The muggy Washington summer of 1948 grew even hotter when news media reported that a "blonde spy queen" three years earlier had given federal investigators convincing evidence of widespread Soviet espionage in America during World War II. In a few days the world learned her name--Elizabeth Bentley--and heard her and another ex-Communist agent, Whittaker Chambers, repeat their charges before Congress. Republican congressmen and candidates cited the stories as further evidence of the Roosevelt and Truman administrations' softness toward Communism and neglect of national security. Outraged officials both in and out of government, as well as Democrats fearing a campaign issue that would sink President Truman's apparently foundering re-election chances, insisted that Bentley and Chambers were peddling hearsay and innuendo.

Almost lost in the furor was one isolated recollection of Bentley's that ultimately would provide a clue to the truth behind the charges and denials. Bentley, according to press reports, had told a federal grand jury that an aide to President Roosevelt had learned during the war that American intelligence was on the verge of breaking "the Russian secret code." The aide, said Bentley, had passed this nugget to his Soviet contact. (1) For almost 30 years this fragmentary anecdote remained virtually all that the public would hear about one of the Cold War's greatest intelligence coups.

Bentley's charges, and the debates they fueled, typified the American experience with intelligence and related "internal security" issues in the era of totalitarianism and total war. For roughly 60 years the Western democracies struggled to preserve civil liberties and due process while ascertaining the extent of clandestine penetrations by the intelligence services of fascist and Communist regimes. At midcentury the Soviet Union's main strength was "human" intelligence--the collection of information through agents with access to foreign secrets. Washington's forte was "signals" intelligence--the procurement and analysis of coded foreign messages. At the beginning of the Cold War strength met strength in a struggle that still reverberates 50 years later. The tale of this struggle is the Venona story.

The term "Venona" served as an arbitrary codeword stamped on a relatively small number of documents in order to limit access to a particular cryptanalytic breakthrough. This achievement enabled Western counterintelligence specialists to read portions of more than 2,900 Soviet diplomatic telegrams sent between 1940 and 1948. The encipherment of these telegrams shared a common flaw that left them vulnerable to cryptanalysis. It was that flaw rather than any commonality of dates, origins, or subject matter that made the messages a unique and discrete body of documents. American and allied services spent almost four decades deciphering the original texts and then puzzling over their meanings. By the time this effort was formally closed in 1980, the codeword "Venona" meant, to a handful of witting US Intelligence Community officers, the entire program of crypt-analytic and exploitation activities based on the messages.

Espionage in America
The United States made a tempting espionage target for allies and adversaries alike in the 1940s. Berlin, Tokyo, and Moscow all wanted to discover Washington's strategic plans and the progress being made in American factories and laboratories. Axis spies fared poorly in North America, however, in part because allied civilian and military counterintelligence services rolled up Axis nets and agents early in the war. Soviet intelligence fared much better. Indeed, the tensions and crises in East-West relations in the 1940s and 1950s unfolded along patterns determined in no small part by the success of Soviet intelligence officers, and, belatedly, by the growing ability of Western services to counter Moscow's espionage campaign.

Several advantages helped Soviet intelligence succeed where the Axis services failed. First, Soviet intelligence services, in many respects, were stronger than their Axis counterparts, with better leadership and more resources. Second, operating conditions in America were easier for several reasons, the foremost being the fact that the Soviet Union was an ally and therefore was able to post large numbers of officials on American soil in various liaison capacities. Beyond this, many Americans regarded their Russian allies as comrades-in-arms who should be helped with material as well as rhetorical support. There were some instances of American citizens volunteering actual secrets to Soviets during the war, and Soviet officials in the United States sometimes enjoyed considerable hospitality and access. Finally, Soviet intelligence benefited directly and indirectly from the activities and infrastructure of the Communist Party of the United States (CPUSA).

Moscow collected secrets in the United States through overlapping organizations. The Communist International (better known as the Comintern) monitored the CPUSA and supervised the Party's clandestine apparatus. The CPUSA had reached the peak of its strength and limited influence in American life in the late 1930s, when the Great Depression and Stalin's opposition to Hitler and Mussolini convinced thousands of native-born Americans that capitalism was doomed and that the socialist experiment in Russia represented the world's only reliable bulwark against fascism. Party leaders and some trusted members gathered political and industrial information, most of which probably made its way to Soviet intelligence services. Although the CPUSA lost perhaps a third of its members after the Hitler-Stalin pact of August 1939 temporarily made the USSR a junior partner in Nazi aggression, a committed core remained in the ranks. In addition, military intelligence (GRU) officers based in Soviet consular posts worked with the Comintern and with Party-controlled agents in US Government agencies and private industry. Another Soviet organization, the NKVD (later to become the KGB)-- Moscow's secret police and quasi-civilian intelligence service--had its own foreign intelligence arm. The service had long busied itself with internal repression and with foreign counterintelligence that helped guide covert action against émigré Russian political factions. In other types of foreign operations it had been overshadowed by the GRU, at least in the United States. This relationship would be reversed during the war.

The KGB and GRU ran parallel "legal" and "illegal" intelligence networks in the United States. One set of operations was run by intelligence officers working under legal (usually diplomatic) cover in the "residencies" located clandestinely in Soviet diplomatic missions, trade, and media organizations--for example, the Amtorg Trading Corporation, the Soviet Purchasing Commission, and the Tass news agency. Other KGB and GRU networks, in contrast, had no apparent connections to Soviet establishments and were run by "illegals"--Soviet intelligence officers usually living under false identities. In addition, some GRU and KGB agents were themselves CPUSA officers whose clandestine activities were known, to a greater or lesser extent, to the CPUSA leadership and the Comintern. KGB officer Jacob Golos (covername SOUND), for instance, ran the Soviet-sponsored World Tourists corporation in New York and allegedly also served on the central control commission of the CPUSA. His lover, Elizabeth Bentley (covernames SMART
GIRL and MYRNA), had moved from the open Party into underground work in the late 1930s. She helped Golos service various agents and run the World Tourists business.

Stalin wanted his intelligence officers in America to collect information in four main areas. He directed Pavel M. Fitin, the 34-year-old chief of the KGB's First Directorate, to seek American intelligence concerning Hitler's plans for the war in Russia; secret war aims of London and Washington, particularly with regard to planning for a second front in Europe; any indications that the Western allies might cut a separate peace with Hitler; and, finally, American scientific and technological progress, particularly in developing an atomic weapon. (9)

Soviet espionage operatives in the United States during World War II funneled information to Moscow through a handful of professional intelligence officers who sent reports to the Center and relayed orders and questions from the Center to agents in the field. Operations in America were led by experienced hands such as Vassili M. Zarubin (covername MAKSIM), who served as rezident in New York and later in Washington, and Iskhak A. Akhmerov (covernames MER and ALBERT), the senior illegal. Some Soviet case officers, however, were raw recruits recently brought into the services in order to fill out ranks depleted during Stalin's purges of the late 1930s. (10) For many of these officers, America was their first overseas post. Elizabeth Bentley described her initial meeting with "John" (Anatoli A. Yatskov, Venona covername ALEKSEI), who turned out to be

>a thin, pale, blond, young man of about my height, who was dressed in badly fitting clothes of obviously European make... He had that half-starved look so characteristic of new Soviet arrivals, his English was so meager I had difficulty in understanding him, and he displayed an astounding ignorance of American life.

"John," despite his unpromising debut, would play a key role in Soviet espionage against the atomic bomb. (11)

During the latter part of the war, the KGB gradually took over assets and networks originally established by the GRU and the Comintern (particularly after Stalin dissolved the latter body in May 1943). (12) A general re-division of labor among the Soviet services appears to have given political tasks to the KGB, while focusing the GRU more on military collection; both collected scientific and technical data. In addition, agents hitherto run in cooperation with the CPUSA were turned over to direct Soviet control. This streamlining effort faced daunting operational security challenges; Bentley and others who had worked with the Soviets had learned far more than they needed to about other agents and operations--and resented the change in direction.

A Slow Response

The US Government had grown concerned about reputed fascist and Communist subversion in the late 1930s. The war in Europe--and the Nazi-Soviet nonaggression pact of 1939--gave J. Edgar Hoover's Federal Bureau of Investigation an opportunity to move against individuals and organizations suspected of working with the Russians. Tipped by a State Department probe that had uncovered American and foreign Communists traveling on fraudulent American passports, FBI Special Agents in 1939 raided the facilities of several organizations linked to the CPUSA and found sufficient evidence to arrest General Secretary Earl Browder on charges of passport fraud. (13) In 1940, leads developed by British and Canadian investigators in the Woolwich Arsenal spy case pointed the Bureau toward the senior KGB officer in America, New York
rezident Gaik Ovakimian (covername GENNADI), whom the FBI arrested in May 1941 for violating the Foreign Agents Registration Act. (14) Information on Soviet intelligence contacts and methods obtained by the Bureau in these early investigations would prove valuable during and after the war.

American authorities, nonetheless, did not act as decisively as they might have at the time. At least three defectors from Soviet intelligence were in the United States (Alexander Orlov, Walter Krivitsky, and Whittaker Chambers) and have given the Bureau relatively current information, had they been questioned in depth—and well protected—by federal officials. (15) In addition, the German invasion of the USSR in June 1941 virtually reversed American attitudes toward the Soviets. The State Department quickly reached an understanding with Moscow that allowed Ovakimian to leave the country. Similarly, President Roosevelt commuted Browder's sentence in May 1942 in the interest of inter-allied relations. The FBI remained watchful, but the raids and prosecutions ceased.

Any foreign intelligence service needs secure communications channels between its headquarters and its officers abroad. Although Soviet intelligence services had clandestine radio transmitters in diplomatic missions located in several American cities, these apparently were to be used only in emergencies. (16) In consequence, KGB and GRU stations cabled their important messages over commercial telegraph lines and sent bulky reports and documents—including most of the information acquired by agents—in diplomatic pouches. As a new European war loomed in 1939, the US Army had begun collecting enciphered Soviet telegrams, and soon thousands of cables were piling up in the offices of the Army's Signals Security Agency (SSA). A June 1942 agreement with the Navy and FBI gave the Army exclusive responsibility for analysis of foreign diplomatic and military ciphers, and the Army consequently had general responsibility for studying diplomatic traffic.

SSA analysts, based at Arlington Hall in Northern Virginia, soon began to explore whether the collected Soviet diplomatic messages might be readable. The Army and Navy had sporadically studied Soviet codes and ciphers over the preceding decade, but with little success. (17) Decrypted 1942 cables between the Japanese Army's general staff and its military attaches in Berlin and Helsinki showed that Finland's excellent cryptanalysts had made progress on some Soviet military ciphers, had determined the characteristics for sorting the still unsolvable diplomatic messages, and were sharing results with the Japanese. (18) This information was probably the immediate inspiration for SSA's examination of the Soviet telegrams. On 1 February 1943, SSA created a small program to examine the encrypted Soviet telegrams on orders from Col. Carter Clarke, Chief of the Special Branch of the Army's Military Intelligence Service (MID). Clarke seemed particularly concerned that Moscow and Berlin might negotiate a separate peace, and wanted to be able to warn his superiors of such a development.

Gene Grabeel, a Virginia schoolteacher who had recently arrived at Arlington Hall as part of its large civilian contingent, began the effort to read the Soviet diplomatic messages (and would continue working on the project for the next 36 years). She and others assigned to the project in 1943 spent months sorting stored and incoming telegrams by communications circuits. They gradually expanded their knowledge of the characteristics that separated the messages into the groups that the Finnish cryptanalysts had investigated. Five separate cryptographic systems became apparent. More than half the telegrams belonged to a system that analysts dubbed "Trade" because it carried the messages of the Amtorg Trading Corporation and the Soviet Purchasing Commission--most of which concerned the transfer of Lend Lease materiel to the USSR. The other four systems were used by the KGB, GRU, Naval GRU, and Foreign Ministry, but these users would not be fully identified until the mid-1940s.

Moscow had already learned from well-placed agents that both enemies and allies were trying to read its
diplomatic cables. Finnish troops found scorched codebooks and cryptographic materials in the USSR's Petsamo consulate in June 1941, and before the end of that year a Soviet agent in Berlin reported that the Germans were trying to exploit a Russian codebook acquired from their Finnish allies. (19) These developments in themselves were not alarming to Moscow, because the security of messages enciphered by one-time pads lies in the cipher and not in the codes per se (see inset). In any event, the compromised KGB codebook was not replaced until late 1943. (20) Another important piece of information came from British intelligence officer and Soviet agent H.A.R. "Kim" Philby in 1944, when he told the KGB that British cryptanalysts had turned their attention to Soviet ciphers. (21)

Philby probably reported nothing at that time about American efforts against the Soviet messages. (US analysts did not begin to collaborate with their British counterparts on Soviet communications in general until about August 1945.) Nevertheless, senior KGB officials may have become worried when White House aide Lauchlin Currie apparently told Soviet contacts (possibly in spring 1944) that the Americans were about to break a Soviet code. Currie had access to signals intelligence at the White House and could have heard overoptimistic rumors that Arlington Hall would soon be reading Soviet messages. Currie's tip probably was too vague to have alarmed Soviet cryptographers, but it might have worried higher-ups in Moscow. Indeed, the only change observed in the characteristics of the Soviet messages around that time appeared to be a cosmetic correction implemented to please higher authority. On 1 May 1944, KGB code clerks began using a new message starting-point indicator for telegrams--a change that ironically would make work easier for Arlington Hall crypt-analysts. (22)

What Made Venona Possible?

The messages broken by the Venona program were both coded and enciphered. When a code is enciphered with a one-time pad, the cryptographer who designed the system expects the encipherment to provide absolute security—even if an adversary somehow obtains an underlying codebook or debriefs a defecting code clerk (such as Igor Gouzenko). A flaw in the encipherment, however, can leave such messages vulnerable to analysis even in the absence of a codebook. Such was the case for the Soviet diplomatic systems from which the Venona translations came. Arlington Hall's Venona breakthrough in 1943-46 was a purely analytic accomplishment, achieved without the benefit of either Soviet codebooks or plain-text copies of original messages. The 1944-46 messages—which yielded the early translations and the bulk of all translations—were recovered over a period of years by Arlington Hall cryptanalysts and decoded from a "codebook" that crypto-linguist Meredith Gardner reconstructed by using classic codebreaking techniques.

A Soviet code clerk preparing a message first reduced its text into numeric code groups drawn from a codebook (a kind of dictionary in which the words and common phrases correspond to four-digit numbers). After encoding the plain text with numeric code groups, the clerk would obscure the code groups by adding them, digit by digit, to a string of random digits. This second series of digits, called "additive" or "key," was known to both the sender and receiver because it was printed on the pages of a "one-time pad." One-time pads were periodically pouched to Soviet consular missions in sealed packets. The pad pages—with 60 five-digit additive groups per page—were used in order, always starting with the group in the upper lefthand corner (the pad-page number to be used was more or less concealed somewhere on the face of the message). Code clerks in different Soviet missions used up these packets at varying rates, depending on the volume of messages to be enciphered or deciphered.
The security of such an encipherment-decipherment system depends on both the randomness (that is, unpredictability) of the "key" on the one-time pad pages and the uniqueness of the one-time pad sets held by the sender and the receiver. Different Soviet organizations used their own codes, changing them every few years (probably more to improve vocabulary and convenience than to enhance security).

The flaw in the Soviet messages resulted from the manufacturers' duplication of one-time pad pages, rather than from a malfunctioning random-number generator or extensive re-use of pages by code clerks. For a few months in early 1942, a time of great strain on the Soviet regime, the KGB's cryptographic center in the Soviet Union for some unknown reason printed duplicate copies of the "key" on more than 35,000 pages of additive and then assembled and bound these in one-time pads. Arlington Hall's Lt. Richard Hallock analyzed Soviet "Trade" messages in autumn 1943, producing evidence of extensive use of duplicate key pages (often with different page numbers) assembled in separate one-time pad books. Thus, two sets of the ostensibly unique one-time pad-page sets were manufactured. Despite the opinion that a single duplication was insufficient for solution, Hallock and his colleagues continued to attack the Trade messages and made considerable progress in understanding the cryptographic basis of the diplomatic systems. From Hallock's original discovery, additional analysis yielded techniques for finding duplicate pages separated in time and among different users. The duplicate pages began showing up in messages in mid-1942 and were still occurring in one circuit as late as June 1948. Nevertheless, most of the duplicate pages were used between 1942 and 1944--years of rapid expansion of Soviet diplomatic communications.

We do not know how and when the Soviets discovered the flaw, but we believe Moscow learned of it through agents William W. Weisband and Kim Philby. By the time the Soviets saw the consequences of the manufacturing flaw in the late 1940s, however, most of the duplicate one-time pad pages had already been used. The set of potentially exploitable messages thus was bound by the production of the duplicate pages and the West's ability to spot duplicate uses. Finding duplicates, however, only made the messages potentially readable; indeed, some messages and passages remained unexploitable even after 37 years of effort.

Cecil James Phillips  
National Security Agency

In November 1944 Arlington Hall analysts solved this new starting-point indicator problem and soon expanded their effort against the "Trade" messages to encompass a second, still unidentified Soviet system. This was the breakthrough that eventually made the cables readable. The method revealed hundreds of instances in which individual pages of additive digits from KGB one-time pads were duplicated by key used for Trade messages. Over a period of years, cryptanalysts were able to determine the one-time pad additive values for significant parts of hundreds of enciphered telegrams, leaving the coded texts vulnerable to crypto-linguist codebuilders trying to recover the meanings of the four-digit words and phrases.(23)

American authorities inferred during World War II that the Soviets were engaged in espionage, but as yet there was little coordination among the various counterintelligence organizations. A June 1939 Presidential directive gave the FBI responsibility for domestic counterintelligence with the Office of Naval Intelligence (ONI) and the War Department's Military Intelligence Division (better known as the G-2).(24) The three organizations comprised a body known as the Interdepartmental Intelligence Conference (IIC) and stood together to protect their monopoly on domestic counterintelligence work from other agencies, particularly the new Office of Strategic Services (OSS) and its activist chief, Maj. Gen. William J. Donovan. OSS
eventually developed a capable counterintelligence apparatus of its own in Europe--the X-2 Branch--but it had no authority to operate on American soil.

In keeping with the limited extent of interagency cooperation, American counterintelligence organizations made uneven progress in integrating signals intelligence leads during the war. OSS and the FBI separately launched their own cryptologic intelligence operations, but these were short-lived. (25) (Neither OSS nor the FBI, incidentally, was shown the Army's "MAGIC" intercepts of wartime foreign diplomatic messages.) The X-2 Branch of OSS had been created to provide British intelligence services with a point of contact in OSS for sharing certain sensitive "ULTRA" reports derived from decrypted German military and intelligence communications. (26) Unfortunately for OSS, however, X-2 monitored the agents of Axis--not allie--services. It had little influence over security clearances for OSS personnel (some of whom indeed spied for the Soviets). (27)

Coordination was little better between the military's cryptologic services, which in any event had left domestic security largely to the FBI. The Army and Navy signals intelligence organizations barely cooperated with one another, jealously guarding their reports and their access to President Roosevelt. Outside of the Oval Office there was no collation and analysis of the totality of the intelligence information-let alone the counter- intelligence leads--collected by the US Government.

Hoover's FBI monitored the CPUSA during the war but did not always share its leads with other agencies. In April 1943, FBI agents began to collect solid information on current KGB activities and personnel. New York consular officer Vassili M. Zarubin (a KGB general operating under the alias Zubilin) called on senior CPUSA officer Steve Nelson in Berkeley, California. Unbeknownst to both, the FBI had been watching Nelson for weeks. Zarubin's conversation made it obvious to Bureau eavesdroppers that he was an important KGB officer (although they could not yet know that he was Gaik Ovakimian's replacement as senior KGB rezident in America). (28) The FBI watched Zarubin from that day until he left the United States in 1944 (although he occasionally gave his trailers the slip), and Bureau agents catalogued hundreds of contacts and leads developed by this operation. (29)

More leads dropped into the Bureau's mailbox in August 1943, in the form of an anonymous letter drafted on a Russian typewriter and mailed in Washington, DC. This extraordinary note--the author's identity still is uncertain--denounced Zarubin and 10 other KGB officers in North America, along with two of their assets. (30) Special Agents quickly concluded that the letter was genuine and largely accurate, although they gave little credence to its claim that the Soviets were passing secrets to Japan. The FBI subsequently increased surveillance of persons named in the letter and even doubled two agents recruited by one of them, KGB officer Andrei Shevchenko. (31) Nevertheless, the FBI did apparently not pass copies of the anonymous letter to other agencies until after World War II, nor did Special Agents try to recruit Soviet officers named by its author.

The Atomic Era

US Government agencies ran a wartime security system that was porous for Soviet agents and yet opaque for American counterintelligence agencies charged with protecting secrets. FBI Director Hoover allegedly knew nothing of the super-secret Manhattan Project before Steve Nelson inadvertently informed him in the spring of 1943. High-level political and strategic motivations in Washington also hampered US efforts against Soviet espionage. President Roosevelt wanted to strengthen a distrustful Stalin in his fight against Hitler, and his lieutenants had no desire to antagonize Moscow by suppressing the CPUSA or publicly
probing rumors that members of the Party had infiltrated government agencies. (32) Hoover, for his part, kept a close eye on the CPUSA but did not, at least before 1945, try to convince the White House that Soviet officials in the United States were actively engaged in espionage. Donovan's OSS also encountered the administration's reluctance to antagonize Moscow when OSS officers bought unidentified Soviet cryptographic documents from emigre Finnish cryptanalysts in late 1944. Secretary of State Edward P. Stettinius insisted that the papers be given back to the Russians, and Donovan promptly obeyed a White House order to return them to the Soviet Embassy. (33)

The intrigues surrounding the development of the atomic bomb both symbolized and helped widen the growing breach between the Soviet Union and its Western allies in 1945. Washington and London jointly built the bomb but said nothing about their work to Moscow. Stalin's clandestine sources, however, obtained detailed political, military, and diplomatic reports on his allies' strategic planning and war aims. (34) He knew of the bomb project long before the new President Truman finally divulged it to him in July 1945. The KGB effort against the Manhattan Project (codenamed ENORMOUS) represented a shift in collection emphasis. Moscow hitherto had regarded the United States primarily as a source of information useful in the war against Germany; now America became in Russian eyes a rival and even a threat to the Soviet Union itself. Soviet agents penetrated the Manhattan Project at several points. At the Los Alamos facility alone, at least four agents reported through couriers such as Lona Cohen to the Soviet consulate in New York, where a KGB sub-residency under a young engineer named Leonid R. Kvasnikov (covername ANTON) coordinated operations and dispatched intelligence to Moscow. (35)

US perceptions of the Soviets began shifting after the war had been won. Two defections in autumn 1945 galvanized US counterintelligence. Igor Gouzenko, a GRU code clerk in the USSR's Ottawa Embassy, revealed to Canadian authorities that the Soviets had indeed penetrated the Manhattan Project and other agencies. (36) A few weeks later, Elizabeth Bentley gave the FBI details about spies in the State and Treasury Department, OSS, the Pentagon, and even the White House. Both Bentley's and Gouzenko's accounts dovetailed with the story that Time magazine editor and former GRU agent Whittaker Chambers had told FBI agents in 1942 and again, in detail, in May 1945. (37) By mid-November, the White House knew the outlines of the defectors' stories and had heard of their accusations against dozens of US Government employees, including high officials such as White House aide Lauchlin Currie, OSS executive assistant Duncan Lee, and Assistant Secretary of the Treasury Harry Dexter White. (38)

A Canadian Government White Paper on the Gouzenko affair in July 1946 confirmed the gist of press speculation about Soviet wartime espionage and gave the Western public its first official account of the extent of the problem. This confirmation of the essential truth behind the rumors diminished public tolerance for Communism at home and abroad. Truman became convinced of the need for a government-wide tightening of security, but he had no intention of condoning witch-hunts for allegedly disloyal Democratic officials or blanket accusations against federal workers and Roosevelt's New Deal. Little could be done, for the time being, against the individuals named by Gouzenko or Bentley--apart from corroborating their reports and limiting the suspects' access to sensitive information--until Western governments could gather evidence that would stand up in court.

Domestic politics, however, prompted the White House to act. Republicans campaigning in the 1946 Congressional elections accused Democrats of ignoring Communist infiltration and disloyalty; the charge helped the GOP regain control of Congress for the first time since 1931. Truman's response was motivated in part by his own political considerations. Hoping to deter free-ranging Congressional probes and harsh Republican-drafted loyalty legislation, he signed Executive Order 9835, which institutionalized the wartime loyalty regime. The executive order mandated loyalty boards in all federal agencies and defined employee...
disloyalty to include membership in groups judged subversive by the Attorney General.\(^{39}\)

During this period, Bentley gave the FBI details that opened a hitherto unnoticed window on the networks run by "illegals"—Soviet citizens abroad under false identities who worked for the KGB or GRU in apparent isolation from official Soviet consular missions. Special Agents fanned out across the country to investigate Bentley's leads and to monitor persons whom she had named, and for about a year the FBI entertained hopes of "doubling" her against the KGB.\(^{40}\)

The "Gregory" case—as the investigations prompted by Bentley were known inside the government—produced many leads but led to no espionage prosecutions. FBI agents could not use evidence gathered by wiretaps in court, and they were unable to catch suspected spies in the act of compromising official secrets.\(^{41}\) Meanwhile, Soviet agents and intelligence officers almost certainly surmised the existence of a serious leak. They took precautions even before a federal grand jury, meeting in 1947, probed Bentley's allegations and called as witnesses dozens of individuals named in her testimony.

At roughly the same time, the renamed Army Security Agency (ASA—formerly the Signals Security Agency) developed evidence that would soon corroborate Bentley's testimony and the 1943 anonymous letter. After the war, the "Russian Section" at Arlington Hall expanded. Work on diplomatic messages benefited from additional technical personnel and new analysts—among them Samuel Chew, who had focused on Japan, and linguist Meredith Gardner, who had worked on both German and Japanese messages. Chew had considerable success at defining the underlying structure of the coded Russian texts. Gardner and his colleagues began analytically reconstructing the KGB codebooks. Late in 1946, Gardner broke the codebook's "spell table" for encoding English letters. With the solution of this spell table, ASA could read significant portions of messages that included English names and phrases. Gardner soon found himself reading a 1944 message listing prominent atomic scientists, including several with the Manhattan Project.\(^{42}\)

Gardner henceforth made rapid progress, reading dozens of messages sent between Moscow and New York in 1944 and 1945. By May 1947 he had read one that implied the Soviets ran an asset with access to sensitive information from the War Department General Staff.\(^{43}\) It became apparent to Gardner that he was reading KGB messages showing massive Soviet espionage in the United States.

Another problem soon arose—that of determining how and to whom to disseminate the extraordinary information Gardner was developing. ASA's reporting procedures did not seem appropriate because the decrypted messages could not even be paraphrased for Arlington Hall's regular intelligence customers without divulging their source. At this point, ASA knew nothing about the federal grand jury impaneled in Manhattan to probe the espionage and disloyalty charges leveled by Bentley and other defectors from Soviet intelligence, so no one in the US Government was aware that evidence against the Soviets was suddenly developing on two adjacent tracks. Gardner took matters into his own hands in the summer of 1947, drafting "Special Report #1," which went to a handful of senior ASA officials. One item in it about an unidentified Soviet asset would later prove fateful:

\[LIB??\] (Lieb?) or possibly [\textit{LIBERAL}: was ANTENKO [later understood as ANTENNA] until 29 Sept. 1944. Occurs 6 times, 22 October--20 December 1944. Message of 27 November speaks of his wife [\textit{ETHEL}, 29 years old married (?) 5 years, "... . . . . husband's work and the role of METR(O) and NIL." [Spelling and punctuation in original][44]
Cooperation Expands

Deputy G-2 Carter Clarke read Special Report #1 and in late August or early September 1948 asked FBI liaison officer S. Wesley Reynolds for a list of KGB and GRU covernames. Clarke's hint that ASA had broken a KGB code piqued the interest of the Bureau, which at that time was questioning former Soviet agents living in the United States concerning the allegations of Bentley and others and information gathered from surveillance of Soviet officials during the war. The Bureau quickly sent ASA a list of some 200 names, and, although few of them appeared in the translated messages, the long cooperation later known as the Venona program had begun. This cooperative spirit between cryptanalysts and investigators endures to the present day.

Full inter-agency cooperation, however, was still several years away. President Truman, unhappy about the mass of unanalyzed reports that the departments daily sent to the White House, had insisted in 1945 on greater coordination of intelligence information. His new Central Intelligence Group was intended to solve this problem, but it started out slowly. American intelligence agencies on the whole did not do a good job of presenting counterintelligence analyses to the President and his aides. FBI Director Hoover, for instance, frequently sent to the Truman White House allegations of Communist plotting and Soviet espionage. It is not clear how much of this information actually reached the President, however, or how seriously it was regarded by White House aides.

Despite the Truman administration's sustained but piecemeal restructuring of the Intelligence Community, the division of labor in counterintelligence functions remained much as it had been set early in World War II. The new National Security Council preserved the FBI's and armed services' monopoly of domestic counterintelligence in NSC-17/4 and 17/6 in 1949. The agencies outside this monopoly were expected to provide information but were not invited to join operations involving domestic security. The new Central Intelligence Agency (CIA), the closest institutional successor to OSS and CIG and, consequently, the inheritor of OSS's dismal security reputation, saw little of the information Gardner and his colleagues were developing. CIA counterintelligence officers, however, now had wider access to signals intelligence than had their predecessors in X-2, and they briefly joined the Army and Navy in a Joint Counterintelligence Information Center (JCIC) to exploit current signals intelligence leads, using X-2's wartime employment of ULTRA as its model. The JCIC received Special Report #1 at roughly the same time Colonel Clarke notified the FBI, but the Bureau never joined the JCIC or sought its assistance with the Soviet translations. When the JCIC inquired about additional Special Reports in early 1949, Clarke apparently instructed his subordinates not to provide anything. The early American effort to use the information from the Soviet messages thus remained understaffed and highly compartmented, and exploitation opportunities were almost certainly lost in consequence. For several years the major investigative burden remained with the FBI, which assigned the most important inter-agency liaison work to a single Special Agent, Robert Lamphere.

"I stood in the vestibule of the enemy's house, having entered by stealth," Lamphere recalled in his memoir of the investigations. Lamphere began sharing liaison duty with Wesley Reynolds in the spring of 1948. That October he had a private meeting with Meredith Gardner and began full-time liaison on the project. It was Lamphere's tenacity that taught the FBI how to use the translations against Soviet espionage. Through him the Bureau received a steady flow of translations and re-translations, as well as Gardner's insights about the "tradecraft" of Soviet spying. Gardner and his colleagues, in return, received collateral evidence, identifications, and additional leads. The process was essentially a slow comparison of evidence for and against various competing hypotheses, with the knowledge gained in many cases being greater than the sum of its parts.
By the time Lamphere began using the translated messages, the public controversy over "loyalty" and "red-baiting" had risen dramatically amid growing concern over US-Soviet tensions. New allegations that prominent American citizens had spied for the Soviets burst upon the public in July 1948, when Bentley spoke before the House Committee on Un-American Activities. Her testimony recounted, among other things, Lauchlin Currie's alleged distress over US efforts to read wartime Soviet telegrams (this seems to have been the first public clue to the existence of ASA's effort). A few days later Whittaker Chambers charged that Roosevelt administration figures Alger Hiss and Harry Dexter White were secret Communists. Heated denials by the accused and their supporters added to the drama and controversy as elections loomed that autumn. Republican Congressmen and activists hailed the testimony as the long-suppressed proof of Democratic inattention toward Communist subversion. Truman bitterly resented such charges and insisted that the Hiss affair in particular was a GOP "red herring." (50)

Truman's repeated denunciations of the charges against Hiss, White, and others--all of whom appear under covernames in decrypted messages translated before he left office in January 1953--suggest that Truman either was never briefed on the Venona program or did not grasp its significance. Although it seems odd that Truman might not have been told, no definitive evidence has emerged to show he was. In any event, Truman always insisted that Republicans had trumped up the loyalty issue and that wartime espionage had been insignificant and well contained by American authorities. (51)

In December 1948 the FBI identified a Soviet agent covernamed SIMA as Judith Coplon, a young Justice Department analyst recruited by the Soviets in 1944. (52) Coplon would become the first person arrested on the basis of a Venona lead. FBI agents detained her in March 1949 along with a KGB official under UN cover; her purse contained ostensibly sensitive documents (which the Bureau had routed through her office as bait). Director Hoover or (less likely) someone higher in the Truman administration forbade FBI officials testifying at her trial from introducing the translated messages as evidence. This protection of the cryptanalytic breakthrough forced prosecutors and government witnesses into elaborate circumlocutions; Special Agent Lamphere, for example, testified that suspicion had fallen on Coplon because of information from a reliable "confidential informant" that was not a wiretap. (53) Although both of Coplon's convictions would be overturned on appeal, subsequent prosecutions developed in the same manner, with the too-sensitive codebreaking secrets obscured behind mounds of corroborating evidence.

The Coplon case set the pattern for an intense series of investigations and prosecutions that followed over the next two years. Meredith Gardner and his colleagues (working from May 1949 under the auspices of AFSA, the new Armed Forces Security Agency) supplied covernames and translations to the FBI; Lamphere and other Special Agents tracked down the leads:

- **February 1949.** ASA observed that messages containing "Material G" were quoting British Foreign Office telegrams sent to the British Embassy in Washington during the war. Not until March 1951, however, did American and British cryptanalysts conclude that "G," "GOMMER," and "GOMER" (the Russian transliteration of HOMER) had to be the same agent who had provided the cables to the KGB. By the beginning of May 1951, the list of possible suspects had narrowed to one name: Donald Maclean of the Foreign Office. Maclean, with compatriot Guy Burgess, soon fled to the Soviet Union.

- **September 1949.** The FBI determined that covernames REST and CHARLES, both denoting a scientist in the wartime Manhattan Project, referred to physicist Klaus Fuchs, author of a paper quoted in one message. British authorities interrogated Fuchs in late 1949. His information in turn led the FBI to courier Harry Gold, arrested in Philadelphia on 22 May. (54)
February 1950. Lamphere suspected that a Soviet agent covernamed CALIBRE had to be an enlisted man posted at the Manhattan Project facility at Los Alamos during the war. Subsequent AFSA analysis, and additional information from Harry Gold, led to David Greenglass, who confessed to the FBI on 15 June 1950 and also implicated his brother-in-law, Julius Rosenberg.

Spring 1950. Covername NICK had emerged in 1949 as one Amadeo Sabatini, who had fought in Spain together with KGB asset Morris Cohen. Sabatini apparently kept quiet about Cohen but did point the FBI toward a Jones Orin York (almost simultaneously identified as Venona covername NEEDLE). When questioned in April 1950, York alleged that a former case officer of his was an AFSA employee named William Weisband. AFSA suspended Weisband in May.

Late June 1950. The FBI discovered that information in the messages about an agent who collected technological and scientific secrets, codenamed LIBERAL and ANTENNA, matched the known facts about New York engineer Julius Rosenberg. Two messages also implicated his wife, Ethel. Rosenberg had been questioned on the basis of David Greenglass' information on 16 June and tailed ever since, but he was not arrested until a month later. (55)

Sometime in 1949-50. Gardner translated a 1944 message that described the recruitment of Harvard physics student Theodore Alvin Hall. Soon afterward, the Bureau determined that the covername YOUNGSTER [MLAD], found in other messages, matched Hall. Special Agents questioned Hall in 1951, but he was never prosecuted (probably because a case could not have been made without revealing AFSA's program).

Translated messages also corroborated various charges made by Elizabeth Bentley and Whittaker Chambers. By June 1950 the Bureau determined that the covername ALES, mentioned in one KGB message, referred to former State Department aide Alger Hiss, then serving a sentence for perjury. (56) Around the same time, Lamphere told Gardner that the covername JURIST meant Harry Dexter White, a former Assistant Secretary of the Treasury, who had died suddenly a few days after denying Whittaker Chambers' August 1948 charge before the House Committee on Un-American Activities. (57) The translations also clarified another sensational spy case a few years later when the FBI identified the covername MARQUIS as Joseph Milton Bernstein, a GRU agent linked to the Institute of Pacific Relations and Amerasia magazine. (58)

Double Dilemma

The KGB had not been surprised by the wave of charges, arrests, and prosecutions. Intelligence officials in Moscow nonetheless faced much the same dilemma that confronted the FBI and AFSA. Both sides now had sources too important to risk. The Americans and their allies had to be careful in investigating certain suspects. The Soviets had to be equally wary in protecting their agents.

The Soviets apparently had monitored Arlington Hall's "Russian Section" since at least 1945, when William Weisband joined the unit (see inset). Weisband's earliest reports on the work on Soviet diplomatic systems were probably sketchy and might not have provided clear warning to Moscow about the exploitability of the KGB messages. By 1947, Weisband could have reported that KGB messages were being read, although by then virtually all of the exploitable messages had been transmitted and were in Arlington Hall's possession. Where Weisband had sketched the outlines of the cryptanalytic success, British liaison officer Kim Philby received actual translations and analyses on a regular basis after he arrived for duty in Washington in autumn 1949. (59)
Timely warnings from Philby helped the KGB protect some of its agents and operations. Various accounts indicate that in October 1949 Moscow began advising American agents who had dealt with Klaus Fuchs that they might have to flee the country through Mexico. (60) Some operatives, such as Morris and Lona Cohen and their case officer "Mark," avoided the net that was closing around other KGB agents. (The Cohens, as "Helen and Peter Kroger," would be convicted of espionage in the United Kingdom in 1961.)

Who Was William Weisband?

In 1950 one Jones Orin York (covername NEEDLE) told the FBI that he had passed secrets to the KGB since the mid-1930s. A worker in the aircraft industry on the west coast, York said that his KGB handler during 1941-42 had been one Bill Weisband, who had helped him buy a camera for photographing documents.(a)

York's allegation was disturbing news, implying that the KGB had a mole in the sensitive Armed Forces Security Agency (AFSA). Born in Egypt in 1908 of Russian parents, Weisband emigrated to America in the 1920s and became a US citizen in 1938. He joined the US Army Signals Security Agency in 1942 and performed signals intelligence and communications security duties in North Africa and Italy, where he made some important friends before returning to Arlington Hall and joining its "Russian Section." Although not a cryptanalyst, as a "linguist adviser" (he spoke fluent Russian) the gregarious and popular Weisband had access to all areas of Arlington Hall's Soviet work. Meredith Gardner recalled that Weisband had watched him extract the list of Western atomic scientists from the December 1944 KGB message mentioned earlier.

Weisband always denied involvement in espionage, and the US Government never prosecuted him for it. While suspended from AFSA on suspicion of disloyalty, he skipped a federal grand jury hearing on Communist Party activity. As a result, in November 1950 Weisband was convicted of contempt and sentenced to a year in prison. He died suddenly of natural causes in 1967.

The Venona messages do not hold a definite reference to William Weisband. Nevertheless, three messages mention a "ZVENO" (the Russian word for "link"). The earliest and clearest reference suggests procedures for the KGB's London residency to use in contacting ZVENO, who was awaiting a transfer to England. ZVENO, according to one message, had spent the last four weeks in an Italian-language course in Virginia and would leave for Britain by mid-July.(b) NSA records show that Weisband spent that June honing his skills in a language (probably Italian) at Arlington Hall, shipped out on 17 July, and arrived in London by 29 July.

(a) Information that York provided in a later FBI interview can be seen in the Washington Field Office's memorandum "William Wolf Weisband," 27 November 1953, Document 34.

(b) New York 981 to Moscow, 26 June 1943; this was not fully translated until 1979.

The long spate of prosecutions and loyalty hearings coincided with, and helped heighten, the atmosphere of suspicion and accusations now known as McCarthyism. Republicans in Congress were echoing widespread sentiment when they criticized the Truman administration for its failure to prevent Communism from
conquering Eastern Europe and China. "Softness" on Communism abroad was portrayed by Republicans as the corollary of laxness at home. Suspicions that the Roosevelt and Truman administrations had neglected internal security fed charges of a Democratic-led coverup of the wartime Amerasia affair, as well as Eisenhower administration Attorney General Herbert Brownell's 1953 accusation that then President Truman had ignored FBI warnings about Harry Dexter White in 1946. Republican Senator Joseph McCarthy and allies exploited this confusion and rancor, blaming Communists in the State Department for "losing" China and accusing federal workers of disloyalty on flimsy pretexts.

The tacit decision to keep the translated messages secret carried a political and social price for the country. Debates over the extent of Soviet espionage in the United States were polarized in the dearth of reliable information then in the public domain. Anti-Communists suspected that some spies--perhaps including a few who were known to the US Government--remained at large. Those who criticized the government's loyalty campaign as an overreaction, on the other hand, wondered if some defendants were being scapegoated; they seemed to sense that the public was not being told the whole truth about the investigations of such suspects as Julius Rosenberg and Judith Coplon. Given the dangerous international situation and what was known by the government at that time, however, continued secrecy was not illogical. With the Korean war raging and the prospect of war with the Soviet Union a real possibility, military and intelligence leaders almost certainly believed that any cryptologic edge that America gained over the Soviets was too valuable to concede--even if it was already known to Moscow.

Intensified political and legal pressure on the CPUSA coincided with shifts in Soviet intelligence tactics. Two pieces of legislation for a time gave the Justice Department broad powers against the Party. Between 1949 and 1957 the government, invoking the Alien Registration Act (better known as the Smith Act), won convictions of a dozen top CPUSA leaders for advocating the violent overthrow of the government. The following year, Congress overrode Truman's veto and passed the Internal Security Act (often called the McCarran Act), which required Communist-affiliated organizations to register with the government and allowed emergency detention of potential spies and saboteurs.

These and other governmental actions sent the CPUSA partially underground in 1951. Party leaders took this step in an effort to protect essential cadres, but the move actually hastened the CPUSA's decline. In addition, Soviet leader Nikita Khrushchev's 1956 critique of Stalinism prompted demoralizing internal debates in the CPUSA and precipitated the departure of still more members. Soviet intelligence officers apparently received orders to steer clear of the closely monitored CPUSA, and they urged assets to avoid open contacts with Communist causes. By 1953 the FBI had concluded that the CPUSA was no longer a serious espionage threat, although the Bureau still regarded it as a potential recruiting ground for spies. Nonetheless, intensive surveillance of Soviet diplomats and nationals did not stop KGB and GRU officers, even those working under official cover, from meeting with assets, and from continuing to operate with some effectiveness in the United States.

**Venona in Later Years**

Allied efforts to translate the wartime cables would continue for years to come (many translations would be first published in the 1960s and 1970s), but identifications of Soviet agents in America fell off in the 1950s. The CIA finally became an active partner in the Venona effort. After senior manager Frank Rowlett transferred to the CIA in 1952, selected analysts in the Agency's Foreign Intelligence and Counterintelligence Staffs used the translations as a reference point to check the memories of KGB and GRU officers who had defected after the death of Stalin. Defectors once again became the US Intelligence

http://www.cia.gov/csi/books/venona/preface.htm
Community's primary source of relatively current information on Soviet intelligence. American analysts sifted the defectors' accounts and compared them with information supplied by Venona and various liaison services to catalogue Soviet intelligence officers worldwide. Venona thus became a touchstone for American counterintelligence.

Spy stories again dominated the headlines during 1957. In January the FBI wound up an operation it had run for almost a decade, hauling in Soviet asset Jack Soble and his associates on the basis of reports from double-agent Boris Morros---whom the Bureau had initially spotted in the company of Vassili Zarubin in April 1943. A timely defection in Paris soon led the FBI to an even bigger catch. In the spring of 1957 the KGB recalled from New York an unreliable illegal, Lt. Col. Reino Hayhanen, who feared punishment at home and sought sanctuary in the American Embassy in Paris. Hayhanen gave the FBI enough information to locate the Brooklyn studio of his superior, an artist whom he knew only as "Mark." Special Agents spotted the elusive Mark when he returned to his studio one last time and found stolen documents and espionage gear in the artist's hotel room. Arrested in June 1957, Mark gave his name as "Col. Rudolf Abel," refusing to cooperate further. He was really William Henry Fisher, a senior KGB officer born in England who had entered the United States in 1948. Abel's arrest marked the first time the government had caught a Soviet "illegal" working in America. Indeed, Abel may well have been Iskhak A. Akhmerov's successor as illegal rezident in the United States.

The year 1957 ended with the FBI surveilling a pair of GRU illegals, Walter and Margarita Tairov, in New York. Although the Tairovs vanished and apparently fled the country in early 1958, the operation against GRU illegals was another first for American intelligence. The CIA had spotted one of the pair in Europe with help from its penetration of the GRU in East Germany, Lt. Col. Petr S. Popov. Timely liaison work enabled FBI Special Agents to amass scores of leads from surveillance of the duo. Unfortunately, the couple almost certainly spotted the surveillance, and their flight and subsequent report were among the factors that soon led to Popov's arrest.

Venona had contributed to just one of these cases. Only a handful of American intelligence officials knew the truth behind the big spy cases of 1957: that US counterintelligence efforts against the Soviets, at least in the United States, had relied on volunteers since the Venona program peaked. This was not for want of trying. NSA had pored over the Soviet traffic and had kept its shrinking Venona team looking for additional leads. The FBI had penetrated the CPUSA and searched for illegals--but still did not catch Rudolf Abel for almost a decade. CIA divisions created clever but only marginally effective programs designed to establish coverage of Soviet installations abroad, to induce Soviet intelligence officers to defect (the REDCAP program), and to monitor the mail of Soviet illegals in America (HTLINGUAL). Despite all these efforts, the Intelligence Community's most important counterintelligence leads in the late 1950s came from volunteers---both walk-ins like Hayhanen and KGB Maj. Peter S. Deriabin, as well as agents-in-place like Popov and Polish intelligence officer Michal Goleniewski. American counterintelligence was once again, as it had before Venona, left to rely on voluntary sources.

Venona, according to US policy at the time, could only be shared with a small, witting cadre of senior American intelligence officers. The tiny fraction of Soviet messages that were read convinced the CIA and FBI that Soviet espionage, at least in the 1940s, was aggressive, capable, and far-reaching--and that at least some wartime spies and agents of influence remained unidentified. Nothing that the West learned in subsequent years suggested that Soviet intelligence had grown any less capable or aggressive. Senior American intelligence officers also knew how poorly American intelligence had fared in its efforts to recruit agents to report on Soviet intelligence operations in the United States. Direct approaches to Soviet officers and illegals in the early Cold War usually failed, and by the 1960s American intelligence was relying on
voluntary defectors such as Anatoli Golitsyn and Yuri Nosenko, and defectors-in-place such as Aleksi I. Kulak and Dmitri F. Polyakov, for relatively recent information about Soviet intelligence services. The leads they provided were often valuable but sometimes troubling for Western counterintelligence officers. Remembering how many clues to Soviet penetrations had accumulated in the files before Venona finally provided incontrovertible evidence of espionage against the West, molehunters in the CIA and FBI privately resolved to leave no defector's tip uninvestigated.

Only a short step led from this conclusion to a new concern among some, particularly in the CIA, that the Soviets might try to stage such defections to feed misinformation to American and Western intelligence services. While this possibility is now considered to have been remote, it could not be resolved beyond all doubt at the time. It was impossible to prove the negative and rule out the possible existence of Soviet misinformation operations designed to distract Western services from the most damaging penetrations in their midst. Even so, American counterintelligence services would spend much of the 1960s doing all they could to prove that negative, and to minimize the possibility of deception.

The extreme secrecy of the Venona information tended to ensure that any precautions would be viewed skeptically by some of the very intelligence personnel they were designed to protect. Only a handful of American intelligence officers had access to the Venona secret, and those who did not have such access had no way, in many cases, to judge the reliability of the evidence gathered against alleged Soviet agents in the 1940s. As a result, even seasoned intelligence professionals viewed the spy cases and internal security debates of the 1940s and early 1950s as McCarthyite hysteria. This attitude probably influenced some in the Intelligence Community as a whole to underestimate the Soviet espionage threat.

Elizabeth Bentley died in Connecticut in December 1963, long before the end of the Cold War she had helped to start. She never knew about the Venona secret, or about the way in which her testimony (among that of others) assisted the program. Before she died, she had been denounced as a traitor, a liar, and a criminal by everyone from her old comrades to a former President of the United States. The controversy over her testimony was only a skirmish in the national debate over the true extent of Soviet espionage, and over the federal government's attempts to balance competing requirements of civil liberties and internal security. The declassification of Venona augments and clarifies the evidence in the public domain, and consequently should move the debate from the politics and personalities of those who testified in public to the capabilities and actions of political leaders and intelligence officers--both American and Soviet--who worked in many cases behind the scenes.

Footnotes


(2) Maurice Isserman estimates CPUSA membership at between 50,000 and 75,000 in the years before the war; Which Side Were You On?: The American Communist Party During the Second World War (Champaign: University of Illinois Press, 1993), pp. 18-21.


(4) Translated messages disclose examples of the CPUSA's direct and indirect assistance to both the GRU and KGB. See Moscow 142 [circular], 12 September 1943, Translation 18 in this volume; New York 598-99
to Moscow, 2 May 1944, Translation 29; New York 1065 to Moscow, 28 July 1944, Translation 45; New York 12-13 to Moscow, 4 January 1945, Translation 80.

(5) GRU refers to the Chief Directorate for Intelligence of the Red Army's General Staff (the organization was upgraded to a Chief Directorate in 1943). For a GRU view of operating conditions in the United States, see Washington [Naval-GRU] 2505-12 to Moscow, 31 December 1942.

(6) KGB stands for the Committee for State Security. For the sake of clarity and convenience, the main foreign intelligence arm of the Soviet state is here called the KGB, its final name before the 1991 collapse of the Soviet Union. The organization had been reorganized, reauthorized, and renamed several times. It was called the Cheka or VChK (1917-22), the GPU (1922-23), the OGPU (1923-34), the NKVD (1934-41, 1941-43), the NKGB (1941, 1943-46), the MGB (1946-47, 1952-53), the KI (1947-52), the MVD (1953-54), and the KGB (1954-91). The KI was subordinated to the Ministry of Foreign Affairs from 1949 to 1952. See Christopher Andrew and Oleg Gordievsky, KGB: The Inside Story (New York: HarperCollins, 1990), p. ix. See also the new "biographical reference" published by Russian Federation's Foreign Intelligence Service, Veternay vneshney razvedki Rossii [Veterans of Russian Foreign Intelligence], Moscow, 1995, pp. 3-4.

(7) One measure of the KGB's growing pre-eminence in the United States can be glimpsed in the message counts from the KGB and GRU residencies in New York. In 1940 the GRU New York residency sent three messages for every one sent by its KGB counterpart; in 1941 that ratio was reversed, and the KGB total remained higher from then on. An indication of the state of the US Government's knowledge of Soviet intelligence can be seen in Joseph A. Michela, Military Attaché Moscow Report 1903, "N.K.V.D. of the U.S.S.R.,” 14 April 1941, Document 5.

(8) KGB use of Amtorg is discussed in Herbert Romerstein and Stanislav Levchenko, The KGB Against the "Main Enemy": How the Soviet Intelligence Service Operates against the United States (Lexington, MA: D.C. Heath, 1989), pp. 19-21, 176-177.

(9) Stalin's four requirements are either cited or paraphrased (the text and notes do not specify which) and subsequently became a general directive sent to several residencies. Vladimir M. Chikov claims Stalin issued these requirements in the presence of the newly appointed KGB senior rezident in the United States, Vassili M. Zarubin; this suggests that Stalin did so in autumn 1941. See "How the Soviet Intelligence Service `Split' the American Atom," Novoe Vremia [New Times; English ed.], 23 April 1991, p. 38.

(10) According to KGB defector Alexander Orlov, more than 3,000 KGB officers were shot in 1937 alone, even before the Yezhovchina reached its full fury. See The Secret History of Stalin's Crimes (New York: Random House, 1952), p. 216.


(12) See Moscow 142 (circular), 12 September 1943, Translation 18, for more on the dissolution of the Comintern and the transfer of its assets to the professional Soviet intelligence services.


Walter Krivitsky gave some information of value to the Department of State; for a sample, see Loy W. Henderson, memorandum of conversation [with General Krivitsky], 15 March 1939, Document 1. See also Charles Runyon [Department of State], Memorandum for the File, "Walter Krivitsky," 10 June 1947, Document 18.

Wartime transmissions by Soviet clandestine transmitters in the United States with the exception of those to Latin America were usually test messages. It should be noted, however, that Comintern agents in the United States operated clandestine radios in the 1930s, and clandestine radio nets apparently were important for Soviet wartime intelligence operations in Latin America. A hint of the Comintern-CPUSA radio link can be seen in Klehr and Haynes, The Secret World of American Communism, pp. 205-208. Examples of Comintern messages to officials in the CPUSA are Moscow 117 of 21 March 1936 and Moscow 121 of 23 March 1936, Translation 1.

See, for example, Stanford C. Hooper, Director of Naval Communications, to D. M. Crawford, Chief Signal Officer (US Army), "Communist Code and Cipher Material," 7 January 1932, National Archives and Records Administration, Record Group 457 (National Security Agency), "Historic Cryptographic Collection," box 138.

Japanese Army General Staff message to military attaches in Berlin and Helsinki, Tokyo Circular 906, 6 October 1942, Document 7. SSA translated this message in early 1943.


San Francisco 441 to Moscow, 31 October 1943, Translation 19, acknowledges the San Francisco consulate's receipt of the new "075-B" codebook and the scheduled destruction of the "Pobjeda" code, which was almost certainly the one found in Petsamo (and recovered by the US Army in Germany in April 1945).


The change is ordered in Moscow [no number] circular, 25 April 1944, Translation 26.

Several cryptanalysts contributed to this breakthrough, including Genevieve Feinstein, Cecil Phillips, Frank Lewis, Frank Wanat, and Lucille Campbell.

The reasoning and terms of Roosevelt's directive can be seen in Attorney General [Frank Murphy] to the President, 17 June 1939, Document 2; and Franklin D. Roosevelt to Secretary of State, et al., 26 June 1939, Document 3.


(29) An indication of Bureau operations at the time can be seen in Hoover to Birch D. O'Neal, "Alto Case," 26 February 1944, Document 11.


(32) Assistant Secretary of State Adolf A. Berle's and the FBI's slow reaction to allegations by former GRU courier Whittaker Chambers is cited as evidence of Roosevelt administration inattention to Communist infiltration; see Allen Weinstein, *Perjury: The Hiss-Chambers Case* (New York: Alfred A. Knopf, 1978), pp. 329-331.

(33) OSS purchased Soviet code and cipher material (or Finnish information on them) from émigré Finnish army officers in late 1944. The Secretary of State's protest, dated 27 December 1944, is included as Document 12. Donovan might have copied the papers before returning them the following January but there is no record of Arlington Hall receiving them, and CIA and NSA archives have no surviving copies. See Bradley F. Smith, *The Shadow Warriors: OSS and the Origins of the CIA* (New York: Basic Books, 1983), pp. 353-54.

(34) KGB sources, for example, reported accurately on many aspects of Anglo-American planning; see New York 887 to Moscow, 9 June 1943, Translation 11; and New York 1271-4 to Moscow, 7 September 1944,
Translation 53. Ironically, the quality of KGB and Communist Party sources was not matched by any particularly insightful KGB analysis of the Western political scene. In particular, KGB officers and CPUSA officials composed some rather confused reflections on the presidential race of 1944; see New York 598-599 to Moscow, 2 May 1944, Translation 28.

(35) The four assets apparently were Klaus Fuchs (covernames CHARLES and REST), David Greenglass (covernames BUMBLEBEE and CALIBRE), Theodore Alvin Hall (covername YOUNGSTER [MLAD]), and a source covernamed FOGL and PERS; see New York 1749-50 to Moscow, 13 December 1944, Translation 76. PERS seems to have been arbitrarily or erroneously converted to "Perseus" (there is no covername Perseus in the Venona messages) in Russian memoirs as the Soviet and Russian intelligence services sought to describe a high-level source in the Manhattan Project. For more on Russian claims for Perseus, see Chikov, "How the Soviet intelligence service 'split' the American atom," (Part 1), p. 38.

(36) Gouzenko's information helped Western cryptanalysts understand Soviet communications procedures but did not directly contribute to the Venona breakthrough. He brought out GRU messages that identified Soviet assets, but no codebooks or one-time pads.


(38) Hoover sent news of the Gouzenko defection to the White House on 12 September and reported the Bentley allegations on 8 November. See Hoover to Matthew Connelly, 12 September 1945, Document 13; and Hoover to Brigadier General Harold Hawkins Vaughan, 8 November 1945, Document 15.


(42) New York 1699 to Moscow, 2 December 1944, Translation 74.

(43) New York 1751-1753 to Moscow, 13 December 1944, Translation 77. The actual agent (presumably William Ludwig Ullman, covername PILOT) was not indicated on the message.

(44) New York 1657 to Moscow, 27 November 1944, Translation 73. "Special Report #1" is included as Document 19.
(45) It speaks volumes about inter-allied signals intelligence cooperation that Arlington Hall's British liaison officers learned of the breakthrough even before the FBI was notified. Meredith Gardner kept his British counterpart abreast of developments, and from 1948 on there was complete and profitable US-UK cooperation on the problem. The control term "Venona" did not appear on the translated messages until 1961. In the beginning the information was usually called the "Gardner material," and a formal control term"Bride"was finally affixed in 1950. From the late 1950s to 1961 the control term was "Drug."

(46) NSC-17/4 is included under Sidney W. Souers, Memorandum for the President, 22 March 1949, Document 26.

(47) The JCIC worked under the cover of "OP32Y1," an office at the Naval Communications Annex on Nebraska Avenue in Washington. Its CIA contingent was detailed from the Office of Special Operations and included ex-FBI agent William K. Harvey. The Central Intelligence Group became the Central Intelligence Agency with the implementation of the National Security Act of 1947 in September of that year.

(48) Lamphere, The FBI-KGB War, p. 86.

(49) Two of Lamphere's blind memos to Gardner can be seen as "FLORA DON WOVSCHIN, with alias," 9 May 1949, Document 25; and "Anatoli Borisovich Gromov," 12 July 1949, Document 27.

(50) Hamby, Man of the People, p. 453. President Truman repeated his "red herring" remark late that year; see Truman to Attorney General Tom Clark, 16 December 1948, Document 22. Another glimpse of the White House attitude can be seen in George M. Elsey's note to Clark M. Clifford, 16 August 1948, Document 21.

(51) Mr. Truman wrote in his memoirs in 1956: "The country had reason to be proud of and have confidence in our security agencies. They had kept us almost totally free of sabotage and espionage during the war;" see Truman, Years of Trial and Hope, p. 291.

(52) New York 27 [to Moscow], 8 January 1945, Translation 82, notes Coplon's transfer to the Department of Justice headquarters in Washington. Lamphere claims the date of her transfer from New York to Washington clinched the identification; see The FBI-KGB War, pp. 97-98. See also the KGB's request for information on Coplon in Comintern files; Pavel Fitin to Georgi Dimitrov, 19 October 1944, reprinted in Klehr and Haynes, eds., The Secret World of American Communism, pp. 294-295.

(53) Lamphere, The FBI-KGB War, p. 115. For more on the administration's handling of the Coplon case, see Clark to Truman, "Proposed Deportation of Valentine A. Gubitchev," 16 March 1949, Document 24.


(56) Washington 1822 to Moscow, 30 March 1945, Translation 89.

(57) It remains unclear which messages led the FBI to the White identification, but some of the more important messages in which he appeared are New York 1119-1121 to Moscow, 4 August 1944, Translation 50; New York 1634 to Moscow, 20 November 1944, Translation 71; and New York 79 to Moscow, 18 January 1945, Translation 84.


(59) Philby's Washington posting has been discussed in many books; a concise account is in Borovik and Knightley, *The Philby Files*, p. 273. The late John Costello clarified the timeliness of Philby's warning somewhat in his notes on Guy Burgess' KGB file (Costello cited it as File 83792, Volume 4, pp. 76-183). The Burgess file indicated that Philby had learned by late September that British and American authorities believed CHARLES was Klaus Fuchs. Mr. Costello summarized some of his notes for Robert Louis Benson in 1995.


(61) Attorney General Brownell had President Eisenhower's approval for this November 1953 charge; both men almost certainly had seen translated messages about White (and probably about Hiss as well). Indeed, Eisenhower may have been briefed on the program by the G-2 while he was still Army Chief of Staff in 1947. One of the FBI warnings about White is included as Hoover to Vaughan, 1 February 1946, Document 16.

(62) The Supreme Court's decision in *Yates v. US*, handed down in June 1957, all but voided the Smith Act as a tool for prosecuting Party leaders.


(64) One FBI report of the period claimed that there was "no conclusive indication that the Communist Party, USA, is playing a role [in espionage] at this time;" see "Role of the Communist Party, USA, in Soviet Intelligence," February 1953, Dwight D. Eisenhower Library, White House Office Files, Office of the Advisor for National Security Affairs, box 16, p. 48.

(65) Oleg Kalugin has written a memoir of Soviet operations in the United States during this period; see Kalugin and Fen Montaigne, *The First Directorate: My 32 Years in Intelligence and Espionage Against the West* (New York: St. Martin's, 1994), pp. 1-4, 36. Some of the agents in the late 1950s and early 1960s proved devastating to American intelligence, particularly to the National Security Agency. A contemporary "exposé" can be under Hoover to Brigadier General A. J. Goodpaster, 23 May 1960, Document 35.

(66) CIA received its first Venona translations in 1953, after veteran signals intelligence officer Frank Rowlett transferred to the Agency (the aforementioned Special Reports seen by OSO personnel in 1948 were not translations per se). CIA's William Harvey was formally briefed on the program in August 1952.
AFSA was reconstituted as the National Security Agency on 4 November 1952.

(67) CIA transferred the management of its portion of the Venona program to James Angleton's Counterintelligence Staff in 1965.

(68) Jack Soble was a Lithuanian whose given name was Sobolevicius; he and his brother had penetrated Leon Trotsky's entourage for the KGB in the 1920s; see Andrew and Gordievskiy, KGB, pp. 154-155. Hollywood producer Boris Morros was doubled by the FBI in 1947 and reported on the activities of Soble and members of his almost-moribund spy ring, while also passing low-level secrets and misinformation back to Moscow; see Boris Morros, My Ten Years as a Counter-Spy (London: Werner Laurie, 1959), pp. 191, 204-206. Morros is covername FROST in New York 18-19 to Moscow, 4 January 1945, Translation 80. Soble is covername ABRAM in New York 625 to Moscow, 5 May 1944, Translation 31.

(69) See Russian Foreign Intelligence Service, Veterny vneshney razvedki Rossii [Veterans of Russian Foreign Intelligence], pp. 158-159. Abel was exchanged for downed U-2 pilot Francis Gary Powers in 1962.

(70) Martin, Wilderness of Mirrors, pp. 92-93.

(71) The ineffectiveness of the CIA's and FBI's mail opening operations is attested in US Senate Select Committee to Study Governmental Operations with Respect to Intelligence Activities (better known as the Church Committee), "Supplementary Detailed Staff Reports on Intelligence Activities and the Rights of Americans," Volume III, 94th Congress, 2d Session, 1974, pp. 576-578, 652.