











To VIKTOR(i).

To STATOR(i).

In accordance with our telegram no. 403[a] we are advising you of the use cover-names: KAVALERIST - BEK[i], DROOD - ARMHUR[i], RIGHT - CARLEY, AFFAN - CLEEN | TALLEYA - BEK[i], DROOD - ARCHIVE | TALLEYA - BEK[i], AFFAN - ALC | Vil], AYSOLOW - [CS HOR][VII], RALL - BERS[I], AFFAN - MIL[ALI] - MURISING - THE ARCHIVE - MURISING - THE ARCHIVE - MURISING - MULTIPLE - MURISING - MULTIPLE - MURISING - MULTIPLE - MURISING - DROMALD - FINITE | MURISING - MURTIPLE - MURTIPLE - MURTIPLE | MURTIPLE - MURTIPLE

MAJ (xxxiv)

Notes: (a) NEM YORK's no. 744 of 25 May 1944. However, no. 744 has nothing to do with the subject of this message so angit be an incorrect reference.

[b] Sew ALW YORK's no 143 of 5 October 1944

COMMENT:
[ii] MAYALERIST SEEK: ic. CAVALETHAN - RECK, Sergey Niko-Lawrich KURRARUW. c. THRISH - ARAMED, unidentified, 143 becch to MURRARUW. c. THRISH - ARAMED, unidentified, 143 becch - ARAM - CHERN 1 ic. AREM - OREGIN - LEE, noisentified, 144 becch to MURRARUW. C. THRISH - AREMON, unidentified, 145 becch to MURRARUW. C. THRISH - AREMON, MARK REGURENCE.

[vii] THL'VAN - RANT: ic. VULIT - KANT, MARK REGURENCE.

[viii] AIDA - KID: Exchist Texhack RAND.
[viii] AIDA - CREST - CANAMINAN RAND.
[

















#### COVER PHOTOS

Clockwise from top left: Carter Clarke, Robert
Lamphere, Gene Grabeel, Meredith Gardner, Cecil
Phillips, Kim Philby, Klaus Fuchs, Elizabeth Bentley,
Alger Hiss, Julius Rosenberg



Published by the Center for Cryptologic History,

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Center for Cryptologic HistoryH National Security AgencyH 9800 Savage Road, Suite 6886H Fort George G. Meade, MD 20755-6886H

#### THE VENONA STORYH

Robert L. BensonH

The release of VENONAftranslations involved carefulf consideration of thef privacy interests of individualsf mentioned, referenced, or identified in theftranslations.f Some names have not been released when to do so wouldf constitute an invasion of privacy.f

#### **Introduction**R

On 1 February 1943 the U.S. Army's Signal Intelligence Service,¥ a forerunner of the National Security Agency, began a small, very¥ secret program, later codenamed VENONA. The original object of¥ the VENONA program was to examine, and possibly exploit,¥ encrypted Soviet diplomatic communications. These messages had¥ been accumulated by the Signal Intelligence Service (later renamed¥ the U.S. Army Signal Security Agency and commonly called¥ "Arlington Hall" after the Virginia location of its headquarters)¥ since 1939 but had not been studied previously. American analysts¥ discovered that these Soviet communications dealt with not only¥ diplomatic subjects but also espionage matters.¥

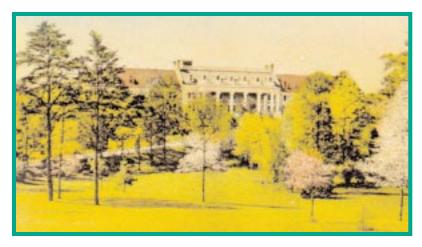
Six public releases of VENONA translations and related¥ documents have been made. These releases covered the following¥ topics and are all discussed in this monograph.¥

- 1. Soviet atomic bomb espionage¥
- 2. New York KGB messages of 1942 and 1943
- 3. New York and Washington KGB messages of 1944 and 1945¥
- 4. San Francisco and Mexico City KGB messages; GRU New¥ York and Washington messages; Washington Naval GRU¥ messages¥

- 5. KGB and GRU messages from Europe, South America, and¥ Australia¥
- 6. Messages inadvertently left out of the previous five updates¥ of previously issued translations. Updates some translations by¥ restoring names that had been protected for privacy reasons in the¥ original releases.¥

The Signal Intelligence Service recruited dozens of language¥ teachers and professors from across the United States after the¥ Japanese attack on Pearl Harbor. Miss Gene Grabeel, a young¥ Signal Intelligence Service employee who had been a schoolteacher¥ only weeks earlier, started the project on 1 February 1943.¥ Meredith Gardner, a language instructor at the University of¥ Akron, who spoke numerous languages, worked on the Japanese¥ and German "problems" during World War II and met with great¥ acclaim. As the war ended, Gardner joined the VENONA effort and¥ spent the next twenty-seven years on the project. As the principal¥ translator and analyst on the VENONA program, he wrote a series¥ of eleven special reports during 1947 and 1948.¥

The accumulated VENONA message traffic comprised an¥ unsorted collection of thousands of Soviet diplomatic telegrams¥



Arlington Hall before the war (This postcard was used by army recruiters.)

that had been sent from Moscow to certain of its diplomatic¥ missions and from those missions to Moscow. During the first¥ months of the project, Arlington Hall analysts sorted the traffic by¥ diplomatic mission and by cryptographic system or subscriber.¥

Initial analysis indicated that five cryptographic systems, later¥ determined to be employed by different subscribers, were in use¥ between Moscow and a number of Soviet overseas missions. It also¥ became apparent that one system involved trade matters,¥ especially Lend-Lease. The other four systems appeared to involve¥ the Soviet Foreign Ministry in Moscow in communication with its¥ missions abroad.¥

Further analysis showed that each one of the five systems was¥ used exclusively by one of the following subscribers (listed in¥ descending order according to the volume of message traffic which¥ had been collected):¥

- 1. trade representatives Lend-Lease, AMTORG, and the¥ Soviet Government Purchasing Commission¥
- 2. diplomats i.e., members of the diplomatic corps in the conduct of legitimate Soviet embassy and consular business¥
- 3. KGB the Soviet espionage agency, headquarters in Moscow¥ and residencies (stations) abroad¥
- 4. GRU the Soviet Army General Staff Intelligence¥ Directorate and attachés abroad¥
  - 5. GRU-Naval Soviet Naval Intelligence Staff¥

#### Public Release of Translated VENONA MaterialsR

The first public release of translated VENONA materials,¥ signals intelligence which had provided an insight into the¥ alarming and hitherto unappreciated breadth and depth of Soviet¥ espionage activities within the United States, was in July 1995.¥

That release was a compilation of forty-nine VENONA translations¥ which related to Soviet espionage efforts against U.S. atomic bomb¥ research, including messages about the Rosenbergs and the¥ Manhattan Project.¥

The second release was of KGB messages between the New¥ York KGB residency and Moscow Center during 1942-1943.¥

The third release comprised many more documents than either¥ the first or second release — more than 500 translations — and¥ included all the decrypted and translated messages between the¥ New York and Washington KGB residencies and Moscow Center¥ (minus the atomic bomb-related messages previously released in¥ July 1995).¥

The fourth release was larger – some 850 message translations¥ – and involved the KGB in San Francisco and Mexico City and the¥ GRU in New York and Washington. This completed the release of¥ U.S. (and Mexico) Soviet espionage message translations.¥

The fifth release contained translations of KGB, GRU, and¥ Naval GRU messages to and from locations in Europe, Latin¥ America, and Australia, as well as some messages of¥ nonintelligence organizations: the Soviet Foreign Ministry and the¥ Trade Ministry. The great majority of releases in this release¥ involved the Soviet intelligence services. This was the final, and¥ largest, release of VENONA translations – well over 1,000¥ messages.¥

The sixth release of VENONA translations and related¥ documents included the translations of KGB messages¥ inadvertently left out of the previous five. It also updated some¥ translations by restoring names that had been protected for privacy¥ reasons in the original releases.¥

This material can be reviewed at the National Cryptologic¥ Museum library and is also available publicly on the World Wide¥

Web (http://www.nsa.gov:8080/), and at the Library of Congress,¥ at state archives, and at university libraries around the country.¥ Scholars, the media, and the public now have all the approximately¥ 3,000 VENONA translations.¥

The British Government Communications Headquarters¥ (GCHQ), NSA's counterpart, has released to the Public Record¥ Office the MASK message traffic – thousands of secret¥ COMINTERN messages between various capital cities and¥ Moscow from 1934 to 1937, which give a wealth of detail about¥ Moscow's control of the various national Communist parties¥ (including the American Communist Party). GCHQ has also¥ released ISCOT messages. ISCOT was the codename for the British¥ program to intercept and decrypt clandestine radio messages¥ between Moscow and COMINTERN¥Communist International)¥ outstations in German-occupied Europe and in China from 1943 to¥ 1945. The National Cryptologic Museum library holds a complete¥ set of both the MASK and ISCOT messages.¥

## The Shutdown of the Venona ProgramR

NSA is often asked why the VENONA program ran so long¥ (1943 to 1980), given the fixed set of material that was being¥ worked. The answer is that NSA's customers – FBI, CIA, and the¥ appropriate United Kingdom and Allied services – asked that the¥ program be continued as investigative leads were still being run,¥ and there was hope that unidentified covernames could be¥ identified. In 1977 William P. Crowell, then the acting chief of¥ the NSA division that housed the remaining VENONA group,¹H decided that the program should end in about two years. The¥ group working on VENONA surveyed customers and evaluated the¥ likelihood of finding further "matches" in the traffic. In 1978 NSA¥ decided to end the program by 1 October 1980.¥

In September 1978 David Blee, head of the CIA¥ Counterintelligence Staff, invited NSA, FBI, and Allied¥ representatives to form a committee to evaluate the potential for ¥



W illiam P. Crowell (circa 1977)



Howard W. (Bill) Kulp

the VENONA effort during the next two years. Howard W. (Bill)¥ Kulp and Mildred Hayes, heads of the VENONA unit in the later¥ years, represented NSA.¥

During the last phase of VENONA (1978 to 1980), NSA issued¥ thirty-nine first-time translations of KGB and GRU messages and¥ reissued eight others. Some of these first-time translations were¥ quite significant, though mainly for counterintelligence research¥ purposes. In January 1980 Bill Kulp prepared a final technical and¥ counterintelligence evaluation of the VENONA program and its¥ prospects. The report concluded that the program should end as¥ scheduled because of the age of the material being worked, the¥ difficulty in conducting investigations and locating collateral¥ material, and the fact that the most important material had been¥ exhaustively analyzed. Nonetheless, NSA analysts Mildred Hayes,¥ Angela Nanni, and Janice Cram continued their cryptanalytic work¥ right up to the end of the project.¥

# Venona ChronologyH

1 February 1943□	Gene Grabeel begins VENONA at ¥ Arlington Hall.¥
November 1943□	Lieutenant Richard Hallock makes ¥ first break into Soviet diplomatic ¥ cipher; break expanded by Frank ¥ Lewis.¥
During 1943□	VENONA program expands; ¥ Captain F. Coudert and Major ¥ William B.S. Smith in charge.¥
November 1944□	Break made in KGB cipher by Cecil ¥ Phillips, Genevieve Feinstein, ¥ Lucille Campbell.¥
1945□	Gouzenko defects; Elizabeth ¥ Bentley and Whittaker Chambers ¥ tell FBI about Soviet espionage in ¥ United States.¥
May 1945□	Military intelligence teams find ¥ Soviet codebooks in Saxony and ¥ Schleswig, Germany.¥
July to Dec 1946□	Meredith Gardner begins to ¥ analytically reconstruct KGB ¥ codebook; translates a few ¥ messages, including one about the ¥ atomic bomb.¥
30 Aug 1947□	Meredith Gardner's study of KGB ¥ covernames in the messages¥

Sept 1947□	Carter W. Clarke of G-2 advises S. ¥ Wesley Reynolds, FBI, of successes ¥ at Arlington Hall on KGB espionage¥ messages.¥
19 to 20 Oct 1948□	Robert J. Lamphere, FBI HQ, Y begins liaison with Meredith Y Gardner and great number of Y espionage cases opened.Y
1948 to 1951□	Exploitation of VENONA exposes ¥ major KGB espionage agents such ¥ as Klaus Fuchs, Harry Gold, David ¥ Greenglass, Theodore Hall, ¥ William Perl, the Rosenbergs, Guy ¥ Burgess, Donald Maclean, ¥ Kim Philby, and Harry D. White.¥
1952 to 1953□	An earlier KGB cryptosystem ¥ exploited; GRU messages attacked.¥ More espionage agents identified ¥ over the next two decades.¥
1953□	CIA officially briefed on VENONA ¥ and begins to assist in counter-¥ intelligence work.¥
1960□	The United Kingdom begins to ¥ exploit Naval GRU messages.¥
1960 to 1980□	Hundreds of first-time translations ¥ of messages; many earlier ¥ translations reissued.¥
1 October 1980□	VENONA ends.¥

# The Venona Breakthrough□

From the very beginning in February 1943, the analysis of the¥ traffic proved slow and difficult. Then in October 1943, Lieutenant¥ Richard Hallock, a Signal Corps reserve officer who had been a¥ peacetime archaeologist at the University of Chicago, discovered¥ weaknesses in the cryptographic system of the Soviet trade traffic.¥ This discovery provided a tool for further analytic progress on the¥ other four cryptographic systems.¥

During 1944 the skills of other expert cryptanalysts were¥ brought to bear on this Soviet message traffic to see if any of¥ the encryption systems of the messages could be broken. One of¥ these cryptanalysts, Cecil Phillips, made observations which led¥ to a fundamental break into the cipher system used by the¥ KGB, although he did not know at the time who used the system.¥ The messages were double-encrypted and of enormous difficulty.¥ In spite of Arlington Hall's extraordinary cryptanalytic¥ breakthroughs, it was to take almost two more years before parts¥ of any of these KGB messages could be read or even be recognized¥ as KGB rather than standard diplomatic communications.¥

Three closely spaced counterintelligence events involving or¥ affecting VENONA occurred in 1945. First, the FBI carefully¥ questioned Whittaker Chambers, whose earlier efforts to disclose¥ details of his involvement in Soviet espionage in the United States¥ in the 1930s had gone unheeded. While not directly bearing on¥ VENONA, Chambers's testimony helped bring Soviet espionage¥ into focus at the FBI. Second, Elizabeth Bentley, a veteran¥ KGB courier and auxiliary agent handler, went to the FBI and¥ named names of government employees passing documents to the¥ Soviets. VENONA messages verified much of what Bentley¥ disclosed. Third, Igor Gouzenko, a GRU code clerk, defected in¥ Ottawa. Gouzenko's revelations were important to Allied¥ counterintelligence efforts, although they did not directly assist¥ breakthroughs into the VENONA system.¥



Meredith Gardner (left)

In the summer of 1946, Meredith Gardner began to read¥ portions of KGB messages that had been sent between the KGB¥ residency (station) in New York and Moscow Center. On 31 July¥ 1946 he extracted a phrase from a KGB New York message that had¥ been sent to Moscow on 10 August 1944. This message, on later¥ analysis, proved to be a discussion of clandestine KGB activity in¥ Latin America. On 13 December Gardner was able to read a KGB¥ message that discussed the U.S. presidential election campaign of¥ 1944. A week later, on 20 December 1946, he broke into another¥ KGB message that had been sent to Moscow Center two years¥ earlier which contained a list of names of the leading scientists¥ working on the Manhattan Project – the atomic bomb.¥

In late April or early May 1947, Gardner was able to read two¥ KGB messages sent in December 1944 that showed that someone¥ inside the War Department General Staff was providing highly¥ classified information to the Soviets.¥

U.S. Army intelligence, G-2, became alarmed at the¥ information that was coming out of Arlington Hall. An Arlington¥ Hall report on 22 July 1947 showed that the Soviet message traffic¥

contained dozens, probably hundreds, of covernames, many of Y KGB agents, including ANTENNA and LIBERAL (later identified Y as Julius Rosenberg). One message mentioned that LIBERAL's Y wife was named "Ethel." Y

In late August or early September 1947, General Carter W.¥ Clarke, deputy G-2, cautiously informed S. Wesley Reynolds, the¥ FBI liaison to G-2 and Arlington Hall, that the army had begun¥ to break into Soviet espionage messages. Over the next year, Wes¥ Reynolds received an unrecorded number of translations. Some of¥ these translations were probably handwritten.¥







S. Wesley Reynolds

By 1948 the British joined the VENONA effort; in particular,¥ their signal intelligence service assigned full-time analysts to¥ Arlington Hall. There was excellent cooperation between the two¥ U.S. agencies and the United Kingdom over the many years of¥ VENONA, in large measure a result of the early efforts of Robert¥ Lamphere and Meredith Gardner.¥

In October 1948 Wes Reynolds officially introduced Robert J.¥ Lamphere, from FBI headquarters, to Meredith Gardner and the¥ Arlington Hall leadership. From then until he left the FBI in 1955,¥ Lamphere was in constant touch with Gardner and his associates,¥

receiving VENONA translations as soon as¥ they were made. He had at least some¥ version of every 1944 to 1945 New York¥ (and probably Washington)¥KGB¥ message that was ever decrypted¥ before the end of 1952. Army G-2's¥ counterintelligence element, which¥ had been studying the earliest¥ Gardner translations, had long before¥ dropped out of the picture. ¥

#### A Word about the CovernamesR

Robert J. Lamphere

The VENONA messages are¥ filled with hundreds of covernames¥

(designations used in place of the real names to hide identities of Y Soviet intelligence officers and agents – i.e., spies or cooperating Y sources – as well as organizations, people, or places discussed in Y the encrypted messages). A number of public figures who had Y nothing to do with espionage were also designated by covernames, Y while others in that category appear in the text of the messages by Y their true names. The following are examples of covernames Y recovered from the VENONA corpus: Y

CovernameH	True NameH
KAPITAN¥	President Roosevelt¥
ANTENNA, later changed to LIBERAL¥	l□ Julius Rosenberg□
BABYLON¥	San Francisco¥
ARSENAL¥	U.S. War Department¥
THE BANKY	U.S. Department of State¥

ENORMOZ□ The Manhattan Project/A-bomb¥

ANTON□ Leonid Kvasnikov, KGB chief of A-bomb ¥ espionage in KGB's New York City office¥

Arlington Hall and the FBI studied the covernames for leads to¥ identities, grouping them into families of covernames. Some¥ covernames came from mythology, some were Russian given¥ names, and others were names of fish, etc. KAPITAN was easily¥ identified from the context as a good covername for President¥ Roosevelt, but his covername was, nonetheless, outranked by those¥ of persons of lower station, including KGB operatives covernamed¥ PRINCE, DUKE, and GOD. Other KGB assets were just plain BOB,¥ TOM, and JOHN, while Elizabeth Bentley had the covername¥ GOOD GIRL. Sometimes the KGB was careless in choosing a¥ covername. For example, the covername FROST was used for KGB¥ agent Boris Moros. The Russian word for "frost" is "Moroz."¥

Some VENONA translations will indicate in the analytic¥ footnotes that a covername is unidentified. Another message may¥ footnote that very same covername with identification. Analysts¥ rarely hand-corrected a footnote identification to reflect later¥ identification (unless a completely new translation was issued).¥ For example, in some early message translations that were never¥ reissued, covernames MER/ALBERT are footnoted as¥ unidentified, when it was afterward determined, as footnoted in¥ later translations of other messages, that this person was Iskak¥ Akhmerov, the KGB's chief Illegal in the United States.¥ Unfortunately for the reader, the KGB did occasionally reuse¥ covernames: the same covername for different persons. This can¥ usually be understood by context or geographic location.¥

Meredith Gardner was able to solve several KGB messages in¥ 1946. From summer 1947 to mid-1948, Gardner published¥ translations or summaries of several dozen KGB messages. At first¥ he noted that the covernames LIBERAL or ANTENNA both¥ referred to the same person (the covername had been changed¥

from ANTENNA to LIBERAL\(\fomaller{1}\) September 1944. (KGB\(\fomaller{1}\) YeV\(\fomaller{1}\) Moscow message #1251, 2 Sep 44). Later he gave full translations\(\fomaller{1}\) of some of these LIBERAL/ANTENNA messages but did not know\(\fomaller{1}\) at the time that those covernames were for Julius Rosenberg.\(\fomaller{1}\) Gardner, in 1947, personally identified the true names of a few\(\fomaller{1}\) covernamed persons, e.g., that the covername KOMAR was Viktor\(\fomaller{1}\) Kravchenko, who defected in the United States in 1944 and was\(\fomaller{1}\) being hunted by the KGB, as shown in VENONA.\(\fomaller{1}\)

Most U.S. covername identifications were made by the FBIY through file review/analysis and by intensive investigation. The¥ United Kingdom made some identifications, and, starting in 1953,¥ CIA made others. Sometimes the true name of the agent is given in¥ the message; that name could, by analysis or investigation, be¥ placed against a covername seen in later messages (e.g., the case of¥ Theodore A. Hall, subsequently named MLAD).¥

As shown in NSA VENONA papers, covernames ROBERT,¥ DORA, and PILOT were found in VENONA messages as early as¥ 1947. In November 1948 the FBI told Arlington Hall that those¥ covernames were for Greg Silvermaster, his wife, Helen Witte¥ Silvermaster, and Lud Ullman, who resided with them. In early¥ 1949 the FBI advised that they had identified covernames SIMA¥ (first found in a message in 1947) as Judith Coplon. Covernames¥ CHARLES and REST were identified as Klaus Fuchs during the¥ summer of 1949, based on VENONA messages that were decrypted¥ from 1947 to 1949. Covernames LIBERAL and ANTENNA were¥ first found in 1947, and the FBI made final identification of the¥ Rosenbergs in 1950.¥

#### The Venona TranslationsR

There were about 3,000 VENONA messages translated. Partial¥ information was available from many messages as early as 1947¥ and later that year was provided to the FBI. The VENONA¥ translations now released to the public often show an unexpectedly¥ recent date of translation because the breaking of strong¥ cryptographic systems is an iterative process requiring trial and¥

error and reapplication of new discoveries, leading to additional¥ ones. A message may have been reworked many times over the¥ years as new discoveries enabled progress in the decryption and¥ understanding of more and more of the text. Only the last and best¥ translations have been released.¥

Almost all of the KGB messages between Moscow and New¥ York and Moscow and Washington of 1944 and 1945 that could¥ be broken at all were broken, to a greater or lesser degree, between¥ 1947 and 1952.¥

There are still gaps of two different types in the translated¥ messages, as indicated by the words "unrecovered" or¥ "unrecoverable." The phrase "unrecovered" meant that the¥ underlying Russian text in theory could be obtained, but the¥ cryptanalysts did not have sufficient text to do so. "Unrecoverable,"¥ on the other hand, indicates passages unaffected by the Soviet¥ misuse of their own system which therefore could never be solved¥ by cryptanalysts (see pages 26-27).¥

The serial numbers of the VENONA messages indicate that the¥ KGB and GRU sent thousands of messages between Moscow and¥ the overseas recipients. Only a fraction of the total messages sent¥ and received were available to the cryptanalysts. The messages¥ which have been exploited were never exploited in real time. In¥ 1946 Meredith Gardner was working on KGB messages from 1944.¥

Arlington Hall's ability to read the VENONA messages was¥ spotty, being a function of the underlying code, key changes, and¥ the lack of volume. Of the message traffic from the KGB New York¥ office to Moscow, 49 percent of the 1944 messages and 15 percent¥ of the 1943 messages were readable, but this was true of only 1.8¥ percent of the 1942 messages. For the 1945 KGB Washington office¥ to Moscow messages, only 1.5 percent were readable. About 50¥ percent of the 1943 GRU-Naval Washington to Moscow/Moscow¥ to Washington messages were read but none from any other year.¥

#### **VENONA Myths and MisunderstandingsR**

In spite of what has been written in a number of books and¥ articles, Arlington Hall made the VENONA breakthroughs purely¥ through sweat-of-the-brow analysis. There was no cryptanalytic¥ assistance for Lieutenant Richard Hallock, Cecil Phillips, or¥ Meredith Gardner, and their colleagues from lost, discovered, or¥ battlefield-recovered Soviet codebooks during the years in which¥ the main analytic breakthroughs were made (through 1952). It was¥ not until 1953 that a photocopy of a partially burned codebook¥ (recovered by U.S. military intelligence in 1945) was discovered to¥ be related to the VENONA cryptographic systems after another¥ cryptanalytic breakthrough. The successful decryption of the¥ VENONA messages was a triumph of analysis by a small group of¥ intelligent and dedicated women and men working long hours in¥ their cramped offices at Arlington Hall.¥

#### KGB OperationsR

Information in the VENONA materials reveals KGB tradecraft¥ (i.e., the practical means and methods of espionage and¥ counterespionage) of the time in great detail. The sheer volume of¥ data collected by KGB stations abroad was too great to be reported¥ by telegram; instead the VENONA messages indicate that¥ photocopies of classified documents went to Moscow by courier.¥ In one translation, KGB in New York informed Moscow that it had¥ fifty-six rolls of film from their agent, covernamed ROBERT, and¥ that this trove of classified material was to be sent off by courier to¥ Moscow Center.¥

Information in VENONA translations describes the KGB's¥ modus operandi in arranging meetings with their agents, with¥ much attention given to the security of these secret meetings.¥ Other messages describe KGB countermeasures against the FBI¥ surveillance, detection of bugging devices, and ensuring the loyalty¥ of Soviet personnel in the United States. A particularly fascinating¥ set of VENONA messages describes the KGB's efforts to locate¥ Soviet sailors who had deserted from merchant ships in San¥ Francisco and other U.S. ports. Some of the most interesting¥

messages detail KGB assessment and recruitment of American¥ Communists for espionage work.¥

Almost all of the VENONA KGB messages during World War IIY are between Lieutenant General Fitin, the head of the KGB's FirstY Chief Directorate (FCD) and his "rezidents" (station chiefs) abroad.¥ FCD was the foreign intelligence arm of the KGB responsible for¥ espionage and counterintelligence outside the Soviet Union.¥ However, in terms of personnel, it was a very small part of the KGBY then and later. Far larger were the KGB's Second Chief Directorate,¥ which handled internal counterintelligence and security (this and¥ related departments were the true secret police of the Soviet¥ Union), and SMERSH ("Death to Spies"), which was responsible¥ for military counterintelligence. The KGB had large formations of¥ police troops, prison camp guards, and a small army protecting¥ Stalin and the Soviet leadership. During 1943 to 1945, Arlington¥ Hall and the U.S. Navy's signal intelligence organization also¥ collected a small amount of police and SMERSH radio traffic.¥

## KGB Agents and OfficersR

A KGB officer, whether under official diplomatic cover or¥ operating as an "Illegal," was a Soviet citizen and a sworn officer of Y the KGB (usually holding police rank). In VENONA messages,¥ KGB officers are often referred to as "workers" or "cadre." Illegals¥ were Soviet citizens, KGB, or GRU officers, operating under cover¥ in foreign countries with no visible connections to legal Soviet¥ establishments. Illegals had no diplomatic immunity, usually¥ entering the country illegally - hence the term. An agent was a¥ private citizen recruited by the KGB to carry out espionage or other¥ clandestine activities on behalf of the KGB. During the VENONAY period the KGB used the coverterm PROBATIONERS to refer to¥ their agents. In VENONA we also see some persons who appear to Y fall somewhere in between agent and officer. American¥ Communists Jacob Golos, Elizabeth Bentley, and Greg¥ Silvermaster, veteran controllers of agent networks, could be¥ placed in this category. In fact, Silvermaster was at one time the¥ only American citizen in the KGB Hall of Fame in Moscow.¥

#### KGB and GRU Spies and Assets in the United StatesR

Several hundred named or covernamed persons found in the¥ VENONA translations, persons then present in the United States,¥ are claimed by the KGB and GRU in their messages as their¥ clandestine assets or contacts. Many of these people have been¥ identified, many have not been. These several hundred persons are¥ separate from the many KGB and GRU officers who also appear in¥ VENONA. One such asset, Robert Silvermaster, is found in¥ VENONA translations several dozen times. Other covernamed¥ persons were found only a few times. The majority of unidentified¥ covernames in the New York KGB traffic appear three or fewer¥ times.¥

#### The American Communist Party in VenonaR

Information derived from the VENONA translations shows the¥ KGB's extensive contacts with the American Communist Party.¥ Many of the espionage activities by members of the American¥ Communist Party are reflected in the VENONA translations.¥

# The Rosenberg/Atomic Bomb Espionage MessagesR

VENONA translations that had been identified as associated¥ with atomic bomb espionage messages were released first. All but¥ two of this group of forty-nine messages were KGB traffic – one is¥ a GRU and one a Soviet diplomatic message.¥

These messages disclose some of the clandestine activities of Y Julius and Ethel Rosenberg, Harry Gold, Klaus Fuchs, David and Y Ruth Greenglass, and others such as the spy known by the Y covername MLAD (Theodore Hall) or the important, but still Y unidentified, PERS. The role played by the person covernamed Y VEKSEL remains uncertain but troubling. A number of other Y covernames of persons associated with atomic bomb espionage Y remain unidentified to this day. Y







Julius Rosenberg



David Greenglass

VENONA messages show that KGB¥ officer Leonid Kvasnikov, covername¥ ANTON, headed atomic bomb espionage¥ in the United States but that he, like the¥ Rosenbergs, who came under his control,¥ had many other high-tech espionage¥ targets such as the U.S. jet aircraft¥ program, developments in radar and¥ rockets, etc. ¥

As with most VENONA messages, the¥ Rosenberg messages contain much¥ information relating to KGB net control¥ and tradecraft matters.¥

Klaus Fuchs, the atomic bomb spy, is¥ mentioned in many other KGB¥ messages: no. 1606, 16 November 1944,¥ and Moscow Center's messages to New¥ York, nos. 183, 27 February 1945, and¥ 349, 10 April 1945. The¥ last message, only¥ ChARL Z partially recovered, will¥ Klaus be of great interest with¥



ANTON Leonid Kvasnikov



respect to the controversy about the pace of Soviet atomic bomb¥ development. In it, Moscow tells New York that ChARL'Z's (Fuchs'¥ covername) information on the atomic bomb "is of great value," and¥ his recent report "contains information received for the first time¥ from you about the electromagnetic method of separation of¥ ENORMOZ."¥

One translation, NYYho. 1507, October 1944, footnoted¥ covername BUMBLE-BEE (Russian ShMEL') as equating to David¥ Greenglass; however, the translation shows a handwritten¥ emendation of "David Greenglass" to "Walter Lippman," which is the¥ correct equation. ¥

The VENONA program concerned KGB and GRU messages that¥ were available to Arlington Hall codebreakers. Most of the messages¥ which were collected were not successfully decrypted, and short of a¥ release of the KGB and GRU archives from the period, we may never¥ know more about the KGB and GRU¥activities represented in the¥ VENONA corpus of messages.¥

#### KGB Espionage against the VENONA ProgramR

A number of sources outside of signals intelligence reveal that¥



Kim Philby

the KGB learned early on that the¥ United States had begun to study¥ Soviet communications. In late¥ 1945 KGB agent Elizabeth Bentley¥ told the FBI that the KGB had¥ acquired some limited information¥ about the U.S. effort during 1944.¥ Kim Philby, while assigned¥ to Washington, D.C., from 1949¥ to 1951, occasionally visited¥ Arlington Hall for discussions¥ about VENONA; furthermore,¥ regularly received copies¥ summaries of **VENONAY** translations as part of his official¥



Map of Arlington Hall complex, circa 1940s

duties. But if the Soviets knew¥ something about what Arlington¥ Hall was accomplishing, they¥ could not, at any rate, get the¥ messages back. There was even a¥ KGB agent inside Arlington Hall.¥ This was Bill Weisband, a native¥ speaker of Russian, who returned¥ to Arlington Hall from an¥ overseas assignment in the¥ summer of 1944. Weisband, who¥ reportedly had been a KGB agent¥ since 1934, was reactivated by the¥ KGB at a meeting in New York¥



ZVENO Bill Weisband

City in early 1945. Found in Venona as covername ZVENO, he¥ worked in the Russian section at Arlington Hall from 1945 until his¥ arrest in 1950. He caused very grave damage to the U.S. SIGINT¥ program against the Soviet Union. For more details see The Korean¥ War: ¥The SIGINT Background (Center for Cryptologic History,¥ 2000).

# The 1942 to 1943 New York to Moscow KGBH MessagesH

#### Messages from the KGB New York Residence to MoscowR CenterR

Although KGB and GRU communications between New York¥ and Moscow during 1939 to 1941 were in a cryptographic system¥ that could not be broken, a comparison of the New York to Moscow¥ KGB and GRU message counts between 1939 and 1941 indicates¥ that, at least in the United States, the GRU may have been the more¥ active Soviet intelligence agency up until that time. For example, in¥ 1940 the New York GRU sent an estimated 992 messages to Moscow¥ while the KGB sent only an estimated 335 messages. Furthermore,¥ releases of the VENONA translations from 1944 and 1945 messages¥ show that a number of KGB espionage personalities had previously¥ been GRU agents (or possibly COMINTERN agents under GRU¥ control). In 1942 there were nearly 1,300 KGB New York to Moscow¥ messages, but only twenty-three were a little over 1,300 messages¥ with over 200 decrypted and translated.¥

#### The Comintern and the Soviet Intelligence ServicesR

The COMINTERN (Communist International) was a Soviet-¥ controlled organization that conducted liaison with the national¥ Communist parties of various countries, including the United States,¥ in order to further the cause of revolution. Moscow issued guidance,¥ support, and orders to the parties through the apparatus of¥

the COMINTERN. Nevertheless, Stalin publicly disbanded the¥ COMINTERN in 1943. A Moscow KGB message to all stations on 12¥ September 1943, message number 142, relating to this event is one¥ of the most interesting and historically important messages in the¥ entire corpus of VENONA translations. This message clearly¥ disclosed the KGB's connection to the COMINTERN and to the¥ national Communist parties. The message details instructions for¥ handling intelligence sources within the Communist Party after the¥ disestablishment of the COMINTERN. The released translation is¥ the Moscow to Canberra message, which was the only message of¥ those sent to all residencies that was successfully decrypted.¥

#### KGB Organization in the United StatesR

During the VENONA period, the KGB had U.S. residencies¥ (offices) in New York, Washington, and San Francisco – the latter¥ residency was not established (or possibly reestablished) until¥ December 1941. There also was a geographic subresidency in Los¥ Angeles.¥

The VENONA translations showed that the KGB New York¥ residency operated under three official institutional cover¥ arrangements — the Soviet consulate, the trade mission¥ (AMTORG/Soviet Government Purchasing Commission), and¥ TASS, the Soviet news agency. Other KGB officers worked at various¥ locations around the United States under Purchasing Commission¥ cover, often as factory inspectors working on Lend-Lease matters.¥

During 1942 to 1943, General Vassili M. Zubilin (true name:¥ Zarubin) was the KGB resident (chief) in New York. In 1943 he was¥ transferred to Washington to become resident there. Zubilin, known¥ in VENONA by the covername MAKSIM, signed many KGB¥ telegrams. His wife, Elizabeth, was a KGB colonel who had the¥ covername VARDO. There are indications that Zubilin/MAKSIM¥ was the senior KGB officer in the United States. For example, the¥ KGB residency in Washington did not send messages until late 1943¥ after Zubilin arrived there. Before that, the Washington espionage¥ messages were sent by New York.¥







General Vassili M.

Elizabeth Zarubin

Stepan Apresyan

All KGB residencies abroad came under the First Chief¥ Directorate (Foreign Intelligence) of the Moscow Center. Lieutenant¥ General Pavel Fitin, covername VIKTOR, ran the First Chief¥ Directorate, and most VENONA messages from the residencies are¥ addressed to him.¥

KGB officer Pavel Klarin, covername LUKA, succeeded¥ Zubilin/MAKSIM in New York. In 1944 Stepan Apresyan,¥ covername MAJ, became the New York resident. MAJ signed¥ hundreds of VENONA messages. All these New York residents¥ worked under the cover of vice-consul.¥

Although most or all KGB officers in New York worked for the¥ First Chief Directorate, their day-to-day operations were defined by¥ what the KGB called a "Line." A Line worked against a specific target¥ set or carried out some specialized function. A number of Lines are¥ mentioned in the VENONA translations, and their specialization can¥ be either identified or easily inferred. Some, not all, of these may be¥ seen in the 1942 to 1943 messages:¥

Line□	Target or FunctionH
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KhU Line□

High-tech targets including the ¥ Manhattan Project, jet engines, ¥ rocket engines, radar (Julius ¥ Rosenberg's group worked under ¥ this Line)¥

White Line¥ Probably worked against the White ¥

Russians¥

Fifth Line□ Security of the Soviet Merchant ¥

Fleet (probably connected to the ¥ Second Chief Directorate – internal ¥ counterintelligence at Moscow ¥

Center)¥

Second Line□ Watching nationalist or minority ¥

groups of interest to the Soviet state ¥

(e.g., the Ukranians)¥

Technical Line "A" ☐ Special work such as document ¥

forgery. This was probably the ¥

Illegals' support line.¥

Fellow Countryman LineY Liaison with the American  $\square$ 

Communist Party□

Line of Cover $\square$  The institutional or personal cover of Y

the KGB officer¥

Other organizations referenced in the VENONA materials¥ include the Eighth Department at Moscow Center, which received¥ political intelligence; the special cipher office, which encrypted and¥ decrypted the telegrams; the Center-KGB headquarters; and the¥ "House" or "Big House," which probably meant the COMINTERN¥ headquarters in Moscow (although it sometimes appears to be used¥ interchangeably for Moscow Center).¥

Telegrams sent by the KGB residency in New York were usually¥ signed by the resident (MAKSIM, LUKA, or MAJ) and were¥ addressed to VIKTOR, head of the First Chief Directorate.¥ Sometimes telegrams were signed with the covername ANTON,¥

head of the KhU Line, since Moscow Center gave him special¥ authority to do so in 1944. In special circumstances, telegrams were¥ addressed to or received from PETROV, believed to have been L.P.¥ Beria, head of the Soviet security apparatus; however, PETROV¥ might also have been V.N. Merkulov, a principal deputy of Beria,¥ who probably headed KGB operations from the latter part of 1943.¥

At least in the case of the New York residency, we see¥ what probably was the KGB in transition – trying to organize its¥ espionage activities better while sorting out the impact of the¥ dissolution of the COMINTERN. We also see considerable KGB¥ interest in European and Latin American Communists, which¥ presented opportunities for subversion, a classic COMINTERN¥ methodology, rather than espionage. Nonetheless, the New York¥ residency had many espionage assets during this period and was¥ aggressive, even reckless, and imaginative in trying to recruit or¥ place people in sensitive positions.¥

The activities of Soviet "Illegal" MER/ALBERT (covernames for YKGB officer Iskak Akhmerov, who operated as a clothier) first came Yto light in the 1942-43 New York to Moscow messages. VENONAY provides some insight into Illegals used by Soviet intelligence, Yalthough with the exception of the noteworthy activities of YAkhmerov and a GRU-Naval operation involving an Illegal, there are Yonly a small number of other cases of Illegals mentioned in the YVENONA translations. Y

# The Translations and KGB Cryptographic SystemsR

The VENONA translations from 1942 to 1943 messages¥ occasionally are fragmentary and difficult to understand. The code¥ itself was complex and difficult to exploit using pure analytic¥ techniques. Moreover, the broad contextual sweep of the content of¥ these messages vastly complicated the difficulty of reading these¥ KGB systems.¥

The cryptographic systems used by the KGB's First Chief¥ Directorate involved a codebook in which words and phrases were¥ represented by numbers. These numbers were then further¥

enciphered by the addition of random number groups, additives Y taken from a so-called one-time pad. A one-time pad comprised Y pages of random numbers, copies of which were used by the sender Y and receiver of a message to add and remove an extra layer Y of encipherment. One-time pads used properly only once are Y unbreakable; however, the KGB's cryptographic material Y manufacturing center in the Soviet Union apparently reused some of Y the pages from one-time pads. This provided Arlington Hall with an Y opening. Very few of the 1942 KGB messages could be solved Y because there was very little duplication of one-time pad pages in Y those messages. The situation was more favorable in 1943, even Y more so in 1944, and the success rate improved accordingly. Y

In order to break into the system successfully, Arlington HallY analysts had to first identify and strip off the layer of additive inY order to attack the underlying code. These two levels of encryptionY caused immense difficulty in exploiting the codebook, and manyY code groups were, therefore, never recovered. The KGB messagesY from 1942 through 1943 and into 1944, as well as from earlier years,Y were based on one codebook version. The 1944 to 1945 messagesY were based on a new codebook.

#### Recovered CodebooksR

As previously noted, the Arlington Hall breakthrough on the¥ KGB cryptographic systems was accomplished entirely through¥ sweat-of-the-brow analysis without the aid of any captured¥ codebooks. Fundamental cryptanalytic breaks against the extra¥ encipherment which overlay the various codebooks were made in¥ 1943 and 1944 by Richard Hallock and Cecil Phillips, and a small¥ team of experts, by their own cryptanalytic brilliance. The knowledge¥ gained earlier about the extra encipherment layer allowed Meredith¥ Gardner to break into the second KGB codebook in late 1946. The¥ majority of KGB messages between the United States and Moscow¥ that were solved employed this second KGB codebook and were¥ broken between 1947 and 1952. These were based on a KGB¥ codebook which Arlington Hall had never seen.¥

The KGB messages from 1942 and 1943 employed the earlier and Y more difficult codebook. These 1942 and 1943 messages were not Y attacked successfully until 1953 to 1954, when a second major Y cryptanalytic breakthrough was made through pure analysis by Y Dr. Samuel P. Chew at NSA, the successor of Arlington Hall. It was Y only after this second major breakthrough that a partially burned Y KGB codebook, which had been found in 1945, was able to be Y identified as the codebook employed in this system and to be put to Y use in attacking these messages. Y

A military intelligence team headed by Lieutenant Colonel Paul¥ Neff, acting under Arlington Hall direction, had obtained a¥ photocopy of this partially burned codebook at a Nazi Foreign Office¥ signal intelligence archive located in a castle in Saxony during the¥ last days of World War II in Europe. Neff's team got the material¥ back to U.S. lines shortly before Soviet occupation forces moved into¥ the area. The Nazis had acquired this codebook from the Soviet¥ consulate in Petsamo, Finland, on 22 June 1941. KGB officers in the¥ consulate had succeeded only in partially burning the codebook¥ before the facility was overrun. At about the same time, Lieutenant¥ Oliver Kirby, also connected to Arlington Hall, recovered related¥ cryptographic material while on a special mission in Schleswig,¥ Germany. (Both Neff and Kirby later became senior civilian officials¥ at Arlington Hall and later with NSA.)¥



**KGB SystemH Message Translations** Help from H by Arlington Hall¥ Captured H Codebook?H Pre-1939 into □ 1944¥ 1953 to 1954 🗆 & later□ Some after ¥ initial analytic¥ breakthrough¥ late 1946 to 1952 & later¥ None¥ 1944 to 1945¥

#### KGB Tradecraft and Operations, 1942 to 1943R

Several KGB tradecraft terms that appear frequently in the¥ VENONA translations are defined below:¥

Probationers□KGB agents¥Fellow Countrymen□member of the ¥<br/>American Communist ¥<br/>Party¥Workers or Cadre□KGB officers¥Put on Ice or in Cold Storage□deactivate an agent ¥Legend□cover story¥Neighbors□how the KGB referred ¥<br/>to GRU and vice versa¥

The following references identify VENONA translations that give¥ examples of KGB tradecraft and operations:¥

- $\bullet$  NY KGB recruiting proposals: No. 854, 16 June 1942; No. 424,¥ 1 July 1942; Nos. 1132-33, 13 July 1943¥
- An unidentified KGB agent in the company of President¥ Roosevelt and Prime Minister Churchill (note that the Illegal MER,¥ later known as ALBERT, signed the message): No. 812, 29 May 1943¥

# The 1944 to 1945 New York and Washington to ☐ Moscow KGB Messages ☐

#### The Washington KGB Residency $\square$

Except for its agents working against¥ high-tech targets such as the atomic bomb¥ project, the most important KGBY sources were in Washington, D.C.Y Nonetheless, VENONA shows that¥ these Washington-based espionage¥ nets were apparently run by the New¥ York residency; that is, the New York¥ residency wrote and sent VENONAY messages to Moscow even when these¥ messages clearly concerned activities in¥ Washington. KGB Washington sent no¥ messages until very late in 1943. In¥ 1944 Washington's message volume¥ was still only half that of New York.¥ Finally, in 1945 Washington KGBY



VADIM
Anatolij Gromov /Gorsky

took charge, it seems, sending twice as many messages as New York.¥ Vassili Zarubin, a KGB general officer who had been the resident¥ (chief) in New York in 1942 to 1943, moved to Washington during¥ 1943 as resident there. The Washington KGB thereafter began¥ sending messages in ever-increasing volume. When Zarubin was¥ recalled to Moscow in 1944, Anatolij Gromov, covername VADIM,¥ replaced him in Washington. Gromov (actual last name Gorsky) was¥ also a senior officer, in his late thirties, who had served for the¥ preceding four years as the KGB resident in London. American¥ spymaster and courier for the KGB Elizabeth Bentley knew him only¥ as "Al."¥

# New York Espionage Operations – the New KGBR

In 1944 covername MAJ, Stepan Apresyan, became the KGBY resident in New York. According to a complaint to Moscow Center by¥ his co-resident or subordinate, covername SERGEJ, MAJ was a¥ young, inexperienced officer who had not previously been posted¥

abroad. (In the U.S. covername SERGEI used the pseudonym¥ Vladimir Pravdin. During the 1930s, "Pravdin" had been involved in¥ killings and kidnappings in Europe for the KGB.) Apresyan was¥ about twenty-eight years old; he operated in New York under the¥ cover of vice-consul (see New York messages of 9 to 11 October¥ 1944). While we do not know why MAJ was elevated early to senior¥ KGB ranks, there were other major changes in KGB espionage¥ operations, as we can see in the VENONA messages. Moscow Center¥ and the New York residency intended to take more direct control of¥ some existing espionage nets that had been run for the KGB by¥ American Communists such as Jacob Golos (covername ZVUK) and¥ Greg Silvermaster (covernames PEL and ROBERT). And, as MAJY reported to Moscow, the time might come when the KGB would need¥ to have espionage agents not recruited from within the Communist¥ Party. The transition was resisted by American spies Greg¥ Silvermaster and Elizabeth Bentley, as well as by some of their¥ agents. They complained that Moscow did not trust them and that,¥ as a practical matter, the KGB would be less successful in running¥ espionage operations if they put their officers in direct contact with Y the agents, bypassing the old guard Communist Party controllers.¥ Perhaps mindful of this, the KGB introduced the Illegal ALBERTY into their espionage operations. Silvermaster, Elizabeth Bentley,¥ some of their individual agents, and members of the "new network" ¥ were now to fall under ALBERT's control.¥

These translations frequently show KGB tradecraft – the¥ techniques of secret espionage and counterespionage – in great¥ detail. The KGB term Konspiratoria sometimes seen in VENONA¥ refers to tradecraft and operational security. A few examples for¥ quick reference (all New York to Moscow):¥

- Agent Recruiting: No. 27, 8 January 1945 and No. 1506, ¥
   October 1944¥
- Meeting and Password Scenarios: No. 1220, 26 August 1944¥
- Secret Document Photography: No. 1469, 17 October 1944¥

- Countersurveillance: No. 1755, 14 December 1944¥
- Technical Surveillance Countermeasures: No. 1824, ¥ 27 December 1944
- Document Forgery Operations (the KGB "A"-line technique): ¥ No. 1203, 23 August 1944¥
- Cover Business: No. 618, 4 May 44¥
- Payments/Rewards to Agents: Nos. 1052 and 1053, 5 July 1945¥

Also, VENONA has excellent examples of the work of a KGB¥ agent and Communist Party functionary, covernames ECHO and¥ DICK (Bernard Schuster), in carrying out investigations on behalf of¥ the KGB as part of the vetting process of agent candidates (New York¥ to Moscow, Nos. 1221, 1457, and 1512, all from 1944).¥

Alger Hiss, a veteran GRU agent,¥ is presumably found in one KGB¥ message: Washington to Moscow,¥ no. 1822, 30 March 1945. In this¥ message, "A," meaning the chief¥ Illegal ALBERT (Iskak Akhmerov)¥ reports about his interview of ALES,¥ who describes his recent GRU career¥ and says he has been a GRU agent¥ "continuously since 1935." ¥Analysts¥ later identified ALES as probably¥ Hiss. Presumably, ALBERT was¥ examining the possibility of¥ transferring Hiss from¥GRU to the¥ KGB. ¥



ALES Alger Hiss

# KGB Special OperationsR

In addition to espionage, the KGB carried out other secret¥ activities in the United States. In VENONA we can follow the KGB¥ using its agents in the hunt for Viktor Kravchenko, covername¥

KOMAR, who in 1944 defected in Washington from the Soviet¥ Government Purchasing Commission. (See especially New York to¥ Moscow messages of May to August 1944, nos. 594, 600, 613-14,¥ 654, 694, 724, 726, 740, 799, and 907.) In the latter message, sent¥ from MAJ to PETROV (who was either L.P. Beria, head of Soviet¥ State Security, or V. N. Merkulov, his principal deputy who¥ functioned as the day to-day head of the KGB), New York announces¥ that KOMAR/Kravchenko had been located by their veteran agent¥ Mark Zborowski, covername TULIP. Additional related messages of¥ 1944 are nos. 1145, 1202, also no. 97 of 19 January 1945, the last¥ VENONA reference to the case, which reports that KOMAR is "in a¥ great panic" about his safety and that KGB agents KANT (the new¥ covername for MARK Zborowski) and ZHANNA are carrying out the¥ "work on KOMAR." The KOMAR messages contain references to Y anticommunist emigre community involvement in the defection. including references to David Dallin, Isaac Don Levine, and even¥ Aleksander Kerenskij, head of the post-revolutionary Menshevik¥ government before it was overthrown in the Bolshevik coup. KGB¥ New York also makes the mysterious remark (message no. 740, 26¥ May 1944) that "KOMAR is well informed about the KRIVITSKIJY case." KRIVITSKIJ was a famous KGB defector who supposedly¥ committed suicide in Washington in 1941.¥



Elizabeth Bentley

In 1945 Elizabeth Bentley, a¥ KGB agent who also ran a network¥ of spies and served as a courier,¥ went to the FBI to describe Soviet¥ espionage in the United States and¥ her part in it. She gave a 100-page¥ statement, in which she provided¥ many names – persons in positions¥ of trust who, she told the FBI, were¥ secretly supplying information to¥ the KGB. However, she brought no¥ documentary proof. No espionage¥ prosecutions resulted directly from¥ her accusations. Over the years she¥ testified before Congress and in¥

court and also published a book about her espionage career.¥ Elizabeth Bentley was a controversial figure, and there were many¥ who discounted her information. Ms. Bentley appears in these¥ VENONA translations (as covernames UMNITsa – [GOOD GIRL]¥ and MYRNA) as do dozens of KGB agents and officers whom she¥ named to the FBI. VENONA confirms most of the information about¥ Soviet espionage that Ms. Bentley provided the FBI.¥

#### **Boris MorosR**

Boris Moros was, like Ms. Bentley, another controversial figure of the Cold War. In 1959 he wrote an often criticized book, My Ten Y Years as a Counterspy, in which he described his long association Y with the KGB and his decision to go to the FBI with the story of KGBY operations in the United States. In the book he wrote about various Y personalities who are referred to in VENONA, including Vassili Y Zarubin and Jack Soble. Moros appears in VENONA as covername Y FROST. In his book Moros described how KGB agent Alfred Stern Y provided his own money to fund a musical record company, Y managed by Moros, as a KGB front and a cover for international Y intelligence operations. This operation is confirmed in VENONA – Y Stern (covername LUI) is quoted as saying his "130,000 dollar Y investment is exhausted" but also that "I want to reaffirm my desire Y

to be helpful. My resources are sufficientY for any solid constructive purpose...."¥ (See New York to Moscow, nos. 4-5, 11,¥ and 18-19 of 3 and 4 January 1945.)¥

#### **Donald MacleanR**

Long-time KGB agent Donald¥ Maclean, covername HOMER, a senior¥ British diplomat posted to Washington¥ during the 1940s, is found in several¥ VENONA messages from New York and¥ Washington (nos. 915, 1105-1110, 1146,¥ 1263, 1271-74, possibly 1352, all sent¥ during 1944). He was neutralized¥ because of information from VENONA.¥



HOMER
Donald Maclean

Since only 1.5 percent (thirty-six) of all Washington to Moscow KGB¥ messages of 1945 could be decrypted, it is notable that six of these¥ were HOMER messages (nos. 1788, 1791, 1793, 1808-1809, 1815,¥ and 1826 – no. 1809 is a continuation of 1808). Note that the small¥ body of Washington messages that could be broken was from small¥ windows of cryptanalytic opportunity found by the Arlington Hall¥ analysts in messages of March and June 1945 only. Therefore, we¥ have but a glimpse of Maclean's involvement but ample opportunity¥ to see the type of important information he was providing to the¥ Soviets.¥

HOMER is the English rendition of the Russian covername¥ spelling, GOMER. (The Cyrillic alphabet used in Russian has no¥ letter representing the sound "h" of the Roman alphabet, and foreign¥ words beginning with the "h" sound are regularly spelled with the¥ Cyrillic equivalent of "g.") Meredith Gardner, Arlington Hall's¥ principal VENONA analyst in the early days, began to break¥ HOMER messages as early as 1947/1948, but the story did not come¥ together immediately as the covername was variously represented in¥ the messages as GOMMER (a KGB misspelling), GOMER, G., and¥ "Material G." Initially, it was not apparent that these were all¥ references to the same person, particularly as both New York and¥ Washington traffic was involved, and Gardner worked the NYC¥ traffic first.¥

## Covername Albert: Principal KGB Illegal in the United StatesR

Covername ALBERT (earlier covername MER) is found in YVENONA more than fifty times, sometimes as signatory to messages Y sent by the New York residency. ALBERT was Iskhak Abdulovich YAkhmerov, a veteran KGB officer who had two tours of duty in the YUnited States as an Illegal, that is, an officer using a false identity and Y background (a Legenda in KGB parlance) and without diplomatic YCOVET cover or immunity. ALBERT's career, ascertained from VENONAY and other sources, gives an excellent example of the bewildering Y plethora of names by which a KGB personality might be known: Y

Communications Covername¥(the covername in VENONA):¥ MER in 1943 to 1944; ALBERT, 1944 to 1945.¥

35

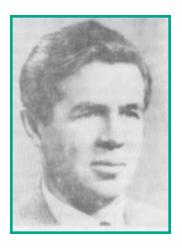
Aliases (1937 to 1945): William Greinke, Michael Green, Michael¥ Adamec, and more.¥

Street Names: YMichael, Bill. For example, Elizabeth Bentley Y knew him only as Bill—no last name, not even the alias, much less his Y true name. She knew his wife, also an Illegal, as "Catherine." Y Catherine actually was VENONA covername EL'ZA, true name Y Helen Lowry, a niece of KGB agent and U. S. Communist Party Y leader Earl Browder (VENONA covername RULEVOJ). Y

True name: Iskhak Abdulovich Akhmerov. (In some cases so-¥ called true names of KGB officers, the names that appeared on their¥ passports and the diplomatic lists, were false. For example, Vassili¥ Zubilin, the sometime KGB resident in New York and Washington,¥ was actually named Zarubin. To add to the difficulty in¥ understanding the names, other KGB officers used true names that¥ were not names at all—Russian words, but not traditional Russian¥ names. Some of these pseudonyms included senior KGB officers¥ Vladimir Pravdin and Jacob Golos, whose last names mean,¥ respectively, "truth" and "voice.")¥

In one message ALBERT refers to his earlier work in the United¥ States as an Illegal, and he mentions his old agents, covernames¥

LEONA, JULIA, TONYA, and¥ REDHEAD (REDHEAD was the¥ covername for Hedde Massing).¥ None of the others have been¥ identified, nor do we know if¥ ALBERT reactivated them in 1944 to¥ 1945 (No. 975, 11 July 1944). See¥ also the important message,¥ Washington to Moscow, No. 1822,¥ 30 March 1945, which reports of the¥ well-placed veteran GRU agent¥ ALES being interviewed by¥ covername "A." It appears that "A"¥ was ALBERT.¥



ALBERT/MER
Iskhak Abdulovich

#### The TranslationsR

The majority of these translations represent telegrams from the¥ New York KGB residency to Moscow Center in 1944. Most of these¥ messages were between KGB officers — covername MAJ (Stephen¥ Apresyan) and covername VIKTOR (General Pavel Fitin).¥ Approximately 50 percent of all the 1944 New York KGB to Moscow¥ Center messages were sufficiently decrypted to be translated. In¥ contrast, only 1.5 percent of the Washington to Moscow KGB¥ messages from 1945 were ever successfully deciphered. While¥ relatively few messages from the center to the residencies were¥ broken, those that were broken are very important to our¥ understanding of KGB operations and doctrine.¥

The translations are relatively¥ easy to read and understand. The¥ codebook and cipher procedures¥ used by the KGB during 1944 and¥ 1945 made it possible, after great¥ effort, for the analysts to produce¥ complete translations.¥ fairly Nevertheless, translations often¥ contain significant gaps - code¥ groups that could not be broken.¥ The New York translations in this¥ set were the earliest of all the¥ VENONA materials decrypted. All of¥ the New York to Moscow messages¥ (but not Moscow to New York) that¥ were successfully solved were at¥



VIKTOR Lieutenant General Pavel

least partially solved during 1947 to 1952 and disseminated to the¥ FBI (on a regular basis starting in 1948). Many of the Washington¥ KGB messages were also first decrypted during this period but not¥ quite so early as the New York material.¥

The 1944 and 1945 messages disclose mainly U.S. individuals¥ involved in a massive Soviet espionage effort – over one hundred¥ Americans, most of them Communists, are mentioned in the¥

translations of this release. Some of the organizations infiltrated by¥ these individuals included the following:¥

U.S. AgencyH	Some of the Relevant VENONA H MessagesH
Department of the ¥ Treasury ¥	NY No. II 19-1121, 4 to 5 August 1944;¥ 1634, 20 November 1944¥
Office of Strategic¥ Services (OSS)¥	NY No. 954, 20 September 1944¥
War Department¥	NY No. 1721-28, 8 December 1944¥
Department of State ¥	Wash. No. 1822, 30 March 1945¥
Department of Justice¥	NY No. 27, 8 January 1945¥

The translations disclose agents with access to the White House,¥ Congress, and political parties, as well as agents in the media and in¥ high-tech defense industries. New York message nos. 1635, 21 Nov¥ 44 and 12-16, 4 Jan 45 reveal assets and infighting relating to¥ ROBERT's (Greg Silvermaster) large KGB net in government¥ departments and agencies in Washington.¥

The KGB successor organization has recently provided historians¥



LESLIE Lona Cohen

some information about Lona and Morris¥ Cohen, their agents in the United States in¥ the 1940s, and later infamous Illegals¥ operating in the United Kingdom as Helen¥ and Peter Kroger. Reportedly, Lona Cohen¥ had the covername LESLIE while she was¥ involved in atomic bomb espionage courier¥ duties for the KGB (see NY's no. 50, 11¥ January 1945, the only VENONA reference¥ to this covername. This message suggests¥ that LESLIE/LESLEY had not been active¥ for the previous six months).¥

## The KGB in San Francisco and Mexico City□

## Covername GNOME - Trotsky's MurdererR

The KGB communications between Mexico City and Moscow¥ during 1943 to 1946 are a particularly rich historical trove, showing¥ the elaborate plans to free from prison a man assigned the¥ covername GNOME, who had murdered Trotsky in Mexico City in¥ 1940. The murderer, who had been arrested at the scene of his crime,¥ was known as Frank Jacson; he held Canadian documentation.¥ Mexican authorities readily saw this documentation as a sham, but it¥ would be many years before GNOME's true identity was known, for¥ he had many aliases. GNOME (GNOM in the Russian spelling) was¥ in reality Ramon Mercader, a Spanish Communist recruited into¥ KGB service by his mother, the Spanish Communist and KGB agent-¥ officer Caridad Mercader. She appears in these VENONA messages¥ as covername KLAVA.¥



Ramon Mercader
(Covername GNOME),
after capture by Mexican police

The Soviet Union opened an embassy in Mexico City in 1943,¥ which provided a cover for a KGB residency (before then the KGB¥ had operated in Mexico City without diplomatic protection). During¥ 1943 to 1945 that KGB residency sent about 570 messages to¥ Moscow Center, while the Center sent 400 messages to Mexico. This¥ was a substantial number, though fewer than half could be¥ sufficiently decrypted to be issued as the translations seen in this¥ release. Many of these messages concern the GNOME affair and Y indicate that the KGB had two plans to facilitate his release: a¥ combat operation, to spring him by force, or an effort to use¥ influence. In any case, the KGB drew upon American, Mexican, and¥ Spanish Communists to accomplish this mission, but the operation¥ failed. The following KGB messages related to the GNOME case (all¥ except the last two were from Mexico City to Moscow) are¥ particularly interesting. Some of these messages were addressed to¥ covername PETROV (L. Beria), head of Soviet state security:¥

- Plans for the Combat Operation: No. 158, 23 December 1943;¥ Nos. 174-76, 29 December 1943¥
- The work of KGB agent Jacob Epstein: Nos. 193-94, 14 March¥ 1944¥

The KGB has suspicions about one of their agents: Nos. 553-54,¥ 29 June 1944

- Influence operations and an agent with access to GNOME in¥ prison: No. 474, 6 June 1944¥
- GNOME's mother's presence in Mexico is complicating the¥ case: Moscow Center to Mexico City, Nos. 172-174, 9 to 10 March¥ 1945¥
- A scathing criticism of the work of the KGB resident (chief) in¥ Mexico: San Francisco KGB to Moscow, Nos. 321-322, 19 August¥ 1944¥

Other Mexico City messages discuss or mention a remarkably¥ varied group of KGB personalities, including General Leonid¥ Eitington (covername TOM), who had organized the murder of Y Trotsky; Dolores Ibarruri, the Spanish Communist leader known as¥ "La Pasionara"; the later Nobel Prize winner Pablo Neruda; and¥ Communist Party member and KGB agent Kitty Harris (covername¥ ADA), sometime lover of KGB agent and American Communist Party¥ leader Earl Browder. In several messages, the KGB discusses Otto¥ Katz (also known as Andre Simon), a prominent Communist¥ executed with other members of the Czech Communist Party¥ leadership after World War II in an infamous purge ordered by¥ Stalin. The story, simultaneously seen in the New York City KGB¥ messages, of Nicholas and Maria Fisher, whom the KGB was trying¥ to get into Mexico via a U.S. transit visa, also continues. The Fishers¥ were clearly important KGB officers, operating under instructions¥ from Beria. Their goal was to take over the GNOME affair, to support¥ operations in the United States, maybe even for atomic bomb¥ espionage.2H

#### The KGB in San FranciscoR

The KGB established a residency (office) in San Francisco in¥ December 1941. The resident from 1941 to July 1944 was Grigori¥ Kheifits (covername KHARON). He was replaced by Grigori¥ Kasparov (covername DAR). In 1945 Moscow Center sent the New¥ York Resident Stepan Apresyan (covername MAJ) to take over the¥ San Francisco operation in anticipation of the UN conference¥ (attended by KGB agent Harry Dexter White). Arlington Hall and¥

NSA were unable to¥ decrypt the approximately¥ 125 messages sent by that¥ residency in 1941 to 1942¥ (only two or three¥ messages were sent in¥ 1941).¥

Grigori Kheifits (right); Grigori Kasparov (left)



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As often happened, (see the released New York, Washington, and¥ A-bomb translations), the San Francisco KGB got most of its agents¥ – spies – from the local Communist Party. Isaac Folkoff (covername¥ DyaDYa – "uncle"), a grand old man of the California Communist¥ Party, is seen in VENONA as an agent, espionage talent spotter, and¥ recruiter for the KGB. But there is one surprise: a major KGB agent¥ in the West Coast defense aviation industry was not a Party member.¥ This was Jones Orin York, covername IGLA, who later admitted he¥ was in it for the money, although he received very little.¥

One other oddity of the San Francisco translations is that, with¥ one exception,<sup>3H</sup>there is no obvious reference to atomic bomb¥ espionage (though non-VENONA sources confirm that such¥ espionage was in progress at least in 1942 to 1943). Perhaps that¥ work had ended locally by the time of the readable VENONA¥ messages (and it should be noted that the Los Angeles KGB message¥ traffic, though of small volume, is entirely unreadable). The San¥ Francisco messages do contain evidence of espionage against other¥ high-tech targets.¥

One important KGB officer, Olga Valentinovna Khlopkova¥ (covername JULIA), is seen in both San Francisco and New York¥ KGB messages. She was on some missions of interest to Beria,¥ possibly involving internal KGB security issues.<sup>4H</sup>

## The Hunt for Sailor DesertersR

Several dozen San Francisco KGB messages concern the hunt for¥ deserters from the Soviet merchant fleet and investigations into the¥ suicides or accidental deaths of other sailors. There is, for example,¥ the tragic story of ship's officer Elizabeth Kuznetsova, who jumped¥ ship in Portland, Oregon, on 9 February 1944. According to a later¥ VENONA KGB message, she subsequently married a taxicab driver¥ in San Francisco. The VENONA part of the story ends, "On 4¥ November this year the traitor to the fatherland KUZNETSOVA was¥ shipped to Vladivostok on the tanker 'BELGOROD.' Details to follow¥ in a supplement..."

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## The GRU in New York and Washington□

Shedding Light on GRU Espionage in the U.S.R

As noted earlier, up until 1941 the GRU, the intelligence¥ directorate of the Red Army General Staff, had been the principal¥ foreign intelligence agency of the Soviet Union. By the time of¥ VENONA readability (the 1939 to 1941 messages of KGB and GRU in¥ the United States could not be decrypted), Stalin had made the KGB¥ his top espionage organization. Still the GRU continued to run¥ espionage operations (though many of its best assets had been¥ transferred to the KGB), and these are seen in the fifty or so¥ translations of 1943 messages from the GRU residency in New York.¥

Hundreds of GRU New York messages remain unsolved. The loss¥ to history in the record of the GRU in Washington is particularly¥ noticed. Of the several thousand Washington messages from 1941 to¥ 1945, only about fifty were decrypted, in spite of the best efforts of¥ the United States and the United Kingdom. Unlike the New York¥ GRU messages, where translations concern espionage, these few¥ Washington translations deal with routine military attaché matters¥ (such as overt visits to U.S. defense factories). However, a separate¥ Washington GRU cryptographic system, which was never read,¥ presumably carried GRU espionage traffic.¥

The New York GRU messages show that the organization had¥ good espionage sources in some government agencies, including the¥ OSS, the predecessor to CIA. GRU New York also had a radio-¥ equipped Illegal, covernamed MOK. We see some of the work of the¥ spy (and Communist Party member) Joseph Bernstein, covername¥ MARQUIS, and his recruitment of fellow Communist T.A. Bisson,¥ covername ARTHUR. He GRU chief in New York, covername¥ MOLIERE, was Pavel P. Mikhailov (the alias he used in his cover¥ assignment as vice consul; true name was probably Menshikov or¥ Meleshnikov). A number of GRU sources remain unidentified. ¥

## Some Notes on Analysis of GRU SystemsR

Exploitation of GRU (both Red Army and Naval) messages¥ lagged behind the cryptanalytic successes and exploitation of KGB¥ messages by many years. While the 1945 defection in Ottawa of GRU¥ code clerk Igor Gouzenko provided message texts that revealed a¥ great deal of espionage, Gouzenko did not produce any¥ cryptographic materials of direct use to Arlington Hall's¥ cryptanalytic effort. In the long run, success against GRU messages¥ came from the accumulated knowledge and experience gained¥ exploiting the Soviet trade, true diplomatic, and KGB systems and¥ the application of early computers. In particular, the 1949 to 1950¥ theoretical work of the distinguished mathematician and former¥ navy cryptanalyst Dr. Richard Leibler opened new methods of attack¥ against the VENONA-related diplomatic systems — including those¥ of the GRU.¥

In 1952 cryptanalyst-linguist Charles Y Condray proposed an attack against Y unknown message beginnings which was Y based on Dr. Leibler's work. The Y computer implementation of this Y attack by mathematician Dr. Hugh Y Gingerich led to detection of reused Y key in GRU messages and, ultimately, Y to the solution and translation of GRUY messages. Y

The Naval GRU systems resisted the¥ best efforts of Arlington Hall, NSA, and¥ the U.K. SIGINT service until 1957,¥ when a U.K. analytic attack provided the¥ first results in detecting reused key.¥



Dr. Richard Leibler

## Translations of Naval GRU MessagesR

NSA and the United Kingdom service decrypted some 300 GRU¥ Naval messages that had been sent in 1943 between Washington and¥ Moscow – including about half (200 of 400) of the messages sent by¥ Washington. However, only a few naval GRU messages from any¥ other year could be decrypted and none from any other U.S. location.¥

Commodore I. A. Egorichev was Soviet naval attaché in¥ Washington at that time, and he was probably also the resident¥ (chief) of the secret intelligence apparatus as well. His superior in¥ Moscow was the Soviet director of naval intelligence, probably¥ Commodore Mikhail A. Vorontsov.<sup>8H</sup>

The Naval GRU was clearly the junior Soviet intelligence service,¥ at least in the United States. The translated messages show the¥ Washington Naval GRU wrestling with various unrelated missions¥ while trying to establish secret espionage networks. In fact, the Naval¥ GRU's cryptographic system was used for various nonintelligence¥ entities, such as the Soviet naval Lend-Lease representatives, their¥ naval weather service personnel, and Soviet naval convoy officers.¥ Some of the topics of Washington Naval GRU messages were these:¥

- Counterintelligence in Tampa, Florida: Washington to Moscow¥ Nos. 834, 846-848, 18 April 1943¥
- Recruitments and handling of American Communists as¥ espionage agents: Moscow to Washington, No. II 5,20 January 1943;¥ No. 704, 1 April 1943; No. 1194, 10 July 1943; Washington to¥ Moscow, No. 1969, 13 August 1943 (mentions exceptional¥ possibilities in the high-tech field)¥
- Moscow lays out the rules for "the primary and basic aims" of¥ naval intelligence: No. 1109, 26 June 1943¥
- Regular attaché business exchange of information with U.S.¥ Navy: Washington to Moscow, No. 1657, 17 July 1943¥
- Human interest a grief-stricken Soviet admiral: Washington¥ to Moscow, No. II 50, 27 May 1943¥

## The Case of Sally $\square$

Naval GRU assigned covernames AUSTRALIAN WOMAN and¥ then SALLY to an Illegal to be sent by ship from the Soviet Far East¥ to the U.S. West Coast. Fourteen messages relating to this operation¥ were translated. The first of these, Washington to Moscow, Nos.¥ 2505-2512, 31 December 1942, is one of the longest messages in VENONA — an extraordinary document showing the Naval GRU's¥ inexperience in this sort of activity and the need for assistance from¥ the GRU and/or KGB. The last decrypted message about the case¥ states that SALLY had been landed in San Francisco from a Soviet¥ freighter (Washington to Moscow No. 1983, 14 August 1943). The¥ FBI later learned that SALLY had been known in the United States¥ as Edna Patterson, that she had left the United States suddenly in¥ 1956, and that she was a Soviet citizen who had been born in¥ Australia.¥

The reader will recall that several Illegals appear in KGB traffic,¥ most notably covername MER/ALBERT. Other Soviet Illegals¥ include the GRU Illegal MOK and various Illegals in the Mexico City¥ messages (these included probably Spanish nationals and a¥ Canadian, who probably were not Soviet citizens—a variation on the¥ usual origin of Illegals).¥

# The KGB and GRU in Europe, South America, and ☐ Australia ☐

## Insight into Foreign Ministry and Trade MattersR

Trade and Foreign Ministry messages were rarely translated. The¥ VENONA breakthrough was not generally achieved until years after¥ the messages had been sent. Trade and Foreign Ministry messages¥ were not of intelligence value once they had been broken. The¥ voluminous trade messages involved mostly Lend-Lease matters;¥ the Foreign Ministry messages most often dealt with routine¥ consular affairs. Nevertheless, these messages were important for¥ two reasons: they helped in the cryptanalysis of KGB and GRU¥ messages (this was absolutely critical in the case of the trade¥ material), and they provided occasional information concerning¥ Soviet security, counterintelligence, and cryptographic policy. For¥ example, a June 1945 message from the deputy foreign minister to Y all posts abroad warned that a "foreign intelligence service" (not¥ further identified) was showing an interest in the movement of Y Soviet diplomatic mail and would attempt to "extract documents"¥ from these courier shipments. <sup>9</sup>HAnother security warning message of Y May 1947 ordered ambassadors, consuls, and their subordinates to¥ immediately discharge from their personal service any foreigners¥ they might have hired as "cooks, nursemaids, washerwomen, maids,¥ etc."10H

Among the few trade messages translated are discussions of Y "two cases of safe cracking" at the Lend-Lease office annex in Y Washington in December 1942. HA Moscow to Washington Trade Y Ministry message of December 1942 mentions "those confidential Y and secret reports" obtained by "Comrade SHUMOVSKIJ" during Y 1938 to 1942 and gives instructions for his continued work. This is Y especially interesting because Shumovskij was a lieutenant colonel Y in the KGB seen as covername BLERIOT in the KGB VENONAY messages. HERIOT in the KGB VENONAY messages.

## KGB Messages to the London ResidencyR

Only a small set of London KGB messages was available for¥ exploitation – mostly incoming messages from Moscow Center sent¥ in September 1945. This small opening, taken together with the¥ exploitation of certain messages of KGB New York and Washington¥ (translations previously released), assisted in the identification of¥ important KGB agents Donald Maclean, Kim Philby, and Guy¥ Burgess.¹³HThese agents are seen in VENONA under the following¥ covernames:¥

STANLEY¥ Kim Philby¥ HICKS¥ Guy Burgess¥

GOMER (HOMER)¥ Donald Maclean (who is found in the ¥

New York and Washington traffic)¥

Three other KGB messages will be of particular interest to U.S.¥ readers:¥

- No. 6 from Moscow, 25 September 1945, discusses a U.S.-Y connected agent covernamed DAN, who, when contacted by the KGBY in London, was to be greeted at the meeting place by the passwordY scenario, "Didn't I meet you at VICK's restaurant on ConnecticutY Avenue?"Y
- No. 13, also from Moscow, 16 September 1945, concerns¥ espionage against the atomic bomb by the unidentified agent TINA,¥ whose information on that target had been for the KGB "of great¥ interest and represents a valuable contribution to the development¥ of the work in the field." TINA¥has since been identified as Melita¥ Norwood.¥
- No. 36, from Moscow, 17 September 1945, says that the¥ unidentified covername EDUARD had served in Washington from¥ 1939 until February 1945 and that the politicians "mentioned in your¥ letter with whom EDUARD comes in contact are of great interest to¥ us."¥

## GRU Messages between London and MoscowR

The translations of messages between the GRU's London¥ residency and headquarters in Moscow are a particularly interesting¥ and perhaps unexpected addition to the public's knowledge of Soviet¥ espionage. The exploited messages, about 260 overall, date from¥ 1940 to 1941 and then from 1945 to 1947, and they cover a wide range¥ of topics, techniques, and espionage personalities. Here is dramatic,¥ professional intelligence reporting about the Battle of Britain, the¥ Blitz, the expected German invasion, the preparations of the British¥ forces, and the emergency procedures of the GRU, including their¥ establishment of at least three clandestine radio stations. The¥ espionage reporting is substantial. Referred to are a GRU spy group¥ called the "X Network," the unidentified agent BARON, who¥ apparently reported information obtained from U.K. decryption of¥ German Enigma messages, clandestine radio operators STANLEY,¥ MUSE, and the famous SONIA (Ursula Buerton).¥

In a London GRU message of 10 August 1941 is a reference to the¥ GRU's reestablishing contact in the United Kingdom with Klaus¥ Fuchs and from him learning about early efforts to develop the¥ atomic bomb. Fuchs later went under KGB control in the United¥ States as the covername REST and ChARL'Z of KGB New York¥ VENONA messages. The GRU resident (chief) in London was¥ probably Simon Kremer, who had the cover assignment of private¥ secretary to the military attaché. Note that several messages deal¥ with cipher matters — in 1940 to 1941, the London GRU used a¥ so-called Emergency System, a variation of the basic VENONA¥ cryptosystems. London GRU messages merit very close attention.¥ Examples of GRU messages:¥

- Air Raids, Invasion Preparations in the United Kingdom:¥ London No. 800, 23 July 1940; 922, 22 Aug 1940; 1009, 13¥ September 1940 (all London to Moscow)¥
- GRU agents in DeGaulle's government: London No. 776, 17¥ July 1940¥
  - GRU clandestine radios: London No. 798, 22 July 1940¥

- Moscow's Instructions for agent networks in the United¥ Kingdom: Moscow No. 450, 7 September 1940¥
- Agent BARON reports on U.K. Enigma decrypts: London¥ No. 649, 3 April 1941¥
- Klaus Fuchs and the GRU/the A-bomb: London 2227,¥ 10 August 1941¥
- The X Group espionage net in U.K. forces: London to Moscow,¥ No. 1188, 18 October 1940¥

#### The Arthur Case: The KGB in Latin AmericaR

The VENONA translations show the establishment of regular¥ KGB residencies (offices) in Bogota and Montevideo during World¥ War II. Taken together with previously released Mexico City¥ messages, we see attention to subversion and the establishment of¥ agent networks – as always drawing upon the Communist Party for¥ clandestine assets. Covername ARTHUR, seen in New York,¥ Montevideo, and other KGB communications, has recently been¥ identified as the famous KGB Illegal officer Uozas (Joseph)¥ Grigulevich, who had a long undercover career in Latin America and¥ elsewhere, and an equally bloody career during the purges and the¥ Spanish Civil war. He, and his associate who used the covername¥ ALEKSANDR, was a very busy (if judging from VENONA),¥ somewhat unfocused, operative. According to one message, he had¥ begun his South American operations in 1940, after which he¥ operated in Chile and moved on. ALEKSANDR was probably a¥ Chilean national. There are about 150 Montevideo and Bogota KGBY translations in this release. Some examples of KGB messages:¥

• Moscow's Nos. 61 and 154-55 to Montevideo, 23 June 1944 and¥ 8 September 1944, contain information on ARTHUR's background¥ and instructions for him.¥ • Moscow No. 164, 23 May 1945, to Montevideo discusses the use¥ of covername JAN and that the center would especially "like him to¥ help us in getting our bearings in the situation in the Latin American¥ countries."¥

An interesting exchange between Bogota KGB and the center¥ involves the recruitment of the head of the Venezuelan Communist¥ Party. The center approves but notes, in a typical agent assessment¥ and recruiting formula, that before recruiting him "you should¥ thoroughly check his sincere devotion to the Soviet Union." <sup>14H</sup>

Joan Malone Callahan, the first U.S. VENONA analyst/linguist to serve at GCHQ 1949 to 1954. She became project supervisor and principal customer interface in 1954 when Meredith Gardner replaced her in the United Kingdom.





Arlington Hall bowling team of cryptanalysts ca. 1947. Standing (left to right): Cecil Phillips, Bill Lutwiniak, Paul Derthick. Below: (left to right) Frank Lewis, Louise Derthick. (All except Louise worked at some time on VENONArelated



Charles Condray (left)
The principal linguist/code
builder on trade and
diplomatic codes for more
than twenty-five years. He
supervised the total
VENONA-related project in
the later years.

Gene Grabeel (right)
She began work on
Soviet diplomatic
messages on I
February 1943 and
continued working the
problem until the late
1970s.





Gloria Forbes (left)
She began processing
Soviet diplomatic
messages in mid-1943
and continued to
supervise this and
related activities for

Mildred Hayes
VENONA linguist/analyst for
more than twenty-five years.
She closed the VENONA effort
on I October 1980.



### The KGB in AustraliaR

Unlike any other group of VENONA messages, some KGBY messages on the Canberra-Moscow communications link wereY decrypted in near real-time, that is, close to the date of transmission.Y Further, the Canberra material, though of modest volume, isY readable (if intermittently) for the longest period of time, 1943 toY 1948. More than 200 messages were decrypted and translated, theseY representing a fraction of the messages sent and received by theY Canberra KGB residency. In this body of translations, we see typicalY KGB coverage: their agents inside government departments andY interesting places in the private sector; those agents were drawnY from the Communist Party. Some examples of what is contained inY the Canberra KGB material:Y

- Communist Party member/KGB agent in the Australian¥ government: Canberra No. 130, 25 April 1945¥
- Payment to a KGB agent inside the Australian government:¥ Canberra No. 141, 5 May 1945¥
- KGB agent reports about the Australian Security Service:¥ Canberra No. 324-25, 1 September 1945¥
- A Communist Party member who is a KGB agent well placed in¥ the Australian Department of External Affairs: Canberra No. 361-62,¥ 29 September 1945

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- Instructions for handling important agents: Moscow No. 7-8, 9¥ January 1947¥
- Instructions for developing agent networks: Moscow No. 34, 8¥ March 1948¥

## The Stockholm MessagesR

The translations of messages of Soviet intelligence in Stockholm¥ are particularly rich for their variety and volume: more than 450¥ messages of the three Soviet services, KGB, GRU, and Naval GRU.¥ Sweden, neutral during World War II, gave the Soviets a valuable¥ listening post concerning German military activities in Norway,¥ Denmark, Finland, and the Baltic. Note the great attention to¥ transborder operations: debriefing refugees from Norway and¥ sending Norwegians back to Norway.¥

An interesting Naval GRU message, No. 682, 13 April 1942,¥ Stockholm to Moscow, describes a German peace initiative to the¥ banker Jakob Wallenberg, uncle of Raoul Wallenberg, the Swedish¥ diplomat and humanitarian. No translation in the VENONA¥ material, however, is known to concern the case of Raoul¥ Wallenberg, who was arrested by SMERSH (military¥ counterintelligence) in Budapest in 1945 and was reportedly¥ murdered by the KGB in Moscow. Examples of other Stockholm¥ messages:¥

#### KGBR

- A detailed report of German naval construction, disposition of¥ ships, movement of men and equipment in and out of occupied¥ Norway: Stockholm No. 3090, 21 November 1943¥
- Discussion of important KGB agent and Swedish Communist,¥ covername KLARA, "who is completely devoted to us."¥

#### GRU and Naval GRUR

• Much GRU discussion about clandestine radio and the¥ construction and use of agent cipher systems (for example, Moscow¥

No.797, 6 September 1941 and Nos. 938 and 939, both date¥ 13 October 1941)¥

- A GRU source reports on Swedish signal intelligence work¥ against Soviet naval communications, No. 1564, 12 December 1941¥
- • Finnish Army order of battle reported by GRU in No. 151,Y 22 January 1942Y
  - GRU to dispatch agents to Norway, No. 656, 8 April 194¥
- In a message of 19 March 1943, No. 901, Stockholm Naval GRU¥ reported the results of their search for Leica cameras and accessories¥

   a worldwide tradecraft matter in the VENONA messages:¥
   obtaining cameras and film for secret document photography¥

In late 1944 General Carter W. Clarke, the assistant G-2 and¥ Arlington Hall's overlord, called to the Pentagon Lieutenant Paavo¥ Carlson, an Arlington Hall cryptanalyst. Knowing that Carlson spoke¥ Finnish, Clarke told him to prepare to leave within days for¥ Stockholm, where he would act as an interpreter for the U.S. military¥ attache, who would be meeting with representatives of the Finnish¥ SIGINT service, then evacuating into Sweden. The Stockholm¥ OSS chief would participate in the meeting. Carlson later recalled¥ that the Finns handed over a German Enigma machine with¥ the rotors and also described to the Americans their success in¥ working against Soviet military communications (and U.S.¥ diplomatic communications).¥

It was this same Lieutenant Carlson who in mid-December¥ 1942, in Lynchburg, Virginia, recruited Miss Gene Grabeel for¥ employment at Arlington Hall, where six weeks later she opened the¥ attack on Soviet diplomatic communications that became known as¥ the VENONA program.¥

## **Special Reports**□

#### **Translations***R*

Twenty-four KGB message translations, discovered in¥ reconciling the historic collections, were included in the sixth release.¥ Of particular note are messages describing the activities of Jack and¥ Dr. Robert Soble, veteran KGB agents operating in the United States¥ and elsewhere.¹⁵HThese include arrangements for a cover business¥ for Jack Soble; movement of money between Canada and the United¥ States; and the reactivation by the KGB of the correspondent and¥ Hollywood producer Stephen Laird.¹⁶HThere are reports from and¥ about the well-placed KGB agents PLUMB, RAIDER, and FRENK¥ (previously identified as Charles Kramer, Victor Perlo, and Laurence¥ Duggan, respectively). Also of interest is a long and complicated¥ message about affairs in Hungary, which is based on a secret report¥ that had been lost in a taxicab in New York and obtained by the¥ KGB.¹⁵H

Several dozen other previously released translations have been¥ made available in more complete form (see, for example, the¥ Stockholm GRU and Naval GRU translations). This material,¥ concerning Soviet espionage in the United States, is grouped in the¥ same order in the previous releases. More complete versions of the¥ first release may shed additional light on KGB espionage in Chicago¥ against the atomic bomb project (e.g., that covername FLOX was¥ Rose Olson) and on the other KGB operations in New York¥ Washington, and San Francisco. <sup>18H</sup>

#### Meredith Gardner's Special Reports R

Mr. Gardner wrote a series of eleven special reports from 1947 to¥ 1948. The first of these was released at the VENONA Conference in¥ October 1996 and is included in this set. The remaining reports¥ should help date some of the earliest work on important VENONA¥ cases such as covername LIBERAL/ANTENNA (eventually¥ identified as Julius Rosenberg) and LIBERAL's wife Ethel.¥

Mr. Gardner composed these special reports to record what he¥ was finding in the VENONA messages and to alert his chain of¥ command and G-2's counterintelligence group. When Robert¥ Lamphere of FBI headquarters became involved in VENONA full¥ time, Mr. Gardner began to issue individual message translations,¥ and the special report series was discontinued.¥

Following is a list of these special reports. Some are not dated,¥ but all were issued between 30 August 1947 and 12 August 1948.¥

- 1. Gardner's initial overview of the covernames he was finding in¥ the VENONA messages¥
- 2. Mention of covernames GOMER/HOMER and YUN, later identified as Donald Maclean and Stephen Laird¥
  - 3. KGB Canberra¥
- 4. ENORMOZ (atomic bomb) espionage including the work of¥ covername LIBERAL¥
  - 5. Confirmation that VENONA messages were KGB¥
  - 6. LIBERAL's network¥
- 7. The KOMAR affair (KOMAR was Kravchenko, who defected¥ from the Soviet trade mission in Washington and was being hunted¥ by the KGB)¥
  - 8. Messages changing covernames¥
- 9. Covername KARAS (Ivan Subasic, KGB agent involved in¥ Serbo-Croatian matters in the United States and abroad)¥
- 10. Covername CHETA (later identified as KGB officers Micholas¥ and Maria Fisher)¥
  - 11. ANTENNA/LIBERAL's wife Ethel¥

An interesting example of the type of material found in the¥ reports would be in Special Report #6, 28 April 1948, which Y summarizes or gives the text of a significant number of Y LIBERAL/ANTENNA translations. See, for example, message¥ number 1053, 26 July 1944, New York KGB to Moscow Center¥ (paragraph 6) that concerns ANTENNA's proposal to recruit his¥ friend Max Elitcher, who was a Communist, as were all members of Y the Rosenberg espionage ring. The translation of New York to¥ Moscow No. 628, 5 May 1944 (paragraph 4), is important to¥ the story of the development of the Rosenberg case. As of April 1948¥ the Arlington Hall VENONA unit had not been able to decrypt the Y first twenty-four groups of that message. Lacking this critical¥ context, Mr. Gardner translated the message as giving a description¥ of ANTENNA. When those missing twenty-four groups were¥ decrypted – see the reissue of the translation on 27 June 1950 – it¥ was shown that the message was in fact about Rosenberg's¥ description of his friend Al Sarant, whom he recruited for the KGB.¥

One of the special reports issued in July 1948 (1948 was a¥ presidential election year) gives the earliest translation found of the¥ KGB message concerning bribery of persons around David Niles, an¥ important advisor to Presidents Roosevelt and Truman (New York to¥ Moscow message 786, 1 June 1944).¥

### Other DocumentsR

Related to the Gardner special reports is the covername book¥ used by Arlington Hall and later by NSA analysts, to record the KGB¥ message covernames, every appearance of them by message number¥ and date, and the identities of the covernamed persons where¥ known. This covername book contains terms used in KGB New York,¥ Washington, and San Francisco communications and messages to¥ those stations from Moscow Center. The dates of entries made in the¥ covername book are unclear, but it was developed and used from¥ early 1949 until the VENONA program ended in 1980.¥

Two additional Meredith Gardner documents deserve attention.¥ One is his short account of the development of the GOMER/HOMER¥ case (Donald Maclean) from the Arlington Hall point of view. This¥

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account must not be taken as a full representation of the¥ counterintelligence investigation chronology, however. In the¥ second document, short but undated, Mr. Gardner recorded some¥ dates concerning who had access to VENONA information in the¥ early days. This is also a valuable part of the historical record.¥

#### EnvoiR

A few closing remarks follow, some in response to questions from Y the public. Y

VENONA was the final NSA codeword for this very secret¥ program. Earlier codewords had been JADE, BRIDE, and DRUG.¥ All these codewords were selected at random by the United States¥ and the United Kingdom and are not acronyms or abbreviations.¥

There was outstanding cooperation between Arlington HallY (later NSA) and its partners and customers. From 1945 to 1946 CecilY Phillips, an Arlington Hall cryptanalyst, briefed the U.K. SIGINTY service on the program. In 1947 Meredith Gardner, the principalY early analyst and translator of the VENONA messages, explained hisY progress to his British counterpart. During September 1947 GeneralY Carter W. Clarke of G-2 brought the FBI into the problem, and, byY the end of that year, the bureau had begun to open espionage casesY based on VENONA. CIA joined the effort in late 1952.Y

The courage and wisdom of General Carter W. Clarke of G-2 and¥ Robert J. Lamphere contributed mightily to the VENONA success¥ story as did the leadership of Frank B. Rowlett and Oliver Kirby at¥ Arlington Hall. But it all rested on the skills, patience, and¥ determination of the Arlington Hall analysts who made it all¥ possible.¥

#### **Notes**R

- 1. William Crowell was deputy director of NSA from February 1994 to¥ September 1997.¥
- 2. See, for example, No. 334, Moscow Center to Mexico City, 30 May 1944. However, for context see especially the previously released message,¥ New York KGB to Moscow, No. 786, 1 June 1944, that mentions that friends¥ of David Niles (a White House staffer) "will arrange for a bribe," i.e., get the¥ transfer visas for the Fishers.¥
  - 3. See No. 619-620, 27 November 1945.¥
- 4. See, for example, San Francisco to Moscow, Nos. 510 and 519,¥ December 1943.¥
- 5. See San Francisco messages to the Center, from 1944: Number 65,¥ 151, 159, 293; and messages numbers 166, 295, and 568 of 1945. See also the¥ very detailed message from Moscow Center that sets up new procedures for¥ the KGB's Fifth Line in handling the security of the Soviet merchant fleet on¥ the West Coast, No. 379, Moscow to San Francisco, 16 November 1944.¥
  - 6. See messages New York to Moscow Nos. 895-985, 987, 1295.¥
- 7. This will be of interest to students of the so-called Amerasia affair. In¥ 1945 the OSS Security Division and the FBI searched the offices of the¥ magazine Amerasia, which was suspected of holding classified government¥ documents. The staff of the publication included Communist spies and¥ agents, including Joseph Bernstein. In subsequent years, the case resulted¥ in several convictions, none major, and a number of congressional hearings¥ were held on the case. The book The Amerasia Case by Harvey Klehr and¥ Ronald Radosh presents more details on the matter.¥
- 8. The signatories and addresses of the Naval GRU messages are quite¥ confusing as this service dedicated a block of code groups at the back of¥ their codebook for covernames. As these do not fall in alphabetical order¥ and are not seen in any other context, the actual meaning of these code¥ groups could not be found. Thus, we see the arbitrary numbering and¥ lettering systems adopted by the United States-United Kingdom (not by the¥ Soviets) to identify these covernames, e.g., Name No. 5.¥
  - 9. Moscow Foreign Ministry Circular to all posts, 8-13 June 1945¥
  - 10. Foreign Ministry, Moscow, to all posts No. 019, 22 May 1947¥

- 11. Trade messages, Washington to Moscow, No. 8166, 29 December  $\square$  1942 and 8167-68, same date¥
- 12. Stanislau Shumovskij recruited Jones Orin York in approximately¥ 1935 in California, beginning York's long career in espionage for the KGB.¥ York is the covername IGLA (NEEDLE) of Venona.¥
- 13. See, for example, the Moscow to London messages of 17 September¥ 1945 about Kim Philby's report on the Gouzenko defection in Ottawa and 21¥ September 1945 about the handling of key KGB assets in light of the¥ Gouzenko case.¥
  - 14. Bogota No. 120, 6 July 1944 and Moscow No. 129, 13 August 1944¥
- 15. New York to Moscow, 24 June 1943, 6 July 1943, 5 May 1944,¥ October 1944¥
  - 16. 12 and 23 August 1944¥
  - 17. Message #1669ff, New York to Moscow, 29-30 November 1944¥
- 18. "Rose Olson" appears to have been Roz Childs, wife of Morris¥ Childs, a prominent Communist and later a double agent for the FBI.¥