disorder hit the Princeton University campus. The radical group Students for a Democratic Society (SDS) discovered the existence on campus of the Communications Research Division of the Institutes for Defense Analyses (IDA/CRD), which had been set up in the late 1950s to help NSA with difficult cryptanalytic problems. Unclassified CRD publications appeared to link the organization with the Defense Department, and SDS set out to force a campus eviction. After several months of sporadic demonstrations, on May 4, 1970, students broke through police lines and vandalized the inside of the building. A few days later a student was arrested as he attempted to set the building on fire. CRD built an eight-foot-high fence around the building and occupied it in a permanent siege mode. But the students had already achieved their objective. The atmosphere was no longer good for defense contractors, and Princeton asked CRD to move. CRD found other quarters off campus and moved out in 1975.<sup>3</sup>

(U) In June 1971, amid the hysteria over the American invasion of Cambodia, the *New York Times* began publishing a series of documents relating to the war effort. The papers had originally been given to journalist Neil Sheehan of the *Times* by one Daniel Ellsberg, a former defense analyst during the Johnson administration. Two days later a federal judge issued a restraining order, but that did not stop the presses. Ellsberg sent copies to seventeen more newspapers, and the revelations continued. On June 30, the court lifted its restraining order, and the *Times* published the rest of the batch. Journalists quickly labeled them the Pentagon Papers.

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(U) Ellsberg had been hired into the Pentagon as one of Robert McNamara's "whiz kids." In 1967 Ellsberg was assigned to a project under Lawrence Gelb to undertake a study of U.S. involvement in Vietnam. Brilliant and dogmatic, Ellsberg turned against the war. He felt that the documents could be damaging to the war effort, so when he left the Pentagon to take a job with the Rand Corporation, he reproduced a copy and carried it with him.



(U) Daniel Ellsberg

(U) It was a very large document indeed - over 7,000 pages - and Ellsberg spent thousands of dollars making copies. For several years he tried to use the papers to convince policy makers (Henry Kissinger and William Fullbright, among others) to change U.S. policy in Southeast Asia, but in vain. As a last resort, then, in 1971 he turned the documents over to the newspapers.<sup>4</sup>

(U) Ellsberg claimed that the Pentagon Papers, although officially classified, were actually unclassified.

[Redacted]

[Redacted] Newspapers did not release the information in 1971, but journalist Jack Anderson got the last four volumes and released them in 1972.

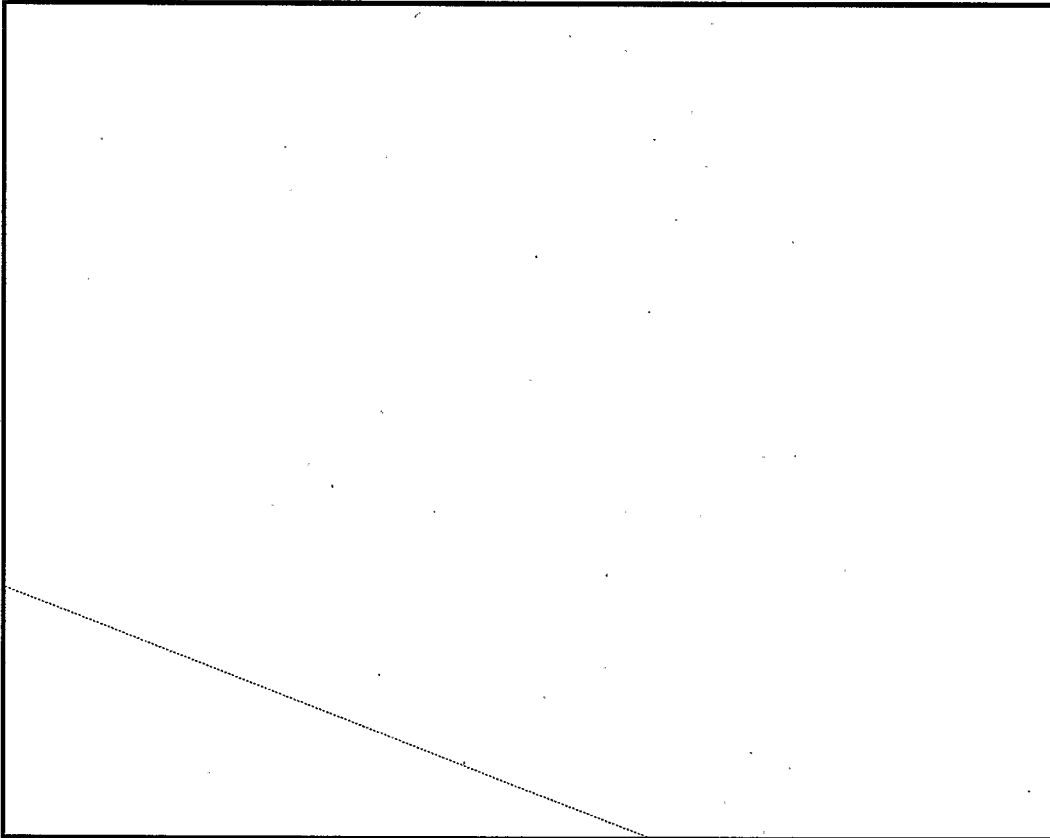
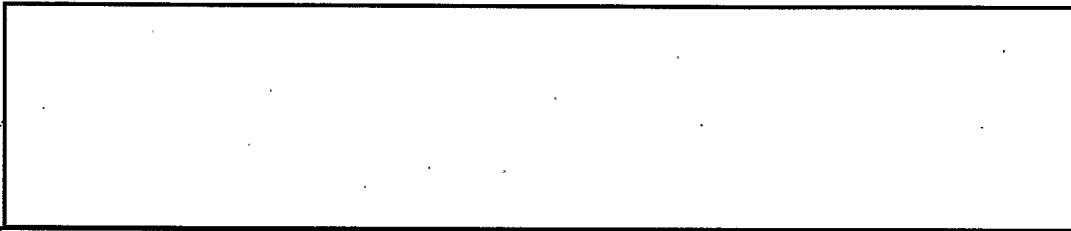
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(U) The Pentagon Papers and subsequent Anderson columns began a trend. The trend was to tell all. It started small, but became a tidal wave of revelations.

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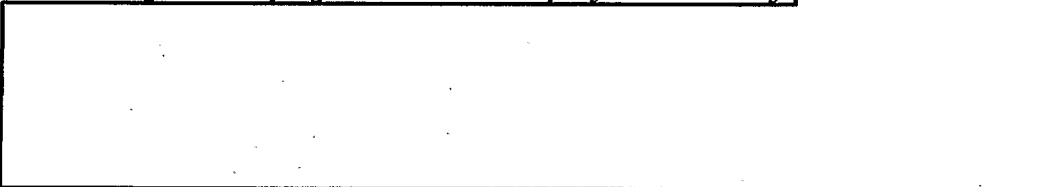
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The previous insider-tells-all account, Herbert Yardley's *The American Black Chamber*, had been written in a fit of greed (Yardley needed money). People like [redacted] could apparently be bought by ideology. It echoed the climate of the 1930s, when the Soviets got their spies for free (or at the very least, for expense money).

(U) Ideology-based public revelations became fashionable with the publication in 1975 of ex-CIA agent Phillip Agee's *Inside the Company - A CIA Diary*. [redacted]



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(U) Using the indefatigable [redacted] as a key source, the Canadian Broadcasting Corporation did a 1974 series entitled "The Fifth Estate - the Espionage Establishment," which made a wide-ranging exposure of intelligence organizations in the United States and Canada. [redacted]

### (U) NSA AND CLANDESTINE ACTIVITIES

(U) Over the years, cryptologists had participated in two activities whose legality was eventually called into question. One, codenamed Shamrock, was a way to intercept messages without setting up intercept sites. The other, Minaret, became enmeshed with an illegal use of information for domestic law enforcement.

#### (U) *Shamrock*

(U) The easiest way to get access to telegrams was to get them from the cable companies which transmitted them. This method actually dated back to World War I, when the federal government, using the implied war powers of the president, set up cable and postal censorship offices. A copy of every cable arriving and departing from the United States was routinely sent to MI-8, which thus had a steady flow of traffic to analyze. After the war, the Army closed all intercept stations. Yardley's Black Chamber continued to use messages provided by the obliging cable companies until 1927, when the Radio Act of 1927 appeared to make this illegal, and the Communications Act of 1934 reinforced this. Lack of traffic forced Friedman's SIS to set up intercept stations in the 1930s.<sup>13</sup>

(U) In 1938, the Army's chief signal officer, General Joseph Mauborgne, approached David Sarnoff, president of RCA, with a request from the secretary of war to renew the arrangement whereby the Army received drop copies of cable traffic. Sarnoff was willing, and during the war the major cable companies (RCA, AT&T, and Western Union) once again provided cables to the cryptologists. Signal Intelligence Service set up Radio Intelligence Companies to collect cables through censors installed at the cable company offices. Following the surrender of Japan, military officials approached the companies to request their continued cooperation, as they had after World War I. This time, however, they met considerable resistance. Cable company officials argued that the Federal Communications Act of 1934 appeared to make this illegal in peacetime. They wanted legislation.

(U) What they got was a promise from the attorney general, Tom Clark, that they would be protected from lawsuits while the Justice Department sought authorizing legislation. (Opinions differ as to whether or not President Truman put this in writing.) But the legislation was not forthcoming, and in 1947 the company executives contacted Secretary of Defense James Forrestal, who had to renew Tom Clark's assurance that they would not be prosecuted, and that the operations would not be exposed. Two years later, still lacking legislation, they approached the new secretary of defense, Louis Johnson. He advised them again that Clark and Truman had been consulted, and had once again approved the practice. Somewhat mollified, they finally dropped the subject.<sup>14</sup>

(U) At NSA the cable drop operation was treated as a compartmented matter, and only a few employees knew where the traffic came from. Couriers carried cabled messages to NSA, but there was no direct contact with the cable companies themselves. NSA selected about 150,000 cables per month for further analysis - the rest were destroyed. Although not technically illegal, Lew Allen, who was director in the mid-1970s, said it did not pass the "smell test" very well. Stopping it was not a difficult decision for him.<sup>15</sup>

#### (U) Minaret

(U) There is no stark line between "foreign intelligence" and domestic law enforcement. The phrases, which appear to be watertight, actually leak into each other at many points. But this never became an issue until the Watergate period.

(U) In the collection of foreign intelligence, cryptologists often came across unrelated communications, which were routinely destroyed because of their irrelevance. But when items of importance to the FBI came available, they were normally passed on. This was done without much thought given to the boundaries between foreign intelligence and law enforcement, which were by law to be kept separate. The practice began in the 1930s and continued through the war years and into the 1950s.<sup>16</sup>

(U) In 1962, following the Cuban Missile Crisis, the White House wanted to know who was traveling to Cuba (which had been made illegal but for exceptional cases). This involved passing on American names and violated customary SIGINT rules by which information on American citizens was to be ignored. It was clearly related to law enforcement, however, and it was the origins of the so-called "Watch List" which became known as the Minaret program.<sup>17</sup>

~~(S-CCO)~~ The idea proved to be irresistible. In 1965, as a result of the conclusions of the Warren Commission, the Secret Service asked NSA to be on the lookout for certain people who might be a threat to the president. The first list was composed almost entirely of Americans, but NSA complied because of the obvious implications of not providing such important information. In 1973 the Agency asked that the Americans be removed from the list and hung onto that position despite anguished protests from the Secret Service.<sup>18</sup>

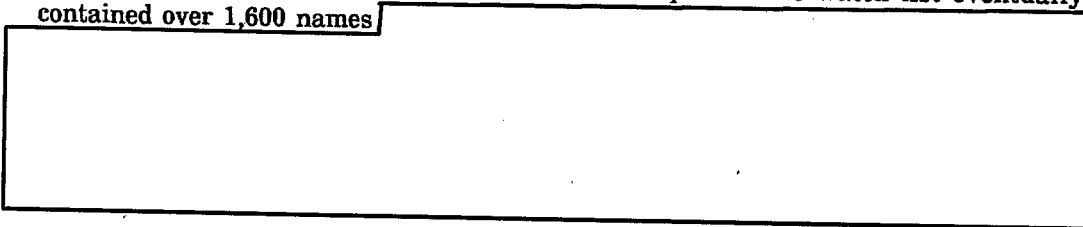
(U) The Watch List expanded in the 1960s to include people suspected of narcotics trafficking, and at one point most of the names on the list were individuals suspected of

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narcotics-related activity. The list was formally documented by USIB in 1971.<sup>19</sup> But by far the most controversial expansion of the list occurred in 1967, and it involved domestic terrorism.

~~(S-CCO)~~ In 1967 the country appeared to be going up in flames. Vietnam War protests were becoming common, and "ghetto riots" in America's urban centers had virtually destroyed sections of Detroit and Los Angeles. President Johnson wanted to know if the domestic antiwar movement was receiving help from abroad, and he commissioned Richard Helms at CIA to find out. CIA came up with very little, but in the process of mobilizing the intelligence community, the Army was tasked with monitoring communications for the purpose of answering Johnson's question. On October 20, Major General William P. Yarborough, the Army chief of staff for intelligence, informed NSA of the effort, in which ASA was involved, and asked for help.<sup>20</sup>

~~(S-CCO)~~ With FBI as the prime source of names, NSA began expanding the watch list to include domestic terrorist and foreign radical suspects. The watch list eventually contained over 1,600 names



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~~(S-CCO)~~ The project, which became known officially as Minaret in 1969, employed unusual procedures. NSA distributed reports without the usual serialization. They were designed to look like HUMINT reports rather than SIGINT, and readers could find no originating agency. Years later the NSA lawyer who first looked at the procedural aspects stated that the people involved seemed to understand that the operation was disreputable if not outright illegal.<sup>22</sup>

(U) ASA's monitoring of domestic radical communications was almost certainly illegal, according to the legal opinions of two different groups of government lawyers. Even worse, it had come to public notice in 1970 when NBC aired a program alleging that ASA had monitored civilian radios during the Democratic Convention of 1968. ASA quickly closed it down and went out of the civil disturbance monitoring business.<sup>23</sup>

~~(S-CCO)~~ Minaret was quite another matter, and it did not depend on ASA for its existence. Lew Allen had been director for less than two weeks when his chief lawyer, Roy Banner, informed him of Minaret - it was the first the new director had known of the program. Banner noted a recent court decision on wiretaps that might affect the Watch List. A federal judge had ruled in a case involving leading Weathermen (SDS radical wing) that all federal agencies, including NSA, must disclose any illegal wiretaps of the defendants. NSA's communications monitoring, although not technically a wiretap, could be construed as such by recent court decisions. Although the Weathermen in question might not be on the Watch List, the time was not far off when a court case would expose the list.



~~(S-CCO)~~ This operation did not pass the "smell test" either. According to Allen, it appeared to be a possible violation of constitutional guarantees. He promptly wrote to Attorney General Elliot Richardson to request that Richardson himself authorize the retention of all individuals by name on the list.<sup>24</sup>

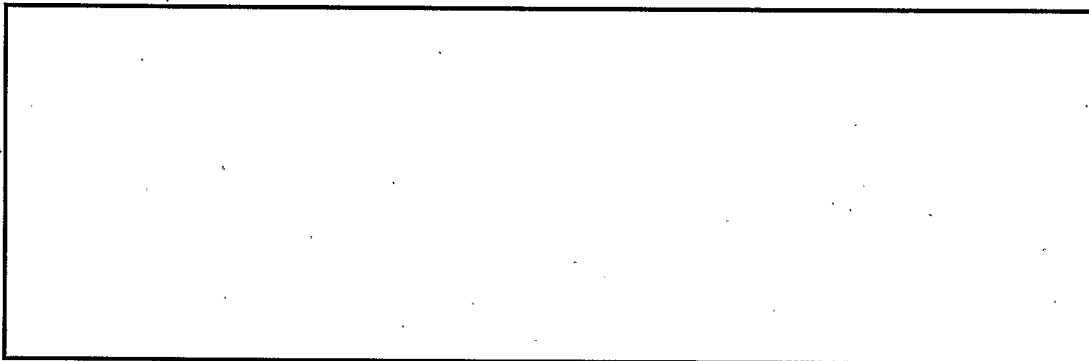
(U) This was in September 1973. The Watergate hearings in Congress had just wrapped up, and the special prosecutor, Archibald Cox, had subpoenaed the presidential tapes. The executive department was in chaos. Richardson's predecessor, Richard Kleindeinst, had been forced out under pressure, and his predecessor, John Mitchell, was almost sure to go to jail. In that atmosphere, the attorney general was not going to permit the continuation of an operation of such doubtful legality. He requested that NSA stop the operation until he had had a chance to review it. With that, Minaret came to a well-deserved end.<sup>25</sup>

**(U) Clandestine Methods**

(U) If you can't break a code, the time-honored method is to steal it. Two of NSA's most cherished secrets, the black bag job and the wiretap, became public knowledge during the Watergate period.

(U) Black bag jobs referred to the art of breaking, entering, and theft of codes and cipher equipment. The Office of Naval Intelligence (ONI), an unlikely leader in the field, became the first practitioner. In 1922 ONI picked the lock of the safe in the Japanese consulate in New York and filched a Japanese naval code. This theft led to the establishment of the first permanent American naval cryptologic effort, OP-20-G, in 1924.<sup>26</sup>

(U) ONI continued to be the main practitioner of the art. Prior to World War II the Navy pilfered a diplomatic code which was used at embassies which lacked a Purple machine. Joseph Mauborgne, the head of the Army Signal Corps, hit the overhead when he found out. Mauborgne reasoned that if the Japanese ever discovered the loss, they might change all their systems, including Purple, and extracted from the Navy an agreement that all such break-ins in the future would be coordinated with the Signal Corps.<sup>27</sup>

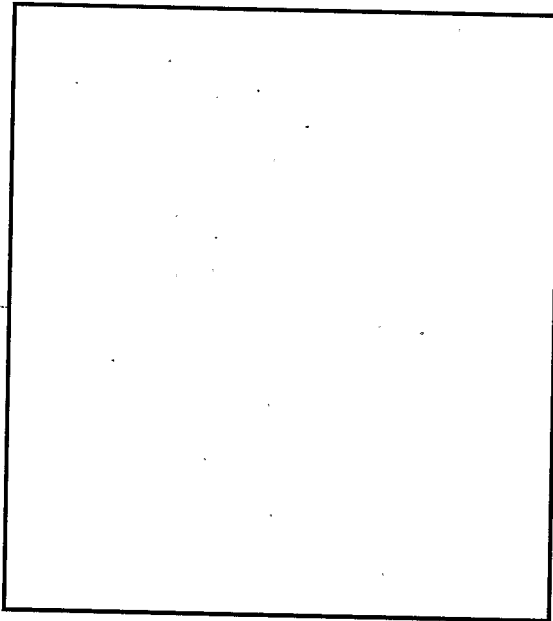


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(U) J. Edgar Hoover

**(U) The Huston Plan**

(U) Richard Nixon had been president just over a year when he initiated a string of actions which ultimately brought down his presidency. The White House-ordered invasion of Cambodia, a militarily ineffective foray, unleashed a wave of domestic protests, culminating in the shootings at Kent State in May of 1970. Stung by the reaction, the president called the heads of the intelligence agencies, and on June 5 he told Richard Helms of CIA, J. Edgar Hoover of the FBI, Lieutenant General Donald Bennett of DIA, and Admiral Noel Gayler of NSA that he wanted to know what steps they and their agencies could take to get a better handle on domestic radicalism. According to journalist Theodore White, who later reconstructed the meeting:

He was dissatisfied with them all . . . they were overstaffed, they weren't getting the story, they were spending too much money, there was no production, they had to get together. In sum, he wanted a thorough coordination of all American intelligence agencies; he wanted to know what the links were between foreign groups - al-Fatah; the Arab terrorists; the Algerian subsidy center - and domestic street turbulence. They would form a committee, J. Edgar Hoover would be the chairman, Tom Huston of the White House would be the staff man.<sup>31</sup>

(U) Thomas Charles Huston, the evident object of the president's displeasure, was a young right-wing lawyer who had been hired as an assistant to White House speech writer Patrick Buchanan. His only qualifications were political - he had been president of the Young Americans for Freedom, a conservative campus organization nationwide. And Huston wasn't even the key player. Hoover was named chair of the committee, in order to place him in a position in which the FBI would finally be forced to confront domestic radicalism.<sup>32</sup>

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(U) The committee report confronted the issue, all right, and it laid out a number of "further steps," many of which were illegal. The report recommended increasing wiretapping and microphone surveillance of radicals; relaxing restrictions on mail covers and mail intercepts; carrying out selective break-ins against domestic radicals and organizations; lifting age restrictions on FBI campus informants; and broadening NSA's intercepts of the international communications of American citizens. But Hoover knew the score, and he attached footnotes to each of the techniques which he did not want the FBI involved in. When it went to the president, it was carefully qualified by the FBI, the one organizations that would be the most involved.<sup>33</sup>

(U) The president sent word back to Huston, through Haldeman, of his approval, but did not initiate any paperwork. So when the committee was tasked to implement the recommendations, it was tasked by Tom Charles Huston, not the president. Hoover informed John Mitchell, the attorney general, that he would not participate without a written order from Mitchell. Mitchell discussed this with Nixon, and both agreed that it would be too dangerous. Ultimately, the president voided the plan, but not before NSA had become directly involved in the seamier side of life.<sup>34</sup>

~~(S-CCO)~~ NSA was ambivalent. On the one hand, Gayler and his committee representative, Benson Buffham, viewed it as a way to get Hoover to relax his damaging restrictions on break-ins and wiretaps. Gayler had personally pleaded with Hoover, to no avail; now the committee mechanism might force the stubborn director into a corner. But that was a legal matter for the FBI to sort out. When asked about intercepting the communications of Americans involved in domestic radicalism, Gayler and Buffham became more pensive. They informed the committee that "NSA currently interprets its jurisdictional mandate as precluding the production and dissemination of intelligence from communications between U.S. citizens, and as precluding specific targeting against communications of U.S. nationals." Of course American names occasionally appeared in intercepted traffic, but use of even this incidental intercept needed to be regularized by a change to NSCID 6.<sup>35</sup> As with the FBI, NSA wanted a legal leg to stand on.

~~(S-CCO)~~ What stand did NSA take? Gayler genuinely wanted to be helpful, especially when the president so insisted on getting help. In meetings he seemed ready to turn NSA's legendary collection capability to the services of the Huston mandate. But his lawyers advised caution, and, according to Huston himself, NSA was more nervous than any of the other intelligence agencies. Gayler clearly wanted a legal mandate.<sup>36</sup>

#### (U) *The White House Tapes*

~~(S-CCO)~~ General Lew Allen, General Phillips's successor, came to the job with a strong admonition from his boss, Secretary of Defense James Schlesinger: stay as far away from Watergate as possible. He was aghast, then, when he learned on a Friday in January 1974 that a virtual army of lawyers was on its way to Fort Meade with the White House tapes. Howard Rosenblum, the director of research and engineering, had made it known that NSA might be able to analyze the infamous White House tapes which had been

HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY

subpoenaed by the special prosecutor. They all arrived in staff cars on a Friday with boxes of tapes. NSA's experts went through the tapes for hours, then gave them back to the lawyers. They had found an eighteen-minute gap on one of the tapes. It appeared to be a deliberate erasure, as the tape had been gone over multiple times in a manner that did not support the president's contention that the erasure had been accidental.<sup>37</sup>

**(U) THE ALLEN ERA AT NSA**

(U) Occasionally a person's impact on events demands that the period be named after him or her. General Lew Allen was such a man. But the "Allen Era" did not actually begin with Allen.

(U) In July 1972 Noel Gayler departed the Agency. He got a fourth star and became CINCPAC. Gayler, an upwardly mobile officer with high ambitions, was the first director to move up. NSA had always been a dead end, where mavericks could end their careers at an agency where mavericks were appreciated, even required. He was not to be the last - rather, Noel Gayler was the first of four officers in succession who gained their fourth star and moved on. The second was his successor, Air Force lieutenant general Sam Phillips.

(U) Phillips came from a highly technical background. A fighter pilot in World War II, he came to NSA from the Apollo program, where he had been the director. The visibility of the program, and the accolades that had been heaped on his management of it, indicated that he was destined for bigger things. According to one source, he knew before he arrived that he would stay only one year, and would move on to command the Air Force Systems Command as a four-star general. However, his successor, Lew Allen, believed that Phillips became aware of NSA's vulnerability to the Watergate mess once he was ensconced and that this influenced his determination to move on.<sup>38</sup>

(U) Lew Allen came from the same sort of background, but more so. He had a doctorate in nuclear physics, had worked at Lawrence Livermore Laboratories, worked in the satellite collection business for the Air Force, and when nominated to be DIRNSA, was de facto director of the Intelligence Community (IC) Staff.

(U) He had become a protégé of James Schlesinger, who had brought him onto the IC Staff. But owing to a temporary feud between Schlesinger and Congress over whether the job should be civilian or military, Allen had not been confirmed. So when Schlesinger became secretary of defense, he asked Allen to become DIRNSA, a position that did not require congressional confirmation.<sup>39</sup>

(U) Lew Allen was easy to like. His quick mind was covered over by a kindly demeanor and a slowness to anger. Even Stansfield Turner, who feuded endlessly with Allen's successor, Bobby Inman, wrote that Allen "particularly impressed me with a firm statement that the NSA took its direction on what information to collect from the Director of Central Intelligence. All I needed, he said, was to tell him what I wanted."<sup>40</sup>



(U) Lieutenant General Sam Phillips



(U) Lieutenant General Lew Allen

~~(TS-CCO-TK)~~ Lew Allen once described candidly the baggage that he brought with him to NSA. Schlesinger was convinced that NSA was too large and too expensive, and he told Allen to look into the charge. (He found it to be unsubstantiated.) He had always been impressed with the technical competence resident at NSA, but he felt that "NSA, like many large bureaucracies, had a lot of turf. . . ." Having come from the NRO side of the satellite business, he knew firsthand of NSA's desire to control SIGINT satellites and ground stations, and he felt that NSA harbored "ambitions for responsibilities that somewhat exceeded the grasp." He had heard that NSA had enormous warehouses of undecipherable tapes. (This too he found to be exaggerated.)<sup>41</sup>

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~~(C)~~ His focus on the technical side of life was perfect for NSA, a technical agency. Allen had no patience with bureaucratic turf battles, and he did not think that constant reorganizations were a good use of time. But he did bring over from the Air Force a penchant for systems design, and for that, one needed a designer. So one of his first acts was to appoint an architectural planning staff to design the various components of the cryptologic system. He had an architect for everything:  Third Party, overhead, support to military operations, high-frequency systems, line-of-sight systems, signals search, and so on. One of Lew Allen's most important legacies was to institute a planning mentality where one had not existed.

~~(FOUO)~~ In 1977, in the last year of his tenure, he confronted a congressional proposal to pull NSA out of the Defense Department. To a man as firmly grounded in the military

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

as Allen, this was a nonstarter. Pointing out that 75 to 80 percent of NSA's material supported the military, he came down firmly on the side of staying in the Defense Department. As to the concurrent proposal to civilianize the director's job, the continued credibility with military commanders was too important a qualification to lose.<sup>42</sup>

#### (U) THE CHURCH COMMITTEE

(U) When John Dean, the president's legal counsel, began unburdening himself to the Ervin Committee in the spring of 1973, the testimony implicated the CIA in aspects of the Watergate scandal. So William Colby, the deputy for operations, decided to do a survey.<sup>43</sup>

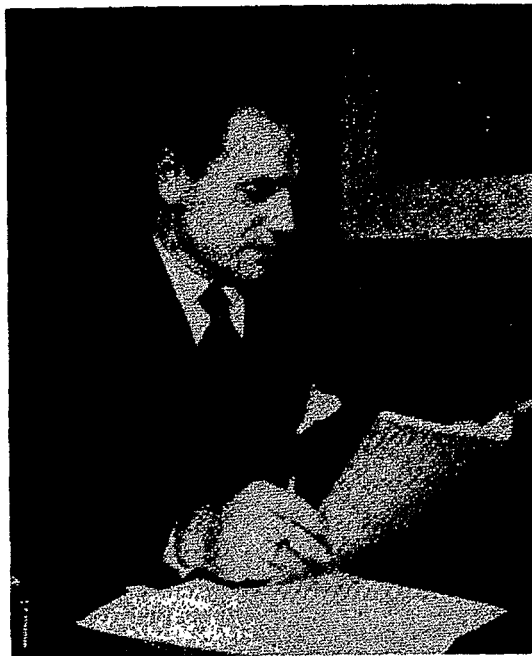
(U) The "Family Jewels" was a 693-page report of possibly illegal CIA activities through the years. Colby, who had become DCI by the time the report was finished, informed the four chairmen of the House and Senate committees which had oversight of the CIA and succeeded in convincing all of them that the matter was over with and that CIA would clean up its own house. But by then so many people within the CIA knew about the report that its eventual exposure became almost inevitable.



(U) William Colby

(U) On December 22, 1974, journalist Seymour Hersh published a story in the *New York Times* based on the "Family Jewels," charging that the CIA had been involved in Chaos, an operation to monitor domestic radical groups during the Nixon administration.<sup>44</sup> The next day, President Ford detailed Henry Kissinger to look into Hersh's allegations. (Although informing Congress, Colby had never told the White House about the report.) Colby confirmed the general outlines of the story to Kissinger, and the president knew that he would have to investigate.<sup>45</sup> So on January 4, Ford appointed a President's Commission on CIA Activities within the United States. It was headed by Vice President Rockefeller, and the press promptly dubbed it the Rockefeller Commission.<sup>46</sup>

(U) While the commission was deliberating, the president himself revealed, on January 16, that some of the allegations of wrongdoing included plots to assassinate foreign heads of state. As if enough controversy did not already surround the commission, this new charge served to scuttle its effectiveness. In the end it issued a very reasonable and workmanlike report which recommended certain structural reforms to guard against



(U) Nelson Rockefeller

future transgressions, and it set forth specific prohibitions of certain activities like illegal wiretaps and participation in domestic intelligence operations. (It declined to rule on assassinations, pleading lack of time to get to the bottom of these allegations.) But by then no one was listening.<sup>47</sup>

(U) Senators were clamoring for an investigation, and on January 27 the Senate established the Senate Select Committee on Intelligence. Philip Hart of Michigan was originally approached to chair the committee, but he was gravely ill with cancer, and so the job was offered to Frank Church of Idaho. Unlike Hart, Church harbored presidential ambitions, and some feared that he would use the committee as a pulpit to advance his ambitions. Like the Rockefeller Commission before it, this investigative body came to be known after its chair and has gone down in history as the Church Committee.

(U) Some, like Church himself, were suspicious of the intelligence community and sought to expose as much as possible. Into this camp fell Democrats Gary Hart of Colorado and Walter Mondale of Minnesota, along with Republicans Charles McMathias of Maryland and Richard Schweicker of Pennsylvania. Many were moderates (Warren Huddleston of Kentucky and Howard Baker of Tennessee being examples) while two senators, Barry Goldwater of Arizona and John Tower of Texas, did not believe in exposing intelligence secrets no matter what the provocation.<sup>48</sup>

~~(S-CCO)~~ To begin with, NSA was not even on the target list. But in the course of preliminary investigation, two Senate staffers discovered in the National Archives files

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(U) Frank Church

some Defense paperwork relating to domestic wiretaps which referred to NSA as the source of the request. The committee was not inclined to make use of this material, but the two staffers leaked the documents to Representative Bella Abzug of New York, who was starting her own investigation. Church terminated the two staffers, but the damage had been done, and the committee somewhat reluctantly broadened its investigation to include the National Security Agency.<sup>49</sup>

~~(S-CCO)~~ What the committee had found was the new Shamrock operation. It had become easier to use wiretaps than to get traffic from cable companies, and NSA was using this technique with increasing frequency. But the Church staffers quickly uncovered the older Shamrock operation, and this became the focus of its early investigation of NSA. Knowing the ramifications, Allen terminated the portion of Shamrock that dealt with the cable companies on May 15, in the middle of the preliminary hearings.<sup>50</sup>

~~(FOUO)~~ NSA's official relationship with the Church Committee began on May 20 with a visit from the committee staff; five days later Church himself came to Fort Meade for briefings and tours. This began a close association which extended over the entire summer and through October 1975. In the beginning it was a rough road, with committee staffers trying to dig deep, while NSA officials tried to protect. But with a few choice words from Allen, NSA's responsiveness improved and, with it, the cooperation of the committee. By the time it was all over it had become a model of how an intelligence agency should relate



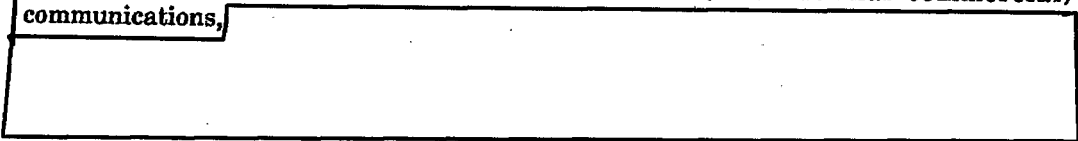
to Congress, and it enhanced NSA's reputation on Capitol Hill. But it had been tough slogging.<sup>51</sup>

(U) In September, the committee decided to request open testimony by Allen. They discussed two operations, Shamrock and Minaret, and in the end decided to question him about only Minaret. The committee discussions on the question were among the most rancorous of all, and Goldwater and Tower openly dissented from the proposition of requiring anyone at NSA to testify on any subject. But they were outvoted, and Allen was subpoenaed, despite a phone call from President Ford to Frank Church.<sup>52</sup>

~~(S-CCO)~~ Never had NSA been forced into such a position, and Lew Allen was very nervous. In a preliminary letter to Church he stated:

As we prepare for open hearings, I am struck even more forcibly by the risks involved in this method of reporting to the American people. . . . Despite the honest and painstaking efforts of your Committee and Staff to work with us to limit damage, I remain concerned that the open hearing presents significant and unnecessary risks.<sup>53</sup>

Allen pleaded that the cost of exposure of Minaret could be very high. The Watch List was a byproduct of NSA's operation to monitor ILC (international commercial communications),



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(U) The Church Committee conducted its open hearing on NSA on October 29, after two days of meticulous closed-door rehearsals. The director began with a prepared statement describing NSA's mission in very general terms and used historical examples (the Battle of Midway and the decryption of the Japanese Purple machine being two) to depict the value of such operations. He detailed the Agency's legal authorities and defined what NSA thought was meant by "foreign intelligence" and "foreign communication." Conceding the murky nature of the definitions, he then launched into a discussion of the Watch List, placing it in historical context and discussing how NSA interpreted the tasking and executed the support to requesting agencies. He stated that he himself had closed down Minaret two years before.<sup>55</sup>

~~(FOUO)~~ Lew Allen's performance was a triumph. Future vice president Walter Mondale noted to the director that "the performance of your staff and yourself before the committee is perhaps the most impressive presentation that we have had. And I consider your agency and your work to be possibly the single most important source of intelligence for this nation." Despite the accolades, however, when the committee in closed session discussed how much to tell about NSA, the majority voted to include Shamrock, which Allen had opposed because of the embarrassment to the cable companies. Goldwater, Tower, and Howard Baker were set in bitter opposition, but Church contended that legislation would be necessary to insure that abuses would not be repeated, and both Shamrock and Minaret constituted important material to back up the request for

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

legislation. When asked, Secretary of Defense James Schlesinger and the DCI, William Colby, viewed the release of these two projects to be affordable.<sup>56</sup>

(U) When the Church Committee issued its final report in February 1976, the discussion of NSA was brief. Focusing on what NSA could *potentially* do, rather than what it *was* doing, Church concluded:

The capabilities that NSA now possess[es] to intercept and analyze communications are awesome. Future breakthroughs in technology will undoubtedly increase that capability. As the technological barriers to the interception of all forms of communication are being eroded, there must be a strengthening of the legal and operational safeguards that protect Americans.

NSA's existence should be based on a congressional statute which established the limitations, rather than on an executive order then twenty-three years old. And so ended the discussion of NSA, just seven pages in a report comprising seven volumes of hearings.<sup>57</sup>

#### (U) THE PIKE COMMITTEE

(U) The backwash of Hersh's Family Jewels article also infected the House of Representatives and produced the predictable clamor to investigate. So the House held its own investigation, under Representative Otis Pike of New York. Not surprisingly, it became known as the Pike Committee.

(U) But it did not begin that way. The first chairman was to be Lucien Nedzi, who chaired the Intelligence Subcommittee of the Armed Services committee. But this effort dissolved in controversy when Democrats on the committee discovered that Colby had taken Nedzi into his confidence over the original Family Jewels report and had convinced him not to investigate. Fatally compromised, Nedzi resigned, and the task fell to Pike.<sup>58</sup>



(U) Otis Pike

(U) While the Church Committee focused on CIA, the Pike Committee had a much broader charter. It was to review the entire intelligence apparatus and to focus on operational effectiveness, coordination procedures, the protection of individual liberties, possible need for more congressional oversight, and on planning, programming, and budgeting. Pike promised to evaluate the performance of the intelligence community

against its budget. But the membership was liberal (somewhat more so than that of the Church Committee) and the staff intrusive. The focus quickly swung to the topic of abuses of individual liberties, and stayed there.<sup>59</sup>

~~(FOUO)~~ NSA had already had one experience with Pike, when he had chaired a subcommittee investigating the *Pueblo* capture of 1968. It had not been a happy encounter. The committee had leaked *in camera* testimony of the director, Lieutenant General Carter, to the press, and Carter was furious. Once burned, the NSA staff was wary (see *American Cryptology during the Cold War, 1945-1989, Book II: Centralization Wins, 1960-1972*, p. 449).

~~(FOUO)~~ The House charter gave the committee the power to determine its own rules concerning classification, handling, and release of executive department documents. Burned during the *Pueblo* investigation, NSA lawyers were anxious to nail down an agreed-upon set of procedures, but preliminary meetings yielded no agreement on the procedures for handling SIGINT documents. Lew Allen, who later characterized the Pike Committee staffers as "irresponsible," issued instructions to "limit our discussions with the full House committee and staff to administrative, fiscal and management matters."<sup>60</sup>

~~(S-CCO)~~ Relationships quickly deteriorated. NSA officials described the committee staff as "hostile," the procedures for handling classified material as questionable, their willingness to learn about NSA as nonexistent. One NSA official noted that only one Pike staffer ever visited NSA, in contrast to the Church Committee, whose entire membership and staff visited Fort Meade in May 1975. Pike staffers objected to having NSA officials in the room when NSA employees were being questioned, and the staff interrogation of  degenerated into a shoving match.<sup>61</sup>

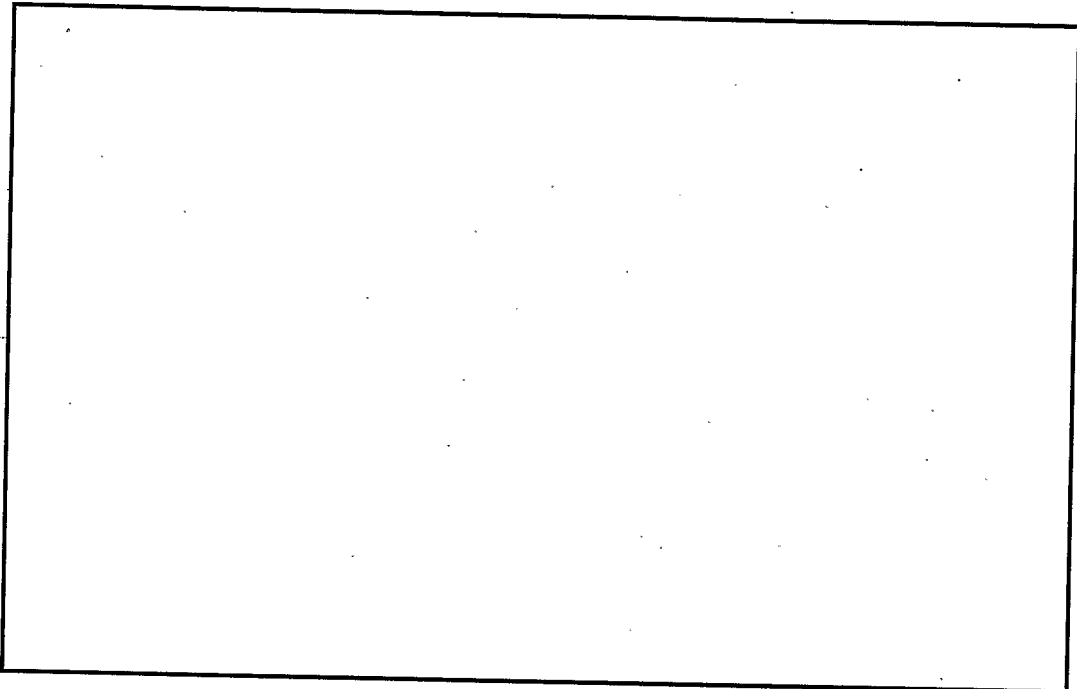
~~(FOUO)~~ In August, the committee called Lew Allen to testify. The letter requesting his presence stated that the budget policies and procedures would be the topic, but questioning soon turned to supposed monitoring of Americans. Allen objected to covering this ground in open session, and after a long committee wrangle and Allen's adamant refusal to go further, the committee voted to go into executive session. Summarizing NSA's objections, he said: "I know of no way to preserve secrecy for an agency such as NSA other than to be as anonymous as possible, and to abide by the statutory restrictions which the Congress instructed us to, and those are that we do not discuss our operations; we do not discuss our organization; we do not discuss our budget in public."<sup>62</sup> Throughout Allen's appearance, Pike and Congressman Ron Dellums of California seemed suspicious and disbelieving. At one point Pike interrupted the interrogation to say:

Now why don't you just tell us and be forthcoming, without my having to drag it out of you, or any other member having to drag it out of you, what sort of communications of American citizens you are intercepting, how you are intercepting them, what you are doing with them, and why you feel it is necessary to keep on doing it.<sup>63</sup>

The presumption of guilt was palpable.

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~~(S-CCO)~~ The final report criticized NSA's reporting policy, which amounted to fire-hosing the intelligence community. [redacted]



[redacted] It noted that NSA frequently had the right answers, but that customers probably did not fully understand what NSA was really saying. [redacted]



Like Church, Pike recommended that NSA's existence be authorized through congressional legislation and that "further, it is recommended that such legislation specifically define the role of NSA with reference to the monitoring of communications of Americans." <sup>65</sup>

(U) The Pike Committee ended awash in controversy. On January 19, the committee distributed its final report. The Ford administration protested that it contained classified information, including several sections with codeword material. The committee voted, 8-4, not to delete the classified sections, and it sent the 340-page report to the House. Faced with anguished protests from the Ford administration, the House Rules Committee on January 29 voted 9-7 to reverse the Pike Committee decision. (Pike condemned this as "the biggest coverup since Watergate.") <sup>66</sup> But it was already too late. On January 22 the *New York Times* reported that it had knowledge of details of the report. On January 25, CBS correspondent Daniel Schorr stated triumphantly on national television, "I have the Pike Report." Four days later the House secured all copies of the report except the one in Schorr's possession. Fearing a Ford administration backlash and possible prosecution, CBS refused to publish. Schorr then contracted with the *Village Voice*, and the report

appeared in entirety in that publication in February, an event which led CBS to terminate his employment.<sup>67</sup>

(U) Despite protestations by Pike that the executive department was doing all the leaking, his own committee appears to have been the source. The draft report was distributed to committee members the morning of January 19, and by four o'clock that afternoon a *New York Times* reporter was already on the phone with the staff director asking questions based on the report. Versions of the report would appear in the press, the committee would make wording changes, and the next day the new wording would be in the newspapers.<sup>68</sup>

(U) Pike apparently began the investigation determined to produce a fair and balanced evaluation of American intelligence. He focused at first on job performance measured against funds expended. But the committee was top-heavy with liberal Democrats, and things quickly got out of hand ideologically. The committee and its staff refused to agree to commonly accepted rules for handling classified material, and when the executive department thwarted its desire to release classified material, it leaked like a sieve. The dispute with the administration over the release of NSA material produced an impasse, and diverted the committee from its original task. The House committee that was appointed to investigate the investigators turned up a shabby performance by the Pike Committee. In the end, it did Pike and Congress more damage than it did the Ford administration. All in all, it was a poor start for congressional oversight.

**(U) THE ABZUG COMMITTEE**

(U) Serious (if ideologically polarized) inquiry descended into opéra bouffe with the charter of yet a third investigation. The leader was Bella Abzug, who had been elected to Congress in 1972 from a liberal district in New York City amid the early voter reactions to Watergate.

~~(S-CCO)~~ Abzug chaired the Government Information and Individual Rights Subcommittee of the Committee on Government Operations. In mid-1975, with the Church Committee holding preliminary investigations in executive session, Abzug got hold of some of the more sensational information relating to Shamrock and Minaret. (The information was apparently leaked by Church Committee staffers.)<sup>69</sup> The climate for a



(U) Bella Abzug

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

full investigation of NSA was right. The press had picked up some of the themes resonating in the Church and Pike hearings. An article in the September 8 edition of *Newsweek* described the "vacuum cleaner" approach to ILC collection and referred to NSA as "Orwellian." This was counterbalanced by a statement that "the NSA intends nothing like tyranny - it is probably the most apolitical agency in Washington." But the fourth estate had clearly discovered the technological advances that permitted NSA to cast a very broad net, and characterized it as a potential threat to individual liberty.<sup>70</sup>

~~(S-CCO)~~ NSA relationships with the Abzug Committee staff were poisonous. At their very first session, Abzug staffers refused to sign the normal indoctrination oath, and further discussions proceeded at the noncodeword level. Despite the refusal to accept executive department rules on clearances, the committee subpoenaed huge amounts of material. One subpoena, for instance, demanded every record, including tape recordings, of every scrap of information pertaining to the Agency's COMINT mission since 1947. (Tape recordings alone comprised in excess of a million reels.)<sup>71</sup> Fearful of leaks that might dwarf those of the Pike Committee, the Ford administration decided to deny these requests.

~~(C)~~ In October, Abzug began maneuvering to get Lew Allen to testify in open session. The sparring sessions (Allen had no intention of complying) ended on October 29 when Allen appeared before the considerably less hostile Church Committee. Preempted, Abzug pressed for lower level NSA officials, and subpoenas began arriving at NSA. With the climate of mutual suspicion that existed, NSA resisted. Allen went to Jack Brooks, chairman of the full committee, to protest, and extracted a promise that Abzug could subpoena, but Brooks would refuse to enforce the subpoenas. In the end, Abzug got her hands on one unfortunate NSA official, Joseph Tomba, who appeared in open session and refused, at the request of DoD lawyers, to answer most questions put to him. The committee held Tomba in contempt, but Jack Brooks was good to his promise, and the citation was not enforced.<sup>72</sup>

~~(C)~~ In the process of dealing with Abzug, Lew Allen and his staff were subjected to fearful browbeating, but they held fast, defended by not only the full executive department, but by Congressman Jack Brooks himself. Hearings dragged on into 1976, making Abzug the longest running of the investigative committees. Then, in September of 1976 they began to fade, as Abzug became involved in a campaign for the Senate, and hearings ceased. (She ultimately lost.) The committee eventually issued a draft report (February 1977) which predictably concluded that there were still loopholes which would allow NSA to intercept U.S. communications for foreign intelligence purposes and that these loopholes should be closed. But the importance was secondary. Church had already exposed the loopholes and had made the same recommendations. Moreover, by then President Ford had issued his new executive order, 11905, which forbade many of the "abuses" that Abzug had in mind. The committee faded into irrelevance.<sup>73</sup>

(U) With that, the investigative process had run its course. It had been a pretty thorough public housecleaning for all intelligence agencies. For CIA (and to a lesser extent FBI) it had been traumatic and damaging. For NSA, the trauma had been much

less. The principal reason was the director. Lew Allen - kindly, thoughtful, intellectual, and forthright - was just the right person at just the right time. He disarmed most of NSA's more reasoned critics with the way he directed his staff to respond to Congress. He headed off controversy before it got well started. Most of all, his five-star performance before the Church Committee convinced many that NSA had not gone seriously off track and that it should be preserved at all cost. A glimpse under the cryptologic curtain convinced most senators and congressmen that NSA was the true gem of the intelligence world.

**(U) THE BACKWASH**

(U) The Watergate era changed cryptology. The tell-all atmosphere resulted in a flood of revelations unprecedented then and now. It also resulted in new executive department restrictions on cryptologic operations and ushered in a new era of congressional oversight.

**(U) The Revelations**

(U) The investigations were conducted amid an absolute fury of press revelations, many apparently stemming from the committee staffs.

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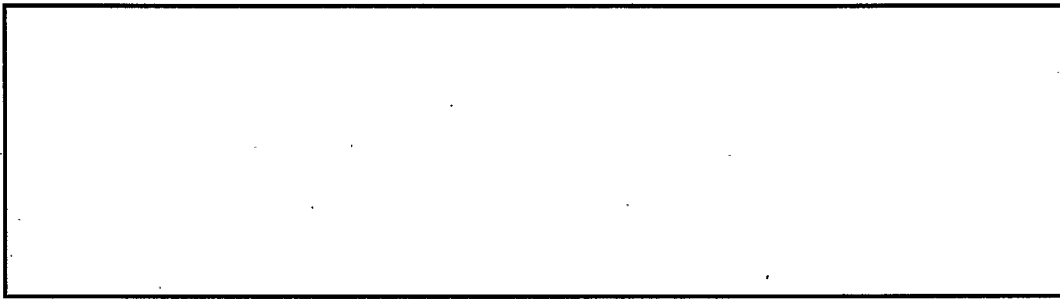
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(U) More serious still were articles on American cryptologic relationships with Second Parties.

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In New Zealand, members of Parliament demanded that the government confirm or deny the nation's membership in UKUSA.<sup>75</sup>

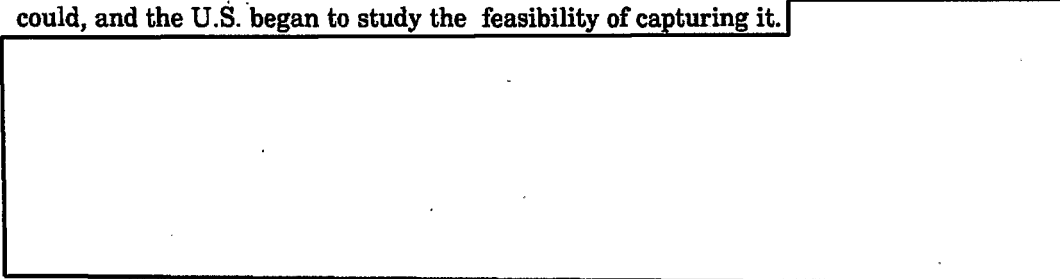
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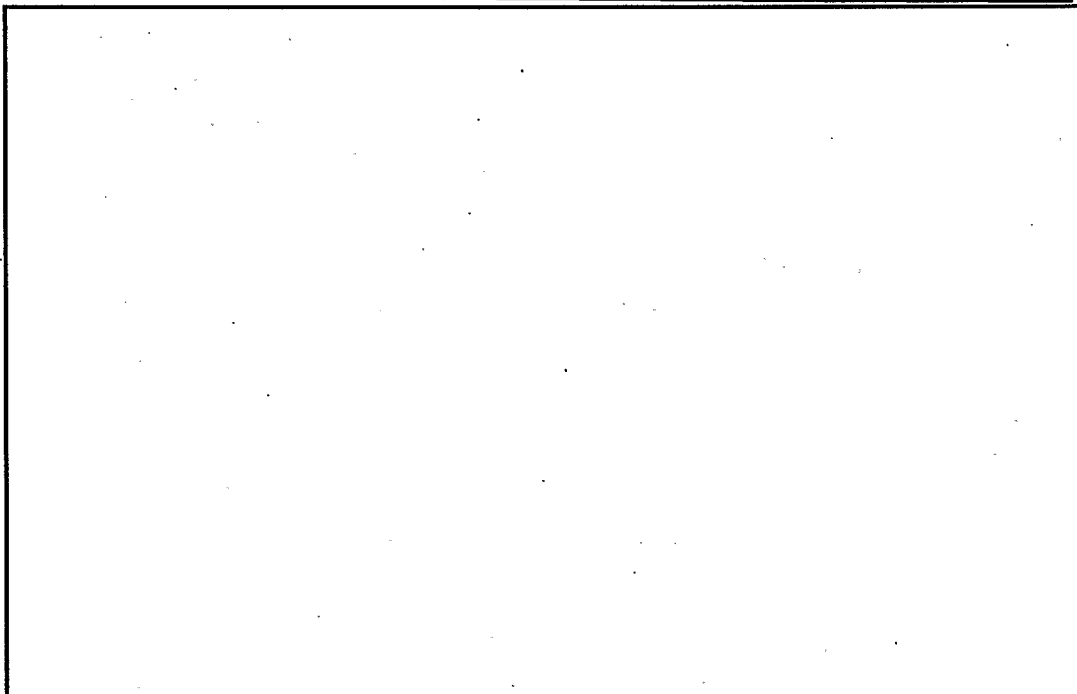
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**(U) Glomar Explorer**

~~(S)~~  In 1968 a Soviet Golf-class nuclear submarine on patrol in the Pacific mysteriously went to the bottom with all hands. The Soviets could not locate the wreck, but the U.S. Navy could, and the U.S. began to study the feasibility of capturing it. 

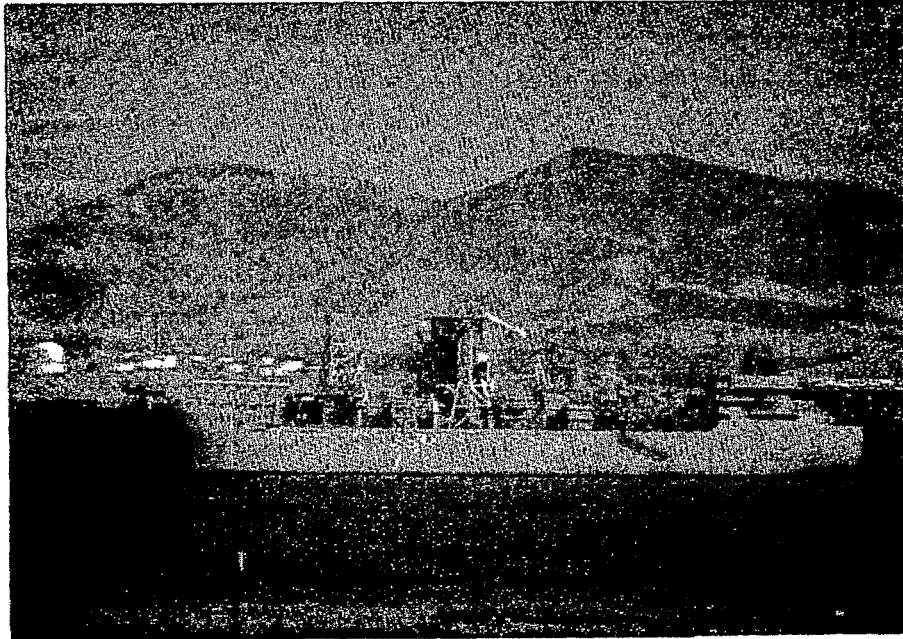


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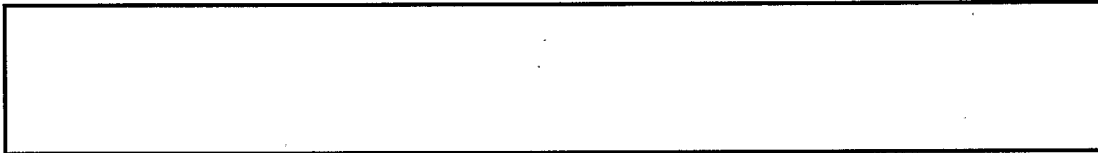


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(U) Glomar Explorer

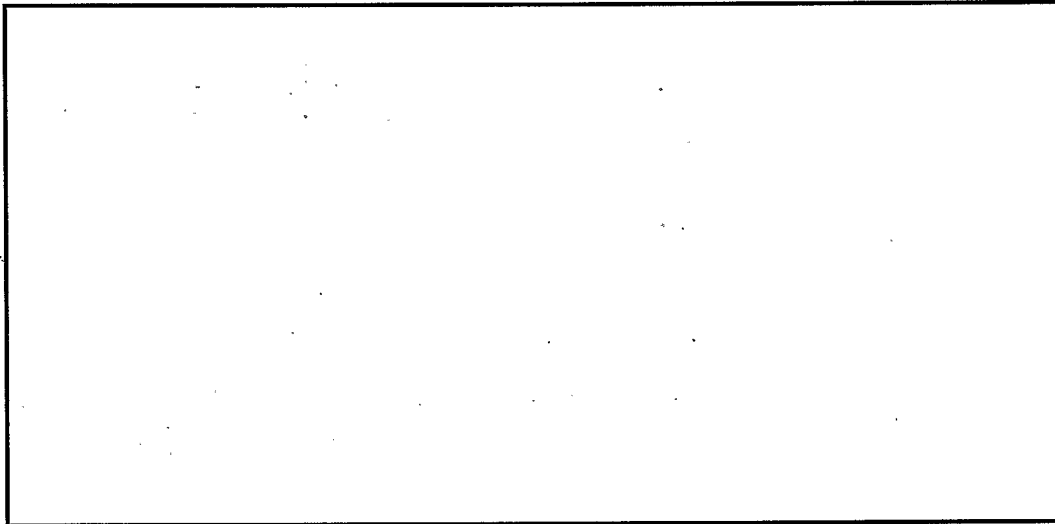


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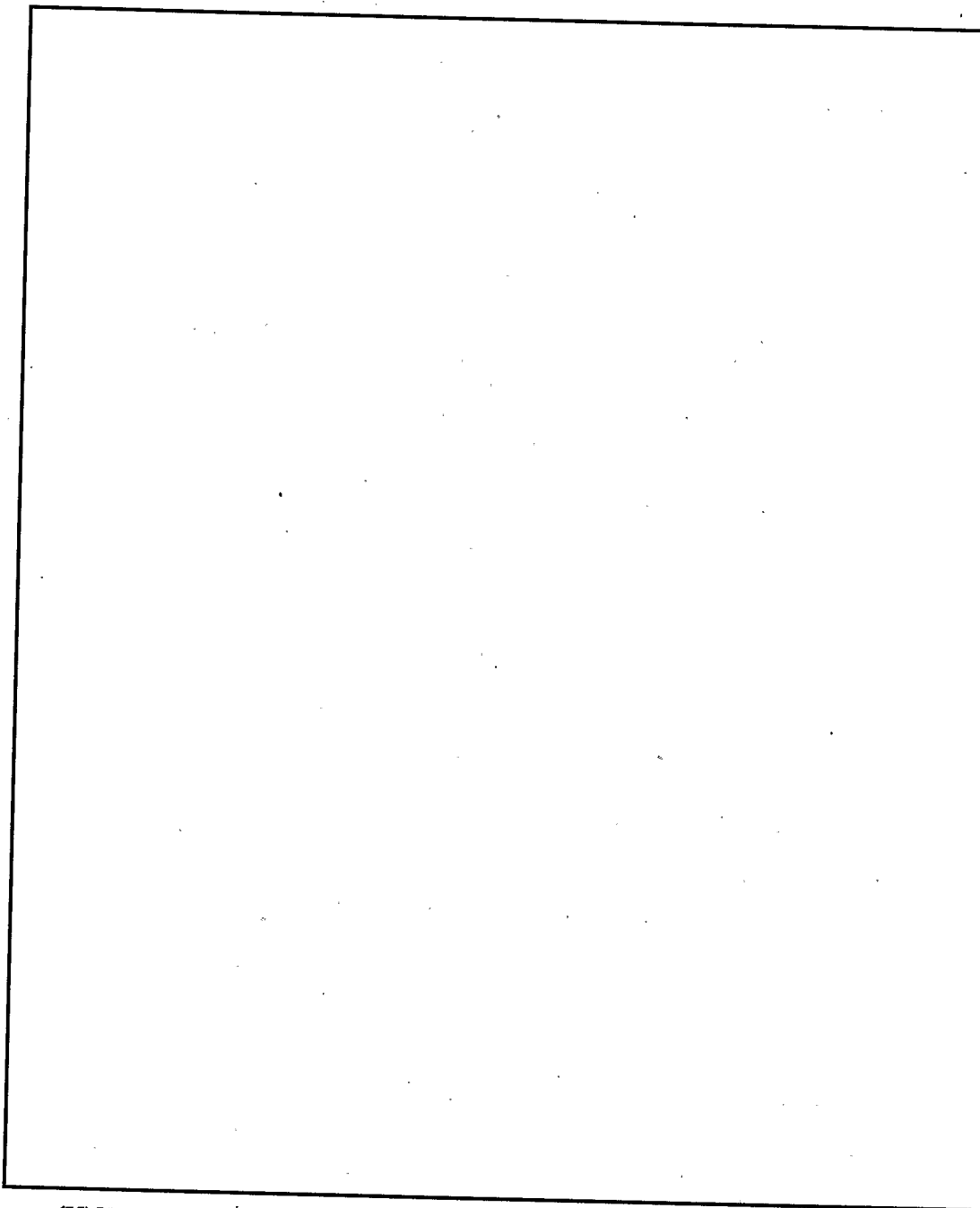
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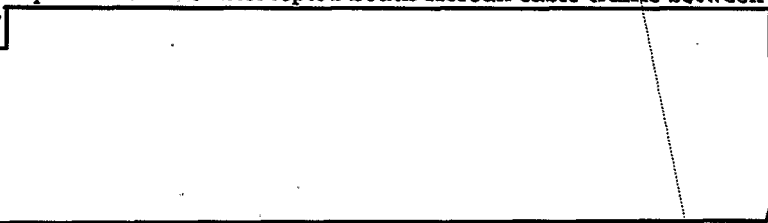
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(U) Newspapers were, of course, following the Fraser investigation, and rumors began appearing that the indictment was based on NSA information. On September 4, 1977, the *New York Times* published an article alleging that Henry Kissinger, Melvin Laird, and other top officials had been aware of the South Korean bribery ring at least as early as 1972. In discussing the source of this information, the *Times* said: "While the investigators did not identify the documents precisely, other sources said that the

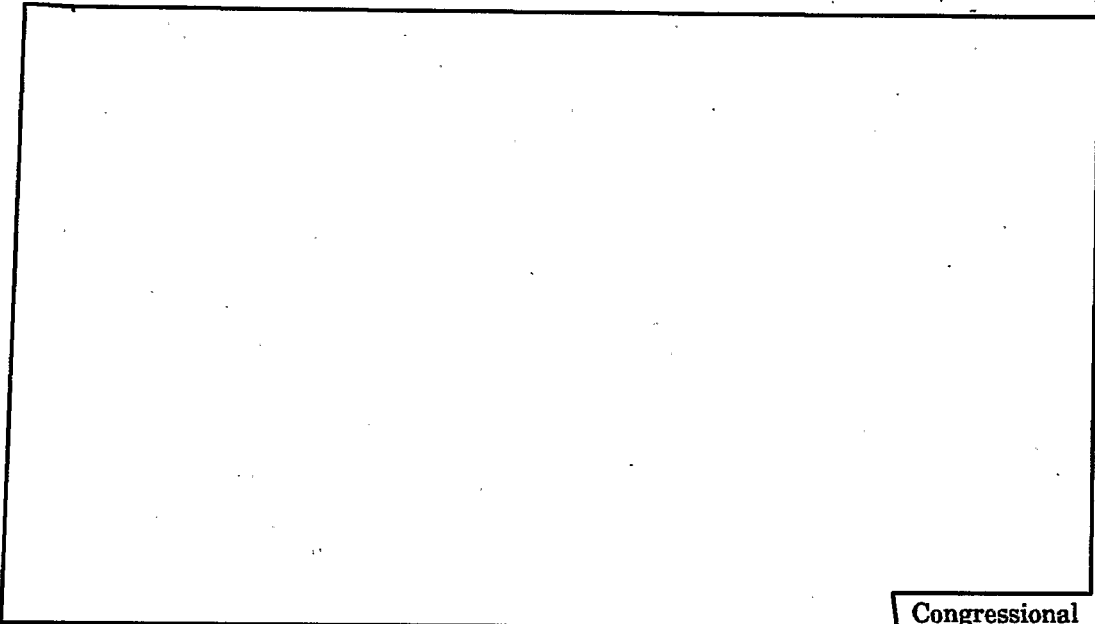
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CRYPTOLOGIC QUARTERLY

documents came from the Central Intelligence Agency, which was earlier reported to have agents in the presidential executive mansion in Seoul, and from the National Security Agency, which has been reported to have intercepted South Korean cable traffic between Seoul and Washington." 

(U) On September 6, two days after the *Times* story, a federal grand jury indicted Tong-Sun Park on thirty-six felony counts of bribery, conspiracy, mail fraud, illegal campaign contributions, and other charges. A California congressman and several former Korean intelligence officials were listed as "unindicted co-conspirators." This placed the issue in the realm of the courts.<sup>83</sup>

(U) But the Koreagate affair was hardly dead. In October 1977, the *New York Times* reported the bizarre case of Sohn Young Ho. Sohn, the top KCIA agent in New York City, was in the process of asking the United States for political asylum when Edward J. Derwinski, a member of the Fraser Committee, allegedly tipped off the KCIA, which went looking for Sohn, possibly intending to mailbag him back to Seoul for safekeeping. Fortunately, the FBI got to him first, but the source of the information about the Derwinski leak, according to the *Times*, was NSA.<sup>84</sup>



Congressional oversight was fine as long it was kept within a narrow range and subjected to the greatest restrictions. As a test of providing SIGINT support to law enforcement, however, it had a much shorter influence. The Reagan administration began reversing that course in 1981,

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insisting that SIGINT be expanded to provide more, rather than less, support to domestic law enforcement.

**(U) Executive Order 11905**

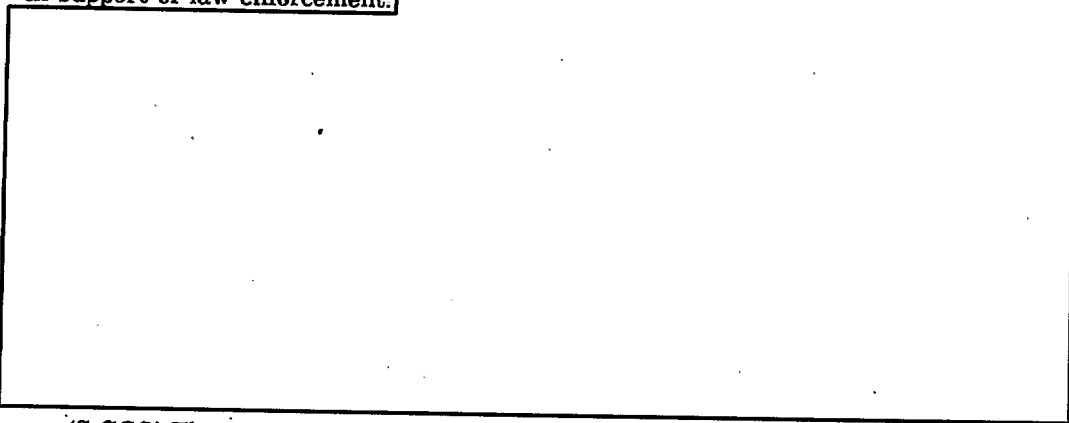
(U) If the president did not act to restrict the intelligence community, it was clear that Congress would. So during the fall of 1975, with the Church hearings in full throttle, President Ford appointed an Intelligence Coordinating Group, chaired by White House counselor Jack Marsh, to draft a comprehensive order, at once organizing the intelligence community and placing checks on it.<sup>86</sup> The result was Executive Order 11905.

(U) Organizationally, the president gave the DCI more authority to supervise the intelligence community, including the critical budget review "club" that Nixon had tentatively proffered to Richard Helms in 1971. The DCI became chairman of a new Council on Foreign Intelligence, which included the assistant secretary of defense for intelligence (a newly created position which would supervise NSA's director). Ford abolished the 40 Committee, which had ruled on all covert operations [redacted]

[redacted] and replaced it with an Operations Advisory Group. He continued the President's Foreign Intelligence Advisory Board and directed that three of its members constitute a special Intelligence Oversight Board to keep track of possibly illegal activities by intelligence organizations. The executive order attempted to draw a clear line between "foreign intelligence" and "domestic law enforcement."<sup>87</sup>

(U) The organizational aspects were of less concern to NSA than were the specific prohibitions. The order prohibited the intercept of communications made from, or intended by the sender to be received in, the United States, or directed against U.S. persons abroad, except "under lawful electronic surveillance under procedures approved by the Attorney General."<sup>88</sup>

~~(S-CCO)~~ The new executive order resulted in the termination of many NSA activities in support of law enforcement. [redacted]



~~(S-CCO)~~ The crisp wording of the order obscured the resident subtleties. How did an analyst know if a person was an American citizen, a resident alien, or just a person with an American-sounding name? How would NSA segregate within its database those

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individuals against whom collection was legal, from those against whom collection was authorized only in specific instances? In fast moving crises such as the *Mayaguez* affair, how could NSA determine if collection was authorized? If it was not, but lives were in danger, who would rule on permissibility? And how much easier it was to Monday morning quarterback the situation than to operate during crisis in the dim, floating world of possible prosecutability. In mid-1976 the NSA DDO, Robert Drake, noted to the IC staff that "To the question of whether or not day-to-day SIGINT production can continue under the provisions of the Executive Order, the answer is yes. In other words, although the guidance is annoying, at times conflicting, and necessarily subject to interpretations at the desk level, I can cope with it. . . . On Monday morning, of course, we all can judge that that incident [*Mayaguez*] was reportable but in cases such as this Monday may be too late." Despite such uncertainty, NSA drafted the general wording of the executive order into a new regulation, USSID 18, which stood the test of time for many years. As with the executive order, it was an attempt to preempt more restrictive congressional legislation. Lew Allen considered the matter to be extremely important and got White House approval.<sup>90</sup>

(U) One result of the Watergate period was to complicate NSA's life [redacted] [redacted] The matter of [redacted] for law enforcement had been contentious since the first Supreme Court decision in 1927, which gave the federal government broad latitude to do electronic surveillance. Courts gradually narrowed this down, and by the 1970s the new climate of concern for individual liberties had basically made warrantless electronic surveillance inadmissible as evidence. But [redacted] foreign intelligence did not fall within this rule, and in the early 1970s federal courts ruled that foreign intelligence [redacted] were legal.<sup>91</sup>

(S-CCO) The "New Shamrock" operations involved [redacted] [redacted] Begun in the 1950s, those [redacted] had continued for years despite periodic resistance by J. Edgar Hoover. Through the decade of the 1960s, the number of such [redacted] fluctuated in the sixty to seventy range. But in December 1974 Attorney General Levi instituted new and cumbersome approval procedures which both lengthened the time needed for approval and broadened the exposure of specific operations from just a few people to a number spread around the intelligence and national security community. At the top of the heap, the attorney general maintained personal control and began disapproving requests that sported justifications that he regarded as weak. Lew Allen tried to divest Levi of control of domestic foreign intelligence [redacted] but was unsuccessful. But, though EO 11905 specifically stated that [redacted] foreign intelligence would be treated differently from [redacted] domestic law enforcement, successive attorneys general continued to control foreign intelligence [redacted] through the Carter administration. To NSA, it was a cost of doing business that had not existed before Watergate.<sup>92</sup>

(U) The last act in the play occurred in 1978 when Congress passed, and the president signed, the Foreign Intelligence Surveillance Act (FISA). This added another approval layer, consisting of a special court of seven judges which would rule on requests from the attorney general [redacted] Although this lengthened further the process of

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instituting the [redacted] it had no effect on their approval. [redacted]

**(U) Congressional Oversight**

(U) Congressional oversight of the intelligence community sprang from the Watergate period. Prior to the Church and Pike committees, oversight was more or less nominal and was confined to just four committees: the Armed Services and Appropriations committees in both houses of Congress. Had Congress no budget to approve, oversight probably would have been even more sketchy than it actually was.

(U) Each of the four committees set up special intelligence subcommittees, comprising the full committee chairman and three or four trusted members from both sides of the aisle. Their examination of funding requests was cursory, and they never asked embarrassing questions about operations. The president controlled the requests, and if someone's intelligence budget were to be shaved down, the executive department would have to do the shaving - congressmen did not get into those details. Thus, inclusion in the president's budget was tantamount to approval.

(U) In the Senate, one man dominated oversight - Richard Russell of Georgia. Serving from 1933 to 1971, Russell chaired both the Armed Services Committee and the Intelligence Subcommittee of the Appropriations Committee. In the House, a succession of chairmen, almost all from conservative southern states with strong national defense leanings, dominated the proceedings. Mendel Rivers, Carl Vinson, and F. Edward Hebern strongly supported intelligence projects and insured that the information was held as tightly as possible in Congress. Lawrence Houston, the CIA general counsel, once said that "Security was impeccable. We never had the slightest breach."<sup>94</sup> Summing up the dealings with Congress, Clark Clifford said, "Congress chose not to be involved and preferred to be uninformed."<sup>95</sup> This situation lasted as long as bipartisan consensus continued.

(U) Special intelligence clearances remained mysterious and obscure. In 1968, at the time of the Tonkin Gulf hearings in the Senate Foreign Relations Committee, no committee members, not even the chairman, William Fulbright, had even heard of clearances above top secret. This problem tied the committee in knots during the testimony of Robert McNamara relating to the August 4, 1964, attack (see Book II, p. 518):

Senator Gore: Mr. Chairman, could we know what particular classification that is? I had not heard of this particular classification.

Senator Fulbright: The staff, Mr. Marcy, and Mr. Hold are cleared for top secret information. This is something I never heard of before either. It is something special with regard to intelligence information. However, Mr. Bader was cleared for that.

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Secretary McNamara: If the staff would wish to request clearance, I am sure the Government would do it.

Mr. Marcy: All of the members who are here submitted renewal requests for top secret clearance recently and, so far as I know, all of those requests have been granted.

Secretary McNamara: But that is not the issue. Clearance is above top secret for the particular information involved in this situation.<sup>96</sup>

(U) By the time the congressional hearings had ended in 1975, the culture had completely changed. Church had termed CIA a "rogue elephant," and closer congressional scrutiny was inevitable. The first thought of Congress was to set up a joint House-Senate committee, but the House fell behind and, unwilling to wait, the Senate established the Senate Select Committee on Intelligence (SSCI) on May 19, 1976. The tardy House, consumed with procedural wrangling over the release of the Pike Report, delayed until July 17, 1977, more than a year later, when it established the House Permanent Select Committee on Intelligence (HPSCI).<sup>97</sup>

~~(FOUO)~~ Ultimately, all members of Congress were to be presumed cleared, and all staff members from the two oversight committees had SI and other security clearances to allow them to do their job. Clearances were also granted to select staff members of certain other committees (like Appropriations) to permit them to do their jobs. Though there were some rough spots at first, NSA-congressional liaison came to be a more or less routine function bedeviled only occasionally by security problems. Certainly there were no repeats of the maverick Pike Committee performance. NSA senior Walter Deeley summed up the matter ten years later: "... I think one of the best things that ever happened to this country is the fact of the establishment of the House Committee on Intelligence and the Senate Committee on Intelligence, and they have total, absolute total, scrutiny over what NSA does."<sup>98</sup>

#### **(U) The Enabling Legislation**

(U) The same Congress that decreed congressional oversight also wanted enabling legislation for the intelligence agencies that had not been established by law, as well as specific limiting legislation for CIA (which had already been established by the National Security Act of 1947). NSA was the most visible of the agencies that had come into being by executive order, and the Agency was one of the main targets of the draft legislation. All the drafts took the same basic form. NSA would have the same authorities as under the Truman Memorandum and would remain within the Department of Defense. The director and deputy director would be appointed by the president and confirmed by the Senate. As with the CIA, the director could be either civilian or military, but if military, the deputy must be a career civilian. What distinguished these drafts from the Truman Memorandum was the heavy emphasis on civil liberties, to be guaranteed through an overlay of oversight bodies - checkers and people to check the checkers. The driving force

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behind the legislation seemed to be the final report of the Church Committee, in which the committee promised to end the abuses of the past.<sup>99</sup>

~~(C)~~ Initially the enabling legislation was pushed along by the strong breeze of reform dominating the Carter White House. But as the president settled into the business of governing, he found this focus on supposed abuses of previous administrations to be increasingly irrelevant. Moreover, the intelligence agencies, and especially NSA, yielded a cornucopia of information. He became less and less interested in pushing legislation that would remove NSA from his total control and give part of that control to Congress. The Carter White House allowed the breezes of reform to blow themselves out, and NSA remained firmly tied to the president's authorities. The Truman Memorandum stood.<sup>100</sup>

### **(U) The Enigma Revelations**

(U) In England, far away from Watergate's tumultuous effects on government, a storm was brewing that was to help NSA, even as it stripped away the gauze of anonymity that remained. It became known as the Enigma revelations.

(U) The story of cryptology's role in World War II had been kept secret since 1945. Only the Americans, who had publicly investigated the surprise attack on Pearl Harbor, had uncapped that bottle, and even they had managed to confine the story to 1940 and 1941, and to limit the disclosures to the breaking of Japanese diplomatic codes and ciphers. The other 95 percent had remained hidden.

(U) The story began to trickle out in 1972, with the publication of John Masterman's book *The Double Cross System*, which covered the capture and turning of German human agents in Britain during the war. How they were captured was another story and went to the heart of the Enigma story, but Masterman kept that part a secret.<sup>101</sup>

(U) The first break to the Enigma story itself occurred in France in 1973, when Gustave Bertrand, the head of French intelligence before the war, published his memoirs revealing the Polish break into Enigma and the conference in 1939, just before the German Blitzkrieg swept over the country. Bertrand detailed his key role in obtaining information on Enigma for the Poles, and he described France's attack against Enigma in the final months preceding the German invasion of 1940. He also described what the British knew about the system.<sup>102</sup>

(U) For a time the British remained silent. But within the ranks of World War II veterans there was a movement to tell their own story, largely to set right what they felt were distortions in the Bertrand account. Leading this effort was Frederick Winterbotham, a former RAF lieutenant colonel who had devised the system for protecting SIGINT during World War II. Winterbotham began working on his own book, published in 1974 as *The Ultra Secret*. He did not speak with a grant of authority from his government and had in fact been warned not to publish. But since the publication of Bertrand's book a year earlier, references to the British attack on Enigma had appeared in nooks and crevices of articles and book reviews, many of them authored by people who had



participated in the operation during the war. Winterbotham knew that it was only a matter of time, and he determined to beat the rush. His book laid out the entire story of Bletchley Park, albeit with certain inaccuracies which came with the fading of memory.<sup>103</sup>

(U) Following Winterbotham, many participants told their stories. For some, like Peter Calvocorresi, editor-in-chief of Penguin Books, revelation became eloquent literature. For others, like Gordon Welchman, it became a detailed technical description that caused the government to blanch (and NSA to pull his accesses).<sup>104</sup>

(U) But none exceeded in scope and detail Harry Hinsley's book on British intelligence during World War II, which was largely a detailed history of Bletchley and the Enigma project. Alone among the writers and historians, Hinsley was given access to the still-classified documents, so that a well-documented story would emerge from among the welter of revelations and memoirs. Hinsley was given permission to use classified documents largely to correct misimpressions stemming from the memory-based accounts of Winterbotham, Calvocorresi, and others.<sup>105</sup>

(U) The story of American codebreaking successes was later in coming. Ronald Clark's *The Man who Broke Purple*, a somewhat breathless (and not entirely accurate) biography of William Friedman, came out in 1977, and was followed by less memorable personal accounts by two Navy men, Edward Van Der Rhoer's *Deadly Magic* in 1978 and Jasper Holmes's *Double-Edged Secrets* in 1979. These could not compete in drama and readability with the stories churning out of the British press, and it took an Englishman, Ronald Lewin, to begin to tell the American story in his book *The American Magic*.<sup>106</sup> The British story captured the moment, while accounts of similarly significant American COMINT successes bobbed unhappily in their wake.

(U) Memoirs, biographies, and selective leaks of information would not, of course satisfy either the public or the historians. The only realistic alternative was to begin declassifying and releasing documents. Here, national security came to loggerheads with the public's right to know, and the issue was resolved only during the post-Watergate sorting out. The declassification effort resulted from two post-Watergate initiatives, FOIA and EO.

(U) Congress passed a new Freedom of Information Act (FOIA) in 1974. In it the congressmen took an old law relating to government documents, which required the requester to prove the need for the documents, and reversed it, instead requiring the government to prove the need to maintain secrecy.<sup>107</sup> Under this new law each government agency set up special arrangements to process FOIA requests. For several years NSA's FOIA team routinely denied every request based on national security. This worked under President Ford, but the new Carter administration in 1977 took the side of the plaintiffs on FOIA. Releasing significant numbers of documents became only a matter of time.

~~(FOUO)~~ Executive Order 11652, issued in 1972, dealt with openness in government, and decreed that government documents be automatically declassified and released to the

HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY



(U) World War II SIGINT histories

National Archives after thirty years.<sup>108</sup> The order actually preceded FOIA, but it did not have a major effect on NSA until after the Church and Pike hearings. By then, Lew Allen had become director, and Winterbotham had begun the Enigma revelations. Seeing that it was only a matter of time, Allen's staff began negotiating with GCHQ for a coordinated bilateral policy on release. They agreed to concentrate on World War II records (those most in demand) and to restrict their declassification initially to the COMINT effort against German, Japanese, and Italian armed forces. In Britain, declassified records would go to the Public Records Office - in the United States, to the National Archives in Washington. NSA would also look at selected Korean War and Vietnam era records,

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EO 1.4.(d)

(U) NSA began the Herculean task of reviewing millions of pages of World War II (and prior) records in 1976, with four reemployed annuitants hired on a temporary, sixty-day basis. The program expanded as more and more files were discovered. Admiral Inman decided to set up a classified NSA archives to hold the records which had been saved but were not yet ready for declassification, and the new "Cryptologic Archival Holding Area" was set up in SAB-2, which had been built in the early 1970s as a warehouse to hold material being transported to a records destruction facility. (At the time NSA did not have its own facility.)<sup>110</sup>

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

~~(FOUO)~~ FOIA ran parallel to the systematic declassification effort, and the two threads became frequently intertwined. In 1978 a researcher named Earnest Bell, who had worked in the Army's wartime COMINT office in London, submitted a FOIA request for all German and Japanese COMINT material for the entire war. NSA's legal counsel, Roy Banner, advised Inman that NSA would likely lose a lawsuit, and the Bell FOIA request greatly expanded the volume of material that the reemployed annuitants had to review. Ultimately twenty-one REAs were hired under Inman to plow through the enormous pile of raw COMINT reports to satisfy Bell's request.<sup>111</sup>

### (U) THE IMPACT OF WATERGATE

(U) The Watergate period resulted in a massive change in the way the cryptologic system related to the American public. Congressional oversight, which sprang from the Church and Pike Committees, fundamentally altered the way NSA related to the legislative branch of government. In a real sense, NSA had to answer to two masters, and the relatively simple life of prior decades became more complex. The new arrangements took some getting used to, but in many ways accountability worked to the advantage of an agency that worked within the law, and within a decade few could imagine going back to the old way of doing business.

(U) If congressional oversight ultimately worked to NSA's benefit, the public exposures accompanying the Watergate period did not. Too many sensitive operations were exposed; too many exposés were splashed across the newspapers. The deleterious effects of the Watergate period stayed with the cryptologic community for many years to come.

### Notes

1. (U) Theodore H. White, *Breach of Faith: The Fall of Richard Nixon*, 1st ed. (New York: Atheneum Publishers, 1975); Karnow, *Vietnam*, 634.
2. (U) Bradburn, et al., *The SIGINT Reconnaissance Satellites*, 5-37.
3. (U) CCH Series VI.A.1.6.2.
4. (U) Seymour Hersh, *The Price of Power: Kissinger in the Nixon White House* (New York: Summit Books, 1983), 321-32.
5. (U) CCH Series VI.H.H.19.6; 19.16.
6. (U) CCH Series VI.H.H.19.6; Harrison Salisbury, *Without Fear or Favor* (New York: Times Books, 1980), 315-18; Interview, Milton Zaslow, by Tom Johnson, 19 June 1998.
7. (U) Hersh, *Kissinger*, CCH VI.I.I.1.2.
8. (U) Ibid.
9. (U) Interview, Meyer J. Levin, by Robert D. Farley and Tom Johnson, 14 January 1987, OH 2-87, NSA.

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~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

10. (U) Winslow Peck [Percy Fellwock], "U.S. Electronic Espionage - a Memoir," *Ramparts*, August 1972, 36-50.
11. (U) CCH Series VI.I.I.1.2.; DDIR files, 96026, box 13, "1974."
12. (U) CCH Series VI. I.I.1.2; Frank Smist, Jr., *Congress Oversees the United States Intelligence Community, 1947-1989* (Knoxville, Tenn: University of Tennessee Press, 1990), 184-86); DDIR files, NSA retired records, 96026.
13. (U) "Summary of Statutes Which Relate Specifically to NSA and the Cryptologic Activities of the Government," undated file in CCH administrative files collection.
14. (U) Athan Theoharis, *Spying on Americans: Political Surveillance from Hoover to the Huston Plan* (Philadelphia: Temple University Press, 1978), 120; NSA Archives, acc nr 18238, CBTF 36; Unpublished manuscript by David Alvarez, Chapter 1, in CCH files.
15. (U) Allen interview.
16. (U) CCH Series VII.B.4; F.19, Vol 1.
17. (U) David Kahn, "Big Ear or Big Brother?," *New York Times Magazine*, May 16, 1976, 13, 62-72.
18. (U) CCH Series XII.H.57.4.
19. (U) Church Committee hearings, Vol V, 10, in NSA records center, 28791-2, 80-079.
20. (U) Theoharis, *Spying on Americans*, 121-22; James Bamford, *The Puzzle Palace: A Report on America's Most Secret Agency* (Boston: Houghton Mifflin Co., 1982), 248; Church Committee correspondence.
21. (U) NSA Archives, acc nr 18238, CBTF 36; Church Committee correspondence, Vol V, 12. Kahn, "Big Ear or Big Brother?," 13, 62.
22. (U) Interview, Tom Charles Huston, by [redacted] 31 January 1986, OH 6-86, NSA.
23. (U) Theoharis, *Spying on Americans*, 20, 121.
24. (U) Allen interview.
25. (U) Theoharis, *Spying on Americans*, 122-23.
26. (U) National Archives, Record Group 457, SRH-001.
27. (U) Ibid.
28. (U) DDIR files, 96026, box 8, "CIA Sensitive Items."
29. (U) When Nixon became president, Carter tried to brief him on a current wiretap program, but Haldeman, whom Carter called "a first class son of a bitch," insisted on being briefed first. Carter refused, and he and Hoover agreed to cancel the operation. See NSA's oral history interview with Carter, by Robert D. Farley, 3-6 October 1988, OH 15-88, NSA.
30. (U) Theoharis, *Spying on Americans*; DDIR files, 96026, box 13, "1974."
31. (U) White, *Breach of Faith*, 133; Theoharis, *Spying on Americans*, 22-26.
32. (U) Theoharis, *Spying on Americans*, 16, 22-31.
33. (U) Ibid.
34. (U) Ibid., 32-33.
35. (U) File on the Huston committee in CCH Series XII.D.; Church Committee correspondence.

P.L. 86-36

36. (U) Huston interview; Kahn, "Big Ear or Big Brother?," 13, 62; Theoharis, *Spying on Americans*, 27.
37. (U) Allen interview; Interview, [redacted] by Charles Baker, Tom Johnson, [redacted] 25 February 1993, OH 4-93, NSA; Interview, Paul Brady, by [redacted] 25 July 1995, OH 22-95, NSA; Interview, Howard Rosenblum, by Robert Farley and Charles Baker, 19 September 1991, OH 3-91, NSA. The existence of a taping system in the Oval Office had been revealed to the Ervin Committee by a Nixon aide, Alexander Butterfield, in July of 1973. Individual tapes were under subpoena, and the most controversial of them contained a gap of eighteen minutes at a crucial point in the Watergate coverup. It was the tapes under subpoena, and especially the tape containing that eighteen-minute gap, that were taken to NSA for examination.
38. (U) Allen interview.
39. (U) Ibid.
40. (U) Stansfield Turner, *Secrecy and Democracy: The CIA in Transition* (Boston: Houghton Mifflin, 1985), 24.
41. (U) Allen interview.
42. (U) CCH Series XIL.D; DDIR files, 96026, box 10, "Directorate Correspondence, Nov. 75-Dec 76."
43. (U) Powers, *Man Who Kept the Secrets*, 288.
44. (U) Smist, *Congress Oversees the United States Intelligence Community*, 9-10, 149; Powers, *Man Who Kept the Secrets*, 288-89.
45. (U) Theoharis, *Spying on Americans*, 9-11.
46. (U) John Robert Greene, *The Presidency of Gerald Ford* (Lawrence, Kansas: University of Kansas Press, 1995), 106.
47. (U) Greene, *The Presidency of Gerald Ford*, 106; NSA Archives acc nr 45146N, H07-0201-6.
48. (U) Smist, *Congress Oversees the United States Intelligence Community*, 30.
49. (U) Huston interview; Smist, *Congress Oversees the United States Intelligence Community*, 63.
50. (U) Huston interview; Church Committee correspondence.
51. (U) Ibid.
52. (U) Christopher Andrew, *For the President's Eyes Only: Secret Intelligence and the American Presidency from Washington to Bush* (New York: HarperCollins, 1994), 415.
53. (U) Church Committee correspondence; DIRNSA letter of 7 October 1975.
54. (U) Ibid.
55. (U) CCH Series VI.D.2.18; Smist, *Congress Oversees the United States Intelligence Community*, 73.
56. (U) Kahn, "Big Ear or Big Brother?," 65; Smist, *Congress Oversees the United States Intelligence Community*, 73.
57. (U) Smist, *Congress Oversees the United States Intelligence Community*, 10; Kahn, "Big Ear or Big Brother?," 72; Church Committee correspondence.
58. (U) Smist, *Congress Oversees the United States Intelligence Community*, 135; [redacted] "The Pike Committee Investigations and the CIA," *Studies in Intelligence* (1997), 41:3, 54.
59. (U) Church Committee correspondence; House Committee on Intelligence - correspondence files, 1975, in NSA retired records 28792, 80-079; [redacted] "The Pike Committee," 56.

P.L. 86-36

HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY

- 60. (U) Allen interview; House Committee on Intelligence - correspondence file; Smist, *Congress Oversees the United States Intelligence Community*, 175.
- 61. (U) House Committee on Intelligence - correspondence file.
- 62. (U) Ibid.
- 63. (U) Ibid.



- 65. (U) House Committee on Intelligence - correspondence file.
- 66. (U) Ibid.
- 67. (U) Ibid.
- 68. (U) Ibid.
- 69. (U) NSA Archives, 28795, 80-079.
- 70. (U) Ibid.
- 71. (U) Gerald R. Ford Library, NSF, in CCH Series XVI.H., "Abzug Committee."
- 72. (U) Huston interview; NSA retired records, 28795, 80-079.
- 73. (U) NSA retired records 28795, 80-079.
- 74. (U) CCH Series VI.I.I.1.2.
- 75. (U) Ibid.
- 76. (U) CCH Series I.I.1.2; DDIR files, 96026, box 10, "Director's correspondence, Nov 75-Dec 76."
- 77. (U) [redacted] "Project Azorian - The Story of the Hughes Glomar Explorer," *Studies in Intelligence*, Fall 1985; Interview, David Boak, by Tom Johnson, 11 May 1998.
- 78. (U) *Newsweek*, October 31, 1977; *Washington Post*, June 6, 1977.
- 79. (U) Interview, Michael A. Smith, by Tom Johnson and [redacted] September 8, 1997, OH 14-97, NSA.
- 80. (U) *New York Times*, September 4, 1977; Memo for the Record, Lt. Gen. Lew Allen, 10 March 1977, in CCH Series XII.D.
- 81. (U) Smith interview; Carter Library, NSF, in CCH Series XVII.I., "Koreagate."
- 82. (U) *Facts on File*, *Weekly World News Digest*, June 11, 1977, 441, 688; Carter Library, NSF, undated 1978 memo to Brzezinski (signature illegible), in CCH Series XVI, "Koreagate"; *New York Times*, September 4, 1977.
- 83. (U) *Facts on File*, 441, 688.
- 84. (U) *New York Times*, October 20, 1977.
- 85. (U) [Signature illegible] Memo to Brzezinski, unknown date in 1978, in Carter Library NSF, in CCH Series XVII.I., "Koreagate."
- 86. (U) Andrew, *For the President's Eyes Only*, 416.
- 87. (U) Ray S. Cline, *The CIA Under Reagan, Bush and Casey* (Washington, D.C.: Acropolis Books, 1981).

EO 1.4.(c)  
P.L. 86-36

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~

88. (U) Church Committee correspondence.
89. (U) Ford Library, NSF, in CCH Series XVI.H., "Legal"; Church Committee correspondence; CCH Series XII.H.57.4.
90. (U) CCH Series XII.D., "EO 11095"; XII.H.57.4, Drake memo to IC staff, 9 August 1976; Allen interview. Ford Library, NSF, in CCH Series XVI.H., "Legal."
91. (U) Church committee hearings, Vol. 5, 81, in NSA retired records 28791-2, 80-079; House Committee on Intelligence - correspondence file, 1975, in NSA retired records 28792, 80-079.
92. (U) DDIR files, 96026, box 13, "1974." Ford Library, NSF, "Wiretap/domestic collection," in CCH Series XVI.
93. (U) Edwin Moise, *Tonkin Gulf and the Escalation of the Vietnam War* (Chapel Hill: University of North Carolina Press, 1996), 17-18; Carter Library [redacted] exit interview, June 15, 1994.
94. (U) Smist, *Congress Oversees the Intelligence Community*, 4.
95. (U) *Ibid.*, 5.
96. (U) The Gulf of Tonkin, the 1974 Incidents: Hearing Before the Committee on Foreign Relations, 90th Cong., 2nd sess., Feb. 20, 1968.
97. (U) Cline, *The CIA Under Reagan*, 279.
98. (U) NSA Archives, acc nr 36740, CBPJ 47, Deeley testimony before Congress, September 27, 1985.
99. (U) NSA Archives, acc nr 42764, H03-0501-4.
100. (U) Carter Library, NSF, in CCH Series XVII.L., "Intelligence Oversight."
101. (U) John C. Masterman, *The Double Cross System in the War of 1939 to 1945* (New Haven: Yale University Press, 1972).
102. (U) Gustave Bertrand, *Enigma: The Greatest Enigma of the War, 1939-1945* (Paris: Plon, 1973).
103. (U) Frederick Winterbotham, *The Ultra Secret* (New York: Harper and Row, 1974).
104. (U) Peter Calvoepressi, *Top Secret Ultra* (New York: Pantheon Books, 1980); [redacted] *Six Story: Breaking the Enigma Codes* (New York: McGraw-Hill, 1982).
105. (U) Francis H. Hinsley and C.A.G. Simkins, *British Intelligence in the Second World War*, 3 vols (New York: Cambridge University Press, 1990).
106. (U) Ronald Lewin, *The American Magic: Codes, Ciphers, and the Defeat of Japan* (New York: Farrar, Straus and Giroux, 1982); See also Edward Van Der Rhoer, *Deadly Magic: A Personal Account of Communication Intelligence in World War II in the Pacific* (New York: Scribner, 1978) and Wilfred J. Holmes, *Double-Edged Secrets: U.S. Navy Intelligence Operations in the Pacific During World War II* (Annapolis: Naval Institute Press, 1979).
107. (U) Brady interview.
108. (U) NSA Archives, acc nr 31218, CBOE 67.
109. (U) [redacted] "The Reemployed Annuitant (REA) Program in NSA: An Evaluation of the Agency Archives," undated paper in CCH records collection; DDIR files, 96026, box 2; [redacted] papers.
110. (U) [redacted] "The Reemployed Annuitant Program"; Interview, Norman Boardman, by Robert D. Farley, 17 January 1986, OH 3-86, NSA.
111. (U) Boardman interview.

P. L.  
86-36

~~HANDLE VIA TALENT KEYHOLE COMINT CONTROL SYSTEMS JOINTLY~~