

Subsequently, advanced cameras were adopted for spy SATELLITES, beginning with the U.S. CORONA and the Soviet ZENIT.

OO PHOTOGRAPHIC INTERPRETATION

The extraction of intelligence from photography of TARGET areas. Photography can be taken by AIRCRAFT, SATELLITES, SUBMARINES, surface ships, and by people on the ground.

The Official World War II Guide to the Army Air Forces, published by the U.S. Army in 1944, provided a useful description, although limited in scope to aerial photography:

Photographic intelligence is derived from the interpretation of aerial photographs taken primarily by reconnaissance aircraft, and secondarily by cameras on bombing aircraft during bombing missions. Highly trained photo-interpreters analyze the photographs to prepare factual reports on damage assessment, industry, transportation, airfield activity, ground and coast defenses, camouflage, dummies and decoys, communications, ground force activities, shipping and ship building. Most important information is obtained by comparison of recent photographs with previously obtained photographs of the same area. Great advances have been made in the field of aerial photography in its military application through the development of various types of cameras for specialized jobs including high altitude, low altitude, high-speed, infra-red, mapping, color and night photography.

Not mentioned—for security reasons—was the beginning of radar photography, the image of radar “pictures” of areas of specific interest. The 1944 publication also stated: “Photographic reconnaissance contributes the largest portion of intelligence upon which military decisions can be based.” The authors of *The Official World War II Guide to the Army Air Forces* had no knowledge of the Allied codebreaking efforts (i.e., MAGIC-ULTRA).

Also see NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER.

OO PIANIST

Intelligence slang for a clandestine radio operator.

OO PIANO

Intelligence slang for a clandestine radio.

OO PICKERING, JEFFREY L.

U.S. Navy enlisted man stationed at the Naval Regional Medical Clinic in Seattle, Wash. He admitted sending a five-page secret document to the Soviet Embassy in Washington, D.C., in 1983, apparently hoping to become a spy. When he was arrested, he had a plastic addressograph card imprinted with the embassy's ad-

dress. He was sentenced to five years at hard labor and given a bad conduct discharge.

OO PIED PIPER

U.S. Air Force classified competition for commercial firms held in 1955 to generate design studies for a SATELLITE RECONNAISSANCE system. This effort—to some extent a continuation of Project FEEDBACK—was a milestone in the development of U.S. spy satellites.

OO PRIG

Russian intelligence term for a traitor.

OO PIGEON POST

Pigeons, with their unerring homing instincts, have been used to carry messages—often communications from spies—since Biblical times. Pigeons carried news of Olympic victories to Greeks absent from the games. The sultan of Baghdad set up a pigeon post in 1150 to link outposts in his empire.

During the siege of Paris in 1870–1871, Parisians sent out crates of pigeons in BALLOONS. The pigeons flew back with messages over Prussian siege lines. One pigeon could carry thousands of dispatches reduced by microphotography to MICRODOTS. Early in the 20th Century Julius Neubronner, a German photographer, strapped 2½-ounce cameras on pigeons and sent them up to demonstrate their reconnaissance potential; an automatic timer clicked the shutter every 30 seconds.

During World War I a pigeon post linked Allied trenches. Balloons used in RECONNAISSANCE went aloft with pigeons that were dispatched to wing messages to the ground. The British Army's Field Intelligence Department used carrier pigeons for communications. A heroic pigeon, Cher Ami, carried messages that saved the American “lost battalion.” Although wounded, Cher Ami flew 25 miles in 25 minutes. He was awarded the French Croix de Guerre with Palm. When he died, a taxidermist preserved him, and he was later presented to the Smithsonian Institution in Washington, D.C.

GI Joe was a World War II pigeon hero. British troops that had just captured an Italian town sent back word via GI Joe. The message arrived just in time, for an air strike was about to be launched on the town. GI Joe received the Dickin Medal, awarded by the Royal Society for the Prevention of Cruelty to Animals. Another Dickin Medal went to Mercury for flying 480 miles over the North Sea to carry a message to Britain from a Danish resistance group.

In the 1950s, Israeli Army reconnaissance units, looking for Arab military installations in desert areas, equipped pigeons with electronic tracking devices. The birds were held until they were hungry, then sent off. The assumption was that the only food would be around an Arab facility. Tracking the pigeons electronically, the Israelis could secretly map likely sites for Arab facilities.

The U.S. Army pigeon service, which started during the Indian Wars of the 1870s, ended in 1957, when the



Carrier pigeon being released from a port hole in a British tank in Northern France, 1918. (IMPERIAL WAR MUSEUM).

last Army pigeons were distributed to zoos and pigeon hobbyists.

● ● PIKE COMMITTEE

U.S. House committee that investigated charges of CIA and NSA abuses in 1975. The committee took its name from Representative Otis Pike (Democrat, New York). Testimony before the committee revealed some NSA activities publicly for the first time.

Prior to hearings in Aug. 1975, the committee requested the NSA "charter" that set forth the scope of the agency's power to intercept communications. The charter was actually an intelligence directive of the NATIONAL SECURITY COUNCIL issued in 1952, when NSA was secretly established. The charter had never been revealed.

The Pentagon official who represented NSA at the hearing appeared without the directive. Pike was outraged. "It seems incredible to me," he said, "that we are asked to appropriate large amounts of money for that agency which employs large numbers of people without being provided a copy of the piece of paper by which the agency is authorized." The committee voted unanimously to subpoena the directive. However, NSA and Justice Department officials managed to keep the directive from being made public (and except for a short section, it still had not been revealed in 1996).

WILLIAM E. COLBY, the DIRECTOR OF CENTRAL INTELLIGENCE, told the committee that NSA eavesdrops on "communications that go abroad from the United States or are abroad." Colby admitted that the communications of some Americans were picked up because their words "cannot be separated from the traffic that is being monitored." Colby then asked that any further discussion take place behind closed doors in executive session. Air Force Lt. Gen. LEW ALLEN, JR., the first NSA director ever to tes-

tify publicly, read a statement outlining the NSA's work and then requested that questions to him also be asked in executive session.

Intelligence officials in both the CIA and NSA later complained about leaks from the committee. Pike's conduct of the hearings was often sharply partisan and criticized by Republicans. The result was disagreement on what should go into a final report. Much of the Pike Committee's work was overshadowed by the more extensive and better-organized CHURCH COMMITTEE.

The Pike Committee report, issued in 1976, mentioned, for example, a "U.S. Navy submarine reconnaissance program often operating within unfriendly waters." This was IVY BELLS, a TOP SECRET Navy operation for tapping a Soviet seafloor communications cable. (It was not revealed until 1986, during the trial of RONALD PELTON, a former NSA analyst who had sold secrets—including Ivy Bells—to the Soviets.)

● ● PINCHER, CHAPMAN

British investigative reporter who wrote a book speculating that Sir ROGER HOLLIS, former Director-General of the British Security Service (MI5), had been a Soviet MOLE.

In 1976 Pincher, a well-known British defense writer, was planning to write a book based on former Prime Minister Harold Wilson's claims that the British Security Service (MI5) had plotted to overthrow Wilson. After that book did not develop, Pincher wrote *Their Trade Is Treachery* (1981). The book was a sensation because of the charge against Hollis, who had headed MI5 from 1956 to 1965; he died in 1973. Pincher also believed that Hollis pushed through the clearances of KLAUS FUCHS, who was a Soviet spy.

Prime Minister Margaret Thatcher, in a statement in Parliament, denied that Hollis had been a Soviet mole,

"although it was impossible to prove the negative." Meanwhile, the furor about Hollis continued.

One of Pincher's sources had been former MI5 officer PETER WRIGHT. Pincher found what he believed were more details and wrote *Too Secret Too Long* (1984), which furthered speculation about Hollis. Wright, who was in retirement in Tasmania, Australia, subsequently wrote *Spycatcher* (1987), which the British government tried to suppress. Wright made similar charges against Hollis.

Baron Victor Rothschild, a scientist, industrialist, and one-time MI5 officer, paid for Wright to travel to England to meet with Pincher. Rothschild's role in setting up the meeting inspired media theories that he was controlling information in the hope of spiking rumors that he had served the Soviets. On Dec. 3, 1986, in a letter to the *Daily Telegraph*, Rothschild demanded that the Director General of MI5 "state publicly that it has unequivocal, repeat unequivocal, evidence that I am not, and never have been, a Soviet agent." Two days later Thatcher stated, "I am advised that we have no evidence that he was ever a Soviet agent." The question still bore that ambiguous answer when Rothschild died in 1990 at the age of 80.

●● PINKERTON, ALLAN

(b. 1819 d. 1884)

Private detective who during the U.S. Civil War ran a MILITARY INTELLIGENCE service that produced very poor intelligence.

Pinkerton was born in Glasgow, Scotland, the son of a police sergeant. Apprenticed to a cooper but sensing a better future in the United States, he emigrated when he was 23, settling first in Chicago, Ill., and then setting up a cooper's shop in a nearby town in Kent County. After capturing a gang of counterfeiters, he was appointed a deputy sheriff, first in Kent County and then in Cook County, with headquarters in Chicago. He joined the newly organized police force there and became a detective, resigning in 1850 to found the Pinkerton National Detective Agency.

The agency's specialty was tracking and capturing railroad bandits. In 1860 a war over slavery was looming, and railroads were a potential target of sabotage. That year several of the Southern states had seceded from the Union. Maryland, a border state, was still in the Union, but secessionists in Maryland were plotting to sabotage the railroads. The Philadelphia, Wilmington & Baltimore Railroad asked Pinkerton to send agents to Baltimore to thwart the saboteurs.

Pinkerton's success in protecting the railroads led to his being hired to guard President-elect Abraham Lincoln as he traveled to Washington, D.C., for his inauguration. Pinkerton and his detectives, learning of an assassination plot, arranged a night train for a secret trip that would carry Lincoln through Maryland to Washington.

Soon after the Civil War began in April 1861, Pinkerton was asked by Maj. Gen. George B. McClellan, then commander of the Union Army's Ohio Department, to establish an intelligence NETWORK. Under the COVER name Maj. E. J. Allen, Pinkerton traveled in the South,



Allan Pinkerton with President Lincoln. (LIBRARY OF CONGRESS)

taking the measure of the political and military climate. When McClellan took command of the Army of the Potomac in the summer of 1861, Pinkerton accompanied him to Washington, where he set up a COUNTERINTELLIGENCE operation against Confederate AGENTS.

McClellan, lacking a formal military intelligence service, relied on Pinkerton and his detectives, whose investigative experience had been limited to railroad bandits and safe crackers. Some historians attribute McClellan's hesitancy in battle to a consistent exaggeration of Confederate strength, misinformation that can be traced to Pinkerton and his men. In July 1862, for example, Pinkerton estimated that Confederate Gen. Robert E. Lee had more than 200,000 men in his Army of Virginia. McClellan's quartermaster general, basing his figure on a systematic study of Southern newspapers, estimated that Lee's forces totaled 60,000 to 105,000 men. Confederate records later showed that Lee actually had fewer than 90,000 men.

At the battle of ANTIETAM in Sept. 1862, McClellan had a two-to-one superiority over Lee's forces and, through a Confederate security leak, a copy of Lee's plan for the invasion of Maryland. But McClellan relied on Pinkerton's poor intelligence reports and failed to exploit the Union's advantages.

Pinkerton claimed that his men gathered solid intelligence by such methods as interviewing Confederate deserters and counting Confederate campfires. But he invariably overestimated, sometimes by as much as 100 percent.

His counterintelligence record in Washington was slightly better, for his men did apprehend several Confederate spies. But he released the skilled BELLE BOYD after personally interrogating her.

When Lincoln fired McClellan for his "slows," Pinkerton lost his patron and shifted from conducting battlefield intelligence to investigating profiteering businessmen. With his departure, a BUREAU OF INFORMATION was established under Col. GEORGE H. SHARPE. (Also see LAFAYETTE BAKER.)

After the war, Pinkerton resumed operation of his detective agency, which had begun to spread nationwide. The "Pinkertons" became especially known for their work as strikebreakers as well as private detectives.

OO PINKROOT I

see PUEBLO

OO PINNACLE

Message series used by U.S. military forces to warn of foreign contact or interference. Pinnacle messages were sent by the PUEBLO, a U.S. INTELLIGENCE COLLECTION SHIP, at the time of her capture by North Korean forces on Jan. 23, 1968.

OO PLAIN TEXT

Original message in ordinary language—before being encoded or enciphered, or after being decoded or deciphered.

OO PLAUSIBLE DENIAL

Originally a way to arrange, coordinate, and conduct U.S. COVERT ACTION so as to "plausibly" permit official denial of U.S. involvement, sponsorship, or support. Later this concept evolved into a way for high officials and their subordinates to communicate without saying anything incriminating. In cautiously discussing possible covert action, they would not use precise language and thus would not reveal authorization and involvement. If they did say or write anything, under the doctrine of plausible deniability, their words would not be embarrassing or politically damaging if publicly revealed.

When a U-2 spyplane was shot down over the Soviet Union, for example, President Eisenhower had plausible deniability in the form of a COVER story that it was an unarmed plane on a weather-monitoring mission. That plausibility evaporated, however, when the Soviets revealed that the pilot, GARY POWERS, was alive and had confessed he was a spy.

The words *plausible deniability* themselves are never used. A wordy nondefinition came in testimony in 1975 before the CHURCH COMMITTEE investigating, among

other issues, assassination plans fomented by the CIA. RICHARD M. BISSELL, JR., chief of CIA clandestine operations, was explaining how ALLEN W. DULLES, DIRECTOR OF CENTRAL INTELLIGENCE, had to brief President Eisenhower and President Kennedy on assassination plans: Dulles would indicate "the general objective of the operation that was contemplated, to make that sufficiently clear so that the president . . . could have ordered the termination of the operation, but to give the president just as little information about it as possible, beyond an understanding of its general purpose. Such an approach would have had as its purpose to leave him in the position to deny knowledge of the operation if it should surface."

OO PLAYBACK

To provide false information to an enemy while drawing out accurate information by impersonating a captured spy or by turning a spy, usually through radio transmissions. Also see DOUBLE-CROSS SYSTEM.

OO PLAYFAIR CIPHER

Famous CIPHER of the 19th Century, invented by Sir Charles Wheatstone, a British scientist and inventor whose achievements included the development of an electric telegraph before that of Samuel Morse in the United States.

Wheatstone's cipher was adopted by his friend and fellow scientist Baron Playfair, who, in Jan. 1854 demonstrated it for Prince Albert, husband of Queen Victoria, and future Prime Minister Lord Palmerston. They were impressed by the cipher—which soon became known by Playfair's name, although he never claimed to have invented it.

Playfair is a block cipher that uses a key word followed by the remaining letters of the alphabet. If the key word is COMPUTER the block would look thus:

| | | | | |
|---|---|---|---|----|
| C | O | M | P | U |
| T | E | R | A | B |
| D | F | G | H | IJ |
| K | L | N | Q | S |
| V | W | X | Y | Z |

The PLAIN TEXT is then enciphered with pairs of letters or digraphics. Pairs in the same row or column are replaced with the letters to their right; pairs not in the same row are replaced by the letter below them; and in pairs that are not in the same row or column, each letter is replaced by the letter that lies in its own row and stands in the column occupied by the other plain-text letter in the digraphic. Double letters have an X inserted between them (to avoid someone's reading the enciphered text and realizing that there is a double-letter word).

Thus, with the key word COMPUTER, the plain-text word ATTACK would have the letters paired, with an X between the double letters and another added at the end to give it an even number of letters. It becomes AT XT AC KX and would be enciphered as follows:

AT = EB
XT = RV

AC = TP
KX = NV
Or EB RV TP NV

The Playfair cipher was relatively easy to learn, remember, and use.

Wheatstone and Playfair explained the cipher to the Under Secretary of the Foreign Office. When the Under Secretary protested that it was too complicated, Wheatstone volunteered to show that three out of four boys at the nearby elementary school could be taught to use the cipher in 15 minutes. "That is very possible," said the Under Secretary, "but you could never teach it to attachés."

But the cipher was employed by the Foreign Office and was used by British military forces in the Boer War and afterwards. Once learned, it was simple to use and difficult to break. For example, the digraphic minimizes the possibility of using letter frequency as a CRIB (e.g., *e* being the most frequently used letter in the English alphabet), while the insertion of an X between double letters further reduces the probability of cribs.

Wheatstone also invented a form of CIPHER DISK.

OO PLUMBAT

MOSSAD and LAKAM operation in 1968 to steal material for Israeli nuclear weapons production; see LAKAM entry for details.

OO PLUMBERS

Special Investigations Unit established in 1971 by the Committee to Re-elect the President (Richard M. Nixon). The unit was to stop security leaks (hence the nickname) and to carry out clandestine intelligence collection and sabotage against the Democratic Party.

The Plumbers, who reported to John Ehrlichman, chief of staff to President Nixon, consisted of E. HOWARD HUNT, Gordon Liddy, David Young (assistant to national security adviser Henry Kissinger), and presidential assistant Egil (Bud) Krogh, who later became Under Secretary of Transportation.

The Plumbers supervised two BLACK BAG JOBS: the burglary of Daniel Ellsberg's psychiatrist's office in 1971 and the WATERGATE break-in of 1972. Ellsberg had infuriated Nixon by stealing and leaking the PENTAGON PAPERS, secret documents on the Vietnam War.

OO POACHER

Slang used by British INTELLIGENCE OFFICERS for a BIRD WATCHER (spy) who is in the field or operating area.

OO POE, EDGAR ALLAN (b. 1809 d. 1849)

American novelist and poet who was an expert on CIPHERS. In this field he had considerable influence on the development of CRYPTOSYSTEMS by the British SECRET SER-

VICE. After studying the history of ciphers, from 1840 onward Poe wrote extensively on the subject in popular magazines and incorporated a cipher as a central plot element in his tale *The Gold-Bug* (1843).

OO POLGAR, THOMAS C.

CIA station chief in Saigon during the final stage of the Vietnam War.

As a young man in the 1930s, Polgar, a Hungarian Jew, fled to the United States. During World War I, the U.S. Army, impressed by his language ability, assigned him to the OFFICE OF STRATEGIC SERVICES (OSS), which trained him in Britain and dropped him behind German lines. After the war he became one of the many OSS veterans who joined the new CIA. He served in BERLIN, where the CIA had a large Cold War station.

Polgar was already a legend in the CIA Directorate for Plans (clandestine services) when he was made chief of station in Saigon in 1972 under COVER as special assistant to the ambassador. He had never been in Asia before.

Describing him in *Decent Interval* (1977), FRANK SNEPP, a former CIA INTELLIGENCE OFFICER in Vietnam, wrote:

Because of his accent and his past Polgar always considered himself an outsider in the CIA's ivy-covered bureaucracy, and as an outsider he felt obliged continually to demonstrate his knowledge and astuteness. . . .

His personal insecurities no doubt helped to shape his relationships with the Vietnamese. . . . For in dealing with Saigon's high and mighty, Polgar tended to suspend critical judgment, accepting what they told him even when he knew it to be self-serving.

By the time Polgar took over the CIA establishment in Vietnam, the war had reached its final stage, although U.S. policymakers were not publicly admitting it. Whatever influence the CIA had on the war was fading as President Nixon and Secretary of State Henry Kissinger were seeking ways toward a negotiated end to the war.

Polgar was on one of the last helicopters out of Saigon when the U.S. Embassy was evacuated in April 1975.

Polgar came out of retirement in 1987 to join the committee staff for the U.S. Senate Select Committee that investigated the IRAN-CONTRA AFFAIR. Polgar pressed unsuccessfully for a deeper congressional investigation of CIA involvement in Iran-Contra. When President GEORGE BUSH nominated ROBERT M. GATES as DIRECTOR OF CENTRAL INTELLIGENCE, Polgar used characteristically blunt language in an article in *The Washington Post*: "Gates acted as if he was in a complete fog or was interested primarily in keeping the truth from being aired in public or, indeed, from reaching Congress."

OO POLITICAL INTELLIGENCE

Information related to a nation or a group's internal political situation that could be of assistance to an oppo-

ment. Political intelligence was often a TARGET of U.S. intelligence activities in Southeast Asia in the 1960s. (See DOMESTIC INTELLIGENCE and VIETNAM.)

●● POLLARD, JONATHAN JAY (b. 1943)

U.S. NAVAL INTELLIGENCE analyst who spied for Israel against the United States. By his own admission he passed to his Israeli HANDLERS more than 800 classified publications and more than 1,000 cables. The documents he provided would fill a space six by six by ten feet.

Pollard was educated at Stanford University and graduated in 1976. He enrolled in graduate school at the Fletcher School of Law and Diplomacy at Tufts University in 1977, but left without a degree in 1979. At Stanford he had told friends how he had fled Czechoslovakia in 1968 when it was revealed that his father worked for the CIA in Prague. These were lies, as were his boasts about connections at that time with the Israeli intelligence services.

Pollard, who once sent himself a telegram addressed to "Colonel" Pollard, entered false job and education information on his application for government employment. But no one caught him. He became a civilian intelligence analyst for the Navy in Sept. 1979. Following the standard BACKGROUND INVESTIGATION, he was given a SECURITY CLEARANCE for TOP SECRET plus access to SENSITIVE COMPARTMENTED INFORMATION (SCI).

Soon after Pollard went to work for the Navy at the Naval Intelligence Support Center in Suitland, Md., near Washington, D.C., he made contact with a military ATTACHÉ at the South African Embassy in Washington. U.S. COUNTERINTELLIGENCE officials, learning of this contact, notified the Navy. Pollard lost his special clearances but was not fired. (If Pollard had handed over secrets to South Africa, they would have rapidly found their way to the KGB, because a high-level Soviet MOLE, COMMO. DIETER FELIX GERHARDT of the South African Navy, was spying for the KGB at that time.)

In June 1984 Pollard was assigned as an analyst in the NAVAL CRIMINAL INVESTIGATIVE SERVICE, then called the Naval Investigative Service (NIS), and his special clearances were restored. He was placed in a new, high-priority unit, the Anti-Terrorism Alert Center in the NIS Threat Analysis Division of Naval Intelligence, with access to such sensitive material as SATELLITE photographs and CIA AGENTS' reports.

He went far beyond the bounds of his job, showing classified material to an Australian naval officer and to a supporter of the mujahedeen freedom fighters in Afghanistan. At least three of his social acquaintances received classified information from him in what authorities believe was an attempt by Pollard to set up a private information service.

About this time he went to New York City and met an Israeli officer who identified himself as "Avi." He was Col. Aviem (Avi) Sella, an Israeli Air Force officer and intelligence operative, in the latter role under COVER as a graduate student at New York University. Sella asked Pollard for a "sample" of the kind of information he could provide to Israel, assuring him that he would be

paid for his services. A few days later the two men met in Washington, and Pollard handed Sella detailed information on the places in Iraq where chemical warfare weapons were manufactured.

Using standard TRADECRAFT, Sella, as the recruitment agent, handed Pollard off to his CASE OFFICER, Yosef (Yossi) Yagur, whose cover was consul for scientific affairs at the Israeli Consulate in New York. Yagur and Pollard met in Paris with RAFAEL (RAFI) EITAN, a veteran Israeli intelligence official who ran the Israeli Defense Ministry's Liaison Bureau for Scientific Affairs, known as LAKAM.

While the men met in a Paris SAFE HOUSE, Pollard's fiancée, Anne Henderson, was taken to a jewelry store and told to pick out an engagement ring. She selected a \$10,000 diamond and sapphire ring, which Sella later purchased and gave to Pollard for presentation to Henderson. The Israelis said that she should tell friends that the engagement ring was a gift from Pollard's "Uncle Joe Fisher."

As the Pollards were about to leave Paris, Sella gave Pollard between \$10,000 and \$12,000 in cash—Pollard would later say he forgot the exact amount—to pay for a grand tour of the Riviera, Italy, Switzerland, and Germany. Sella also promised Pollard a \$1,500 monthly salary for his espionage efforts.

Back in the United States, Pollard quickly fell into an espionage routine. Under the loose security rules that governed the naval intelligence complex at Suitland, Pollard could make computerized searches on virtually any subject. One of his major sources for the theft of secrets was the DEFENSE INTELLIGENCE AGENCY, whose computerized data banks contained MILITARY INTELLIGENCE on nations throughout the world.

About three times a week Pollard would gather up the computer printouts, satellite photographs, and secret documents, put them in his briefcase, and walk out without having his briefcase searched. He would drive to a place where he could not be observed—such as in his car in a car wash—and transfer the documents from his regular briefcase to a suitcase that he reserved for his Friday or Saturday deliveries to the Washington apartments where Israelis copied the documents, which he would return on Monday. In Israel, a special team of analysts evaluated and distributed the Pollard material.

In the spring of 1985 Pollard's monthly (undeclared) spy pay was raised to \$2,500 a month, and he was invited to take an all-expenses-paid European honeymoon. He and Anne Henderson were married in Venice and traveled to Zurich in a \$700 private compartment on the Orient Express. From there they went to Israel.

While in Israel, the Pollards were entertained by Israeli intelligence officials, who gave them, as a parting gift, more than \$10,000 in cash to cover their honeymoon expenses. A couple of months later, at a meeting with Pollard in Washington, Yagur showed Pollard an Israeli passport with Pollard's photograph and the identity of an Israeli citizen named Danny Cohen. Yagur also gave Pollard a Swiss bank account number and mentioned that \$30,000 had already been deposited. A grateful Israel, Yagur said, would add \$30,000 to that account

every year for the next ten years. After that, Pollard would presumably move to Israel as Danny Cohen.

Anne Henderson Pollard quit her public relations job at the National Rifle Association and approached a New York public relations firm that had been looking for a way to represent China. Among the items Pollard then brought home were five secret studies on diplomats in the Chinese Embassy and consulates. His wife made a brilliant presentation for the public relations job.

Alerted to his massive requests for data, Comdr. Jerry Agee, Pollard's commanding officer, ordered "especially close scrutiny" of Pollard's work habits and computer runs. On Nov. 8, 1985, he discovered that Pollard had obtained a printout of SCI information on Middle East subjects. A surreptitious check of Pollard's work space showed that the information was not there; he had therefore taken sensitive material out of the building without proper authorization. Agee called the NIS security office and the FBI.

On Monday, Nov. 18, Pollard, carrying a package containing 60 classified documents—20 of them TOP SECRET—was stopped outside the Navy facility and brought back to his office for questioning by FBI and NIS agents. During the next few days, after a series of desperate attempts to throw off the investigators and to get help from his handlers, on Thursday morning, the Pollards drove to the Israeli Embassy, followed by FBI SURVEILLANCE agents.

The Israelis refused to give Pollard political asylum and, as he left the grounds of the embassy, he was arrested. Anne Henderson Pollard was arrested the next day.

Revelations about Israeli espionage in the United States threatened a breakdown in relations between the two countries. An Israeli government spokesman immediately branded the espionage a "rogue" operation, "an unauthorized deviation" from Israeli's "policy of not conducting any espionage activity whatsoever in the United States, or activities against the United States."

But it soon became obvious that this was a long-term, highly organized intelligence operation. Assessing the damage, Secretary of Defense Caspar Weinberger said, "It is difficult for me . . . to conceive of a greater harm to national security." He said that "substantial and irrevocable damage has been done to this nation," including the selling of data "intentionally reserved by the United States for its own use, because to disclose it, to anyone or any nation, would cause the greatest harm to our national security."

David Geneson, one of the two assistant U.S. attorneys who prosecuted Pollard, later said that much of the intelligence Pollard supplied "was unusable to the Israelis except as bargaining chips and leverage against the United States and other countries' interests." This is the closest anyone publicly came to acknowledging what intelligence officials said privately: Some of the information probably found its way to the Soviet Union, mostly likely through one of the Soviet MOLES in the Israeli government. Further, the material that Pollard supplied included intelligence on U.S. agents or at least key contacts in the Arab world—men who could be TURNED by the Israelis—as well as information on codebreaking efforts by the NSA.

Revelations about a technical collection system are "much like the loss of a network of agents," a government damage assessment said. The identity of U.S. agents, another report said, "could be inferred by a reasonably competent intelligence analyst."

Pollard had also allowed his handlers to copy his identification credentials, making it possible for them to equip other agents with the means to slip in and out of government facilities.

Pollard pleaded guilty to espionage charges and was sentenced to prison for life. His wife pleaded guilty to unauthorized possession of government property and to being an accessory to the possession of military documents by her husband. She was not charged with espionage. Sentenced to five years in prison, she constantly complained about her treatment. In a television interview she compared her experience to "what Auschwitz [death camp] must have been like 47 years ago in terms of medical treatment, in terms of abuse. . . ." She was released in April 1990 after serving 37 months and divorced Pollard soon thereafter.

Pollard became a celebrity in Israel and the hero of an international campaign to release him. Seventy members of the Israeli Knesset (parliament) presented a petition to President Reagan in 1988, asking for a presidential pardon for Pollard and his wife. Pollard's champions compare his plight to that of Capt. ALFRED DREYFUS because Dreyfus was a Jew, as is Pollard. Dreyfus, however, was not a spy, whereas Pollard, arrested during the DECADE OF THE SPY, was not singled out for anti-Semitic reasons. He was a confessed spy.

In 1993 Secretary of Defense Les Aspin revealed that Pollard had tried 14 times to disclose classified information in intercepted letters written from his prison cell. Aspin's revelation came less than a month after Israeli Prime Minister Yitzhak Rabin appealed to President Clinton to free Pollard. Clinton said he could only consider clemency recommendations from the Justice Department, and none had been presented. Previously, Prime Minister Yitzhak Shamir had made a similar appeal to President Bush, who turned down the request. In 1996, following Rabin's assassination, his successor, Shimon Peres, on a visit to Washington, probably made a similar confidential appeal.

● POLYAKOV, LT. GEN. DIMITRI FEDOROVICH

(b. ? d. 1986)

Soviet GRU (MILITARY INTELLIGENCE) officer who was a DEFECTOR IN PLACE for the United States for 18 years. He is believed to have been the highest-ranking GRU officer ever to spy for the West.

Polyakov was a GRU colonel under COVER as a member of the Soviet mission to the UNITED NATIONS in Nov. 1961 when he told an American working for the FBI that he wanted to meet the commanding officer of the U.S. First Army, headquartered on Governor's Island, off Manhattan. The commanding officer invited Polyakov to a cocktail party, where he asked the general to put him in touch with the FBI. At a second party Polyakov was in-

troduced to an FBI agent who said he was a CIA INTELLIGENCE OFFICER.

The FBI began running Polyakov with the CODE NAME TOP HAT in Jan. 1962. Polyakov had trained many Soviet ILLEGALS in the United States and was in charge of all illegals at the time he became a defector in place. Among the illegals he exposed were KAARLO RUDOLPH TUOMI and ALEKSANDR SOKOLOV. Through him the FBI is also believed to have discovered the espionage of U.S. Navy yeoman NELSON C. DRUMMOND, U.S. Army officer WILLIAM H. WHALEN, and U.S. Army enlisted men HERBERT W. BOECKENHAUPT and JACK E. DUNLAP. He is also credited with exposing the British spy FRANK BOSSARD.

Polyakov seemed inspired to spy because of his hatred of the Soviet system; he accepted gifts from the FBI but did not take money. When Polyakov was sent to Moscow in May 1962, he became the ASSET of the CIA. The FBI tried to keep in touch with him by running advertisements in the personal columns of *The New York Times* addressed to Donald F., using a simple CODE to direct him to DEAD DROPS in Moscow.

In Nov. 1965 Polyakov was posted to Rangoon, Burma, as a military ATTACHÉ. There he met the FBI agent who had recruited him and explained their meetings to his superiors as an attempt to recruit the American. He continued to supply information through assignments in Moscow and in India in 1973, the latter as a military attaché.

As a lieutenant general in 1979, David Wise wrote in *Nightmover* (1995), Polyakov's "access to top-secret information was even greater; over the years, Polyakov provided extremely valuable political-military information, including data on Soviet strategic missiles, antitank missiles, nuclear strategy, chemical and biological warfare, crop diseases, and civil defense."

Polyakov was one of the many U.S. AGENTS betrayed by CIA COUNTERINTELLIGENCE officer ALDRICH H. AMES. Arrested by the KGB sometime after Ames began his spying, Polyakov was executed in 1986.

Without naming Polyakov, in Jan. 1990 the newspaper *Pravda* carried a report about a spy named "Donald," a Soviet official who had been in "a very important position." In describing Donald, *Pravda* seemed to trace Polyakov's career, but with some variations. *Pravda*, for instance, said that Donald had recently been captured and sentenced to death; U.S. intelligence officials contend that he was executed in 1986. "Having access to many state secrets," *Pravda* said, "Donald was trading in everything the U.S. intelligence services were interested in." *Pravda* did not list the state secrets.

JAMES JESUS ANGLETON, CIA counterintelligence chief, believed that Top Hat and FEDORA, another FBI-recruited spy, were both DOUBLE AGENTS. Angleton insisted that Top Hat and Fedora were Soviet intelligence agents whose mission was the discrediting of a *real* Soviet defector, ANATOLY GOLITSYN. Angleton's unproven theory was that the Soviets desperately wanted to discredit Golitsyn because he had revealed that a MOLE had penetrated the CIA. In the 1980s WILLIAM J. CASEY, the DIRECTOR OF CENTRAL INTELLIGENCE, ordered his own investigation and concluded that Top Hat was legitimate.

Casey's critics, however, continued to insist that Top Hat was a double agent whose false information included data indicating that Soviet nuclear missiles were far more accurate than they really were. This supposedly led to U.S.-Soviet missile limitation agreements based on false information.

Pravda said that Donald had approached FBI agents in New York in 1961 and that the FBI had communicated with him through personal ads in *The New York Times* addressed to MOODY-Donald F. "Uncle Charles and Sister Clara are OK," said the ads, which appeared in the *Times* for ten consecutive days in 1964.

When Donald was caught, *Pravda* reported, he said, "I was accustomed to balancing on a knife edge and did not imagine any other life for myself. I felt in my spine the KGB was after me, but my own analysis of my actions erased my concerns."

U.S. intelligence officials believed that *Pravda*'s story on Donald was inspired by a desire to build up the sagging image of the KGB. According to the story, the KGB had found about 30 spies like Donald since the mid-1980s; many were apparently betrayed by Ames.

● ● POLYGRAPH

Device used for attempting to determine whether a person is lying. The "lie detector," as it is often called, has been widely employed in COUNTERESPIONAGE work. Employees of the CIA, for example, are regularly "flustered"—questioned with a polygraph strapped on.

A polygraph typically measures a person's breathing, blood pressure, pulse rate, and palm perspiration. These measurements are indicated by a stylus that passes along graph paper. A steady line theoretically indicates calmness (and truth) when a question is asked; a wildly moving line in response to a question indicates stress (and, possibly, lying).

In recent years there has been a growing suspicion that the polygraph produces dubious results. Polygraphs did not intimidate such celebrated spies as U.S. Navy Chief Warrant Officer JOHN A. WALKER and ALDRICH H. AMES, a CIA COUNTERINTELLIGENCE officer. Walker boasted of beating the polygraph, and Ames twice passed polygraph tests. Ames said he was following instructions given to him by his Soviet HANDLERS. Psychiatrists say that spies are usually so adept at duplicity that their lies cannot be detected by a machine.

R. JAMES WOOLSEY refused to take a polygraph test when he became DIRECTOR OF CENTRAL INTELLIGENCE. Similarly, Secretary of State George P. Shultz threatened to resign if forced to take a polygraph test. He strongly opposed the imposition of polygraph tests by Congress in the 1988 Department of State authorization act. President Reagan allowed Shultz to administer the polygraph program at his own discretion. Shultz established regulations allowing employees generally to refuse to take a polygraph test. And if an employee failed a test, no unfavorable action could be taken without the approval of the Secretary of State.

U.S. courts have consistently ruled against polygraph evidence. In the INTELLIGENCE COMMUNITY, however, se-

curity officials have just as consistently upheld its use. In a 1987 study of 20,000 FBI polygraph interrogations, AGENTS who used the information said that less than 1 percent of the results had been wrong.

Many CIA officials became doubtful about the efficacy of the lie detector after learning from a defector that polygraph-approved Cuban AGENTS had been TURNED and were being run as DOUBLE AGENTS by Cuban counter-intelligence officers.

●● PONTECORVO, BRUNO

(b. 1913 d. 1993)

Italian physicist suspected of spying for the Soviet Union. A colleague of Soviet spy KLAUS FUCHS, Pontecorvo defected to the Soviet Union in Oct. 1950, during a European trip from which he had been expected to return to England.

Educated at Pisa University and Rome University, where he received a doctorate with honors in physics in 1934, after graduation he did laboratory work under Professors Edoardo Amaldi and Enrico Fermi. In 1936 he went to Paris on a fellowship to do research under Frédéric Joliot-Curie, a communist. In Paris he met the Swedish Marianne Nordbloom, whom he married in 1940, and when France fell under German conquest, they fled to the United States.

In 1943 Pontecorvo was invited to join the Anglo-Canadian atomic research team at Chalk River in Ontario, Canada, where he remained for six years. He is suspected of having spied during this period, but nothing has ever been proved against him. Nor was he identified in documents given to the Canadian authorities by IGOR GOUZENKO, the Soviet CIPHER clerk who exposed the Soviet ATOMIC SPY RING. Gouzenko's information did lead to the conviction of another Chalk River physicist, ALAN NUNN MAY, as a spy.

In 1948 Pontecorvo became a naturalized British subject and was given a complete SECURITY CLEARANCE, despite the fact that questions had been raised about connections he and family members had with the Communist Party in Italy. In Jan. 1949 he left Canada to become principal scientific officer at Harwell, Britain's atomic research center. In Jan. 1950, just before Klaus Fuchs was arrested, the station head and security officer at Harwell learned that Pontecorvo and his wife were communists, or at least communist sympathizers. Pontecorvo denied this, although he did admit that some members of his family were communists.

Because he was thought to be a potential security risk at Harwell, he was offered a position at Liverpool University, where he would not have access to secret information. He accepted the post and agreed to begin work in Jan. 1951.

But in Oct. 1950 Pontecorvo failed to return to Harwell from a vacation trip in Europe with his wife and three sons. Nothing more was known publicly about Pontecorvo until he held a press conference on March 5, 1955, in Moscow. He said that he had become a Soviet citizen in 1952 and worked in the Institute of Nuclear Physics of the Soviet Academy of Sciences, which later

became the International Center of Research in the Use of Atomic Energy. In 1963 he was awarded the Order of Lenin for "great services in physics" and was elected a full member of the Soviet Academy of Sciences.

In 1980 a U.S. Treasury official said that Pontecorvo had a credit of \$14,250 at the U.S. Treasury as royalty on a U.S. patent, which he shared with Fermi and three other physicists for a process that produces radioisotopes.

●● PONTING, CLIVE

Former assistant secretary at the British Ministry of Defence, tried in 1985 under the OFFICIAL SECRETS ACT for having provided a member of Parliament with classified documents concerning the sinking of the Argentine cruiser *Belgrano* by a British submarine during the 1982 Falklands conflict. He was acquitted by a jury despite major efforts by the government of Prime Minister Margaret Thatcher to convict him.

●● POPOV, DUSKO

(b. 1912 d. 1982)

Voluntary DOUBLE AGENT working for the British who came to the then-neutral United States in 1941 to form a bogus spy ring for the Germans.

Popov was a Yugoslav business promoter when the German ABWEHR recruited him. He informed the British, and when his Abwehr HANDLERS sent him to Britain in Dec. 1940, the TWENTY COMMITTEE, which handled doubled agents, gave him the British CODE NAME Tricycle, reportedly because of his proclivity for having two female sexual partners at a time. The Germans had code-named him Ivan. The intelligence he gave the Germans included false information about the size of the British armed forces.

In June 1941 the Abwehr ordered Popov to go to the United States and set up an espionage ring. At the request of the Germans' Japanese allies, he also was to obtain specific information about Pearl Harbor and go to Hawaii to make sketches of military facilities there. The instructions were concealed in MICRODOTS on a fake telegram that Popov carried.

The British informed the FBI of Popov's double status before he arrived in the United States by Pan American Clipper from Lisbon on Aug. 12, 1941. But J. EDGAR HOOVER, the director of the FBI, believing that Popov was a German spy who had duped the British, refused to allow him to go to Hawaii.

Popov gave the FBI both its first examples of the German microdot process and a list of questions that German intelligence officers wanted answered about the United States. Many of the questions pertained to the U.S. base at Pearl Harbor, which the FBI ignored, failing to see the possible significance of the German interest in Pearl Harbor.

Popov had arrived in the United States with a Yugoslav passport and \$70,000. He rented a Park Avenue penthouse and began making the rounds of New York City nightclubs. The FBI put him under SURVEILLANCE and planted BUGS in his apartment. "Why, if I bend over to smell a bowl of flowers," Popov complained, "I scratch my nose on a microphone." He insisted that to convince his German handlers that his mission to the

United States was not in vain, he needed information that would look like the authentic gleanings of a German spy.

The British Twenty Committee produced that kind of information. But Hoover dredged up little for Popov. Among the 1,421 pages of heavily sanitized pages in Popov's FBI dossier are secret FBI memos showing that the material given to Popov included back copies of the *Infantry Journal* and Army press releases. The OFFICE OF NAVAL INTELLIGENCE was "unable to furnish any specific information which would be suitable for counterespionage data," an FBI memo said.

The FBI operated a clandestine radio on his behalf but did not allow him to work as a double agent. He returned to Britain in July 1943 and did valuable double-dealing against the Germans until the invasion of Normandy in June 1944.

"I knew Dusko Popov well during the war, when he risked and achieved so much for the Allied cause," British INTELLIGENCE OFFICER EWEN MONTAGU wrote. "He could, in some respects, have been an Ian Fleming hero—one of the bravest and gayest of men, possessing immense charm and personal magnetism."

OO POPOV, Lt. COL. PYOTR (b. ? d. 1958)

Soviet GRU (MILITARY INTELLIGENCE) officer who spied for the CIA as a DEFECTOR IN PLACE from 1953 to 1958.

On Jan. 1, 1953, Popov approached an American diplomat in VIENNA and handed him a message asking for a meeting. Popov provided the CIA with some of its earliest detailed information on the structure of the post-World War II GRU. He also provided information on Soviet intelligence operations in Austria and Yugoslavia.

He went to Moscow, possibly on leave, in 1954 and was then assigned to BERLIN, where he again provided valuable information, including plans for sending an ILLEGAL to the United States. Alerted, the FBI put the illegal under SURVEILLANCE soon after her arrival. Sensing that she had been BLOWN, she returned to Moscow.

Popov was ordered back to Moscow in 1958. There he was TURNED by the KGB and told to reveal his CIA connections. Popov arranged a meeting with Russell Langelle, a CIA INTELLIGENCE OFFICER under diplomatic COVER in the U.S. Embassy. During the meeting Popov managed to get across the fact that he had been turned. But it was too late. The two men were arrested. Langelle was expelled and Popov was executed, reportedly by being thrown live into a furnace, with several GRU officers as witnesses.

The FBI's zealous surveillance was at first blamed for Popov's exposure. But there were later indications that Popov might have been betrayed to the KGB by GEORGE BLAKE, an officer of the British Secret Intelligence Service (MI6) who was a SOVIET MOLE.

OO PORTLAND CASE

The media label for the arrest and conviction of five Soviet spies who obtained secrets from the Admiralty Un-

derwater Weapons Establishment at Portland, England, in the 1950s.

Breakup of the ring began when the U.S. CIA received a series of letters signed "Sniper" from a Polish INTELLIGENCE OFFICER (who later defected and was identified as MICHAL GOLIENOWSKI.) Sniper claimed that the KGB had a spy in the British Admiralty. The CIA passed the information to the British Security Service (MI5). Finding no likely suspects in the Admiralty, MI5 focused on the Portland naval facility.

The MI5 investigation trail led to HARRY HOUGHTON, a clerk at Portland who had previously worked for the naval ATTACHE in the British Embassy in Warsaw. SURVEILLANCE of Houghton showed that he met regularly with a man later identified by his espionage pseudonym, GORDON LONSDALE. Houghton's girlfriend, Ethel (Bunny) Gee, also worked at the Navy facility and was placed under surveillance.

Lonsdale was trailed to a house occupied by Peter Kroger and his wife Helen (also espionage pseudonyms; see MORRIS COHEN). In Jan. 1961, detectives of the SPECIAL BRANCH arrested Houghton, Gee, and Lonsdale as they met for a transfer of documents; the Krogers were also arrested.

The Portland Case, as it was called in the press, ended in March 1961 with the Old Bailey trial of all five on espionage charges. Their sentences: Houghton and Gee, 15 years; Lonsdale, 25 years; the Krogers, 20 years each. Two security investigations were later made. The first criticized the Admiralty and lauded MI5. The second was more critical of MI5 for failing to discover the espionage without the aid of a DEFECTOR.

OO POSITIVE INTELLIGENCE

Information that has been interpreted and can be used in intelligence reports.

OO POSITIVE VETTING

British term for a SECURITY CHECK of prospective or already hired INTELLIGENCE OFFICERS, especially in the Security Service (MI5) and the Secret Intelligence Service (MI6). The lack of positive vetting was often cited as dangerous by critics, who argued that some of the MOLES in British services would have been turned away had their backgrounds been investigated more rigorously. (See CAMBRIDGE SPY RING.)

"Vetting" literally means getting a sick animal examined by a veterinarian; it has evolved into a term meaning to test or scrutinize.

OO POSTAGE STAMPS

Historically, governments have been reluctant to honor their spies—successful or unsuccessful. However, several have been honored by postage stamps. Probably the first was NATHAN HALE, an inept but revered spy of the American Revolution. The U.S. Post Office issued a half-cent stamp honoring Hale in 1922 as part of a series com-

memorating famous Americans; among the others in the series were GEORGE WASHINGTON—an outstanding spy-master—as well as such historic figures as Lincoln, Franklin, Theodore Roosevelt, and Grant.

No additional “spy stamps” are recorded for the next four decades. In 1960, Romania issued a stamp honoring its native son DANIEL DEFOE, a great literary figure who was also a collector of DOMESTIC INTELLIGENCE in Britain.

The Soviet Union—always known for big achievements—produced no less than six spy stamps: First came RICHARD SORGE in 1960, a four-kopek stamp honoring the man who successfully spied against the Japanese for eight years before he was caught and executed.

In 1990 the Soviet government issued a set of five beautifully executed, five-kopek stamps honoring the following spies and spymasters:

Hero of the Soviet Union Col. S. A. Vaupshasov (1899–1976), who in 1920–1924 was engaged in underground work in Belorussia against the Whites and Poles, and in 1937–1939 was operating in Spain; he remained active in intelligence work until 1953.

Col. RUDOLF ABEL (1903–1971), who ran the ATOMIC SPY RING in the United States during World War II.

HAROLD (KIM) PHILBY (1912–1988), one of the several members of the highly successful CAMBRIDGE SPY RING, who spied out British and American secrets for the Soviet intelligence services in London and Washington, D.C. (The other members of the ring have not been similarly honored.)

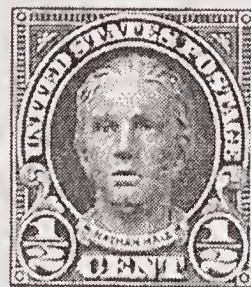
Hero of the Soviet Union I. D. Kudrya (1912–1942), who took part in numerous sabotage operations against the Germans in the Ukraine during 1941–1942; he was captured and killed by the Germans.

Col. Conon Molody (1922–1970), a veteran of World War II and later an officer in the KGB, known in the West as GORDON LONSDALE.

The East German government, in 1964, issued a set of six stamps honoring Germans who fought Nazism in World War II, among them members of the RED ORCHESTRA. (Mildred Fish Harnack and her husband, Arvid, martyrs to the anti-Nazi effort, were honored by a 40-fenning stamp; all six stamps, in addition to their face value, had a small surcharge added to help build a national memorial to victims of the Nazis.)

Postage stamps have themselves been used in espionage. On occasion secret messages in the form of mi-

From top left: S.A. Vaupshasov, R.I. Abel, Kim Philby, I.D. Kudrya; from bottom left: K.T. Molody, Nathan Hale, Richard Sorge.



CRODOTS have been hidden under postage stamps. JULIUS ROSENBERG and his wife, Ethel, members of the atomic spy ring, are said to have used this method of communication.

There are allegations that in World War I, a German spy at the British naval base at Invergordon, Scotland, used postage stamps themselves as a CODE. Three Peruvian stamps, for example, were said to indicate that three light cruisers were in the base. But such stories were more the fancy of spy novelists at the time than actual foreign AGENTS.

Warnings to be on the lookout for spies have been used on postage stamps in Cuba since 1943: The five-stamp issue included a five-centavo stamp with a man having a mask being pulled away from his face and the caption "Unmask the Fifth Columnists."

A stamp has also honored a nonspy—indirectly. In 1931 Canada issued a \$1 stamp showing Mt. Edith Cavell in Alberta, honoring EDITH CAVELL, who was executed by the Germans in World War I. Although charged with helping Allied prisoners, she is often thought of as having committed espionage.

●● POTENTIAL AGENT

Individual who is being developed or is under consideration for becoming an AGENT by an intelligence service.

●● POWERS, FRANCIS GARY

(b. 1929 d. 1977)

Pilot of the U.S. U-2 spyplane shot down over Sverdlovsk in the Soviet Union by an SA-2 missile on May 1, 1960.

Powers graduated from Milligan College in Tennessee in 1950 and joined the U.S. Air Force, training as a fighter pilot. In 1956, when he was a captain, he transferred to the U-2 program run by the CIA. The CIA had recently begun flying spy-planes over the Soviet Union from bases in Pakistan and Norway. The COVER story for the U-2 pilots was that they were working for the National Aeronautics and Space Administration (NASA).

After training in Nevada, Powers was sent to the U-2 base at Incirlik, Turkey, from where he flew missions along the Turkish-Soviet border. In 1960 he was ordered to Pakistan and briefed for his first flight across the Soviet Union. On May 1, 1960—May Day, a major Soviet holiday—he took off from Peshawar, Pakistan. He was to land in Bodo, Norway, a 3,788-mile flight, with 2,919 miles over the Soviet Union.

Among the sites the CIA hoped to photograph were those showing what progress the Soviets were making in the development of intercontinental ballistic missiles. An overflight on April 5 had shown construction of a launch complex at Tyura Tam. President Eisenhower had authorized a second flight over the same area but had set May 1 as the absolute end of any U-2 flights for a while. Eisenhower, Prime Minister Harold Macmillan of Britain, French President Charles de Gaulle, and Soviet Premier Nikita Khrushchev had a summit meeting scheduled in Paris on May 16, to be followed by an unprece-

dented trip by Eisenhower to Moscow. He did not want any incidents spoiling those events.

Powers later claimed that he had been assured that at his altitude (68,000 feet) no Soviet aircraft or missile could hit his U-2. Over Sverdlovsk, he was hit by a missile. He ejected himself and parachuted to the ground, where people held him until police arrived.

When the plane failed to reach Norway, CIA officials feared trouble, which was confirmed by radio intercepts showing that the Soviets had tried to intercept a plane over their territory. The CIA, assuming that Powers was dead, sent out a COVER story by having the Air Force announce that an American weather plane flying for NASA out of Turkey, which had been making "upper air studies," was overdue and presumed missing.

On May 5 Khrushchev announced the shooting down of the plane in a fiery speech and denounced "American aggressive circles" for trying to stop the summit conference with this provocative act. The United States stuck to its weather story, adding that it was possible that the pilot could have been unconscious because of a failure in the aircraft's oxygen system and that the plane, on automatic pilot, could thus accidentally have violated Soviet air space.

On May 6, Khrushchev made another speech—revealing that the pilot of the plane was "quite alive and kicking! We did this quite deliberately, because if we had given out the whole story, the Americans would have thought up still another fable."

In Washington ALLEN W. DULLES, the DIRECTOR OF CENTRAL INTELLIGENCE, offered to resign, but his offer was turned down. Eisenhower ultimately accepted responsibility for using "every possible means" to protect the United States "against surprise attack."

Khrushchev did go to Paris, but he refused to take part in summit talks unless Eisenhower apologized. Eisenhower's trip to Moscow was canceled.

Meanwhile, in Moscow the Soviets prepared for a major show trial for Powers. The CIA briefed Sam Jaffe, the CBS reporter assigned to the trial. According to Michael R. Beschloss in his *Mayday: Eisenhower, Khrushchev and the U-2 Affair* (1986), Jaffe "was given data on Soviet espionage for rebuttal if Khrushchev denounced the U-2. In his reportage Jaffe should refer to Powers not as a spy pilot but as a reconnaissance pilot." Jaffe accompanied Powers's wife, Barbara, on the flight to Moscow. He later said that she told him she hated Powers, but she maintained a public attitude of support.

Powers, tried and convicted of spying in a public trial, was sentenced to ten years in prison. On Feb. 10, 1962, he was traded for Soviet spy RUDOLF ABEL, who was in prison in the United States.

Powers, decorated by the CIA and personally lauded by Dulles, became a test pilot for Lockheed Aircraft Corp. Unknown to him, the CIA was paying his salary. When he found this out, he quit Lockheed. He later became a helicopter traffic reporter. On Aug. 1, 1977, he died in a helicopter crash while reporting on traffic over Los Angeles.

●● PRAIRIE SCHOONER

Highly classified U.S. Navy undersea intelligence collection program in the 1970s.

●● PRECIOUS STONE

see OFEK

●● PREOBRAZHENSKY OFFICE

Organization established by Czar Peter I in 1697 to suppress internal enemies. The Preobrazhensky was a distant predecessor of the later CHEKA, NKVD, and KGB. There was no "political police" establishment in Russia between the Oprichnina, abolished in 1572, and the Preobrazhensky.

The office was originally set up to administer two regiments, the Preobrazhensky and Semyonovsky Guards, which had been established by a young Peter to develop new tactics. But the responsibilities of the Preobrazhensky Office rapidly expanded. It was assigned control of the tobacco trade, and the office undertook the investigation and prosecution of political offenders. It was given jurisdiction over *all* crimes—especially treason—"by word or deed."

In its investigative role the office could investigate and question any citizen of Russia, regardless of rank or station. The office itself was small—a chief and a few clerks and assistants. However, they could use the elite Preobrazhensky and Semyonovsky Guards to make arrests and detain people. Later boyars (nobles) were seconded to the office to assist in "investigations," which included questioning under torture or the threat of its use. A man or woman found guilty of a crime against the state could be sentenced by the office, unless the czar himself wished to make that decision.

The Preobrazhensky Office itself soon established torture chambers. There the office "examined" 1,714 of the Streltsy, Russia's first professional soldiers, who had attempted a revolt in 1698. They were hideously tortured over a period of about six weeks. Most were then executed, by public hanging or beheading. Peter himself reportedly sometimes wielded the axe. Peter reduced the sentences of some 500 soldiers under 20 years of age; they were branded and mutilated; some were exiled.

When Peter established St. Petersburg as his capital in 1705, the Preobrazhensky Office remained in the former capital of Moscow. Perhaps Peter felt the older city housed the potential opponents to his rule, as St. Petersburg was a new city that he had created.

The Preobrazhensky Office survived for some 30 years. It handled several thousand cases—including that of the czar's half-sister, who was imprisoned. The office was abolished in 1729, four years after Peter's death.

The head of the Preobrazhensky Office was Prince Theodore Romodanovsky. A boyhood friend of the czar, Romodanovsky was described by biographer Robert K. Massie in *Peter the Great* (1981):

A savage, brutal man, totally devoted to Peter . . . [he] dealt mercilessly with any suggestion of treason

or rebellion. Through a network of pervasive eavesdropping and denunciation, followed by torture and execution, Romodanovsky and the Secret Office did their grim work well: Even under extreme oppression from tax collectors and labor conscriptors, cases of treason "by word and deed" never threatened the throne.

Often honored by Peter, Romodanovsky served as governor of Moscow and chief of police, and was given the rank of admiral. Romodanovsky ruled the Preobrazhensky Office until his death in 1717, when his son Prince Ivan succeeded him. The younger Romodanovsky sought retirement in 1729, a key factor in the ending of the highly efficient Preobrazhensky Office.

The name Preobrazhensky comes from the village of Preobrazhenskoe near Moscow, where Peter and his young friends—including Romodanovsky—"played" soldier and Peter began his self-education. The word means "transfiguration."

●● PRESIDENT'S FOREIGN INTELLIGENCE ADVISORY BOARD

(PFIAB)

Influential INTELLIGENCE OVERSIGHT panel of the U.S. Executive Branch. The Board reviews the performance of all government agencies engaged in the collection, evaluation, or production of intelligence or in the execution of intelligence policy. It also assesses the adequacy of management, personnel, and organization of intelligence agencies.

The President's Foreign Intelligence Advisory Board (PFIAB—pronounced *piff-é-ab*) was established by President Eisenhower on Feb. 6, 1956, as the President's Board of Consultants on Foreign Intelligence Activities. The members were distinguished citizens with experience in business, international relations, and intelligence.

In 1961 the board was revitalized and its charter broadened by President Kennedy, who probably used the group more than any other President. Chaired by JAMES R. KILLIAN from 1956 to 1963, the board met an average of once a week after Kennedy entered the White House, with the President often attending. He considered it the most useful of all his advisory boards. It submitted 170 formal recommendations to him, out of which he approved 125, rejected only 2, and deferred action on the others.

President Johnson continued the board, renaming it the PFIAB. President Nixon reorganized it in 1969, specifically giving it responsibility for "a continuous review and assessment" not only of foreign intelligence but of all operations undertaken by the CIA, as well as other agencies and services in the INTELLIGENCE COMMUNITY. This charge essentially remained unchanged through successive administrations.

President Carter abolished the PFIAB in May 1977 because of its support for COVERT ACTION and his belief that he was receiving sufficient advice on intelligence matters from the NATIONAL SECURITY COUNCIL and the heads of various intelligence agencies and services.

It was reinstated by President Reagan on Oct. 20, 1981, with 19 "distinguished citizens" from outside the government appointed to the body. Addressing the Reagan era in his *Veil: The Secret Wars of the CIA 1981–1987* (1987), reporter BOB WOODWARD described the PFIAB members as "a high-powered nonpartisan community of elders to whom the White House owed a favor."

Members of the PFIAB have included WILLIAM J. CASEY, a future DIRECTOR OF CENTRAL INTELLIGENCE; Edward Teller, Nobel Prize-winning father of the H-bomb; Clark Clifford, a future Secretary of Defense; Gen. Maxwell Taylor, former Chairman of the Joint Chiefs of Staff; EDWIN LAND, of Polaroid fame and pioneer in SATELLITE camera development; former Texas governor John Connolly; former ambassador Clare Booth Luce; Nelson A. Rockefeller; and future presidential candidate Ross Perot.

The members of PFIAB serve without compensation at the pleasure of the President. One member of the PFIAB is also chairman of the three-member Intelligence Oversight Board.

PFIAB CHAIRMEN

The chairman of the board have been:

| | |
|-----------|--|
| 1956–1963 | Dr. James R. Killian |
| 1963–1968 | Clark H. Clifford |
| 1968–1970 | Gen. Maxwell D. Taylor, USA (Ret) |
| 1970–1976 | Adm. George W. Anderson, USN (Ret) |
| 1976–1977 | Leo Cheme |
| 1982–1990 | Ambassador Anne L. Armstrong |
| 1990–1991 | Sen. John G. Tower |
| 1991–1993 | Adm. BOBBY RAY INMAN, USN (Ret)(acting) |
| 1993–1994 | Adm. William J. Crowe, Jr., USN (Ret) |
| 1994–1995 | Rep. Les Aspin |
| 1996– | Rep. Thomas F. Foley |

●● PRIMAKOV, YEVGENY MAKSIMOVICH

(b. 1929)

Russia's first post-Soviet spymaster. Primakov was one of only two members of Soviet President Mikhail Gorbachev's security council to oppose the attempted coup against him in Aug. 1991. Subsequently, Russian President Boris Yeltsin appointed Primakov to head the Soviet security-intelligence apparatus, the KGB. He remained head of the agency after the demise of the Soviet Union and establishment of the SVR, the Russian Foreign Intelligence Service.

Primakov graduated from the Moscow University's Institute of Oriental Studies in 1953, after which he studied at Moscow State University, earning a Ph.D. in economics in 1969.

From 1953 to 1962 he was a radio and television correspondent, becoming editor and then chief editor of

radio broadcasting, and subsequently for the main editorial board of the state committee for radio and television. He joined the staff of the newspaper *Pravda* in 1962, specializing in Asia, Africa, and the Middle East. In 1977 he left *Pravda* to become a deputy director at the Institute of World Economics and International Relations. Two years later he was named director of the Institute of Oriental Studies, a post he held until 1985, when he was named director of the Institute of World Economy and International Relations.

He became a candidate member of the Communist Party's Central Committee in 1987, and that same year he was elected a deputy to the Supreme Soviet. Mikhail Gorbachev used him as a personal envoy in the Middle East prior to naming him head of the KGB in Aug. 1991. He was the first nonintelligence specialist to be appointed to head the principal Soviet intelligence ORGAN in the more than 70 years since the CHEKA was established.

In a virtually unprecedented public statement two days after being nominated for the KGB post, Primakov told a news conference that he was in favor of greater *glasnost*, or "openness," in the intelligence business. Describing modern intelligence activities, he said:

If you think that spies are people in gray coats, skulking around street corners, listening to people's conversations and welding iron bars, then my appointment is unnatural. We must use analytical methods, synthesize information. This is scientific work.

Primakov succeeded to head the SVR in Dec. 1991. Primakov directed Russian foreign intelligence activities through the difficult transition from the Soviet Union to the Russian Federation.

On Jan. 10, 1996, Yeltsin nominated Primakov to be Russia's Foreign Minister.

Prior to becoming head of the KGB he had traveled extensively throughout the world, including three trips to the United States in 1987–1990.

●● PRIME, GEOFFREY A.

(b. 1938)

British cryptologist at the GOVERNMENT COMMUNICATIONS HEADQUARTERS (GCHQ) who spied for the Soviet Union.

Prime studied the Russian language while he was in the Royal Air Force, and served as a sergeant in a unit that intercepted Warsaw Pact military communications. He was still in the RAF when he was recruited by the KGB. After leaving the RAF in Sept. 1968, he worked for almost eight years in London as a transcriber for a commercial firm, maintaining contact with the KGB via shortwave radio.

In March 1976 he went to work at GCHQ in Cheltenham, where he translated Soviet communications intercepted by the British. He was assigned to the extremely secret J Division, which focused on the interception of the most sensitive Soviet communications, much of which was shared with the United States. He was appointed head of the J Division in Nov. 1976.

Prime quit GCHQ in Sept. 1977 and began driving a taxi in Cheltenham, saying he had left the government because of marital problems. He kept numerous classified documents, which he turned over to the KGB—for payment—in 1980.

A solitary, meticulous man, Prime had two secret lives: He was a spy and he was a pedophile, whose victims were girls 10 to 15 years old. He kept a record of his sexual depravity on index cards. A police investigation into sexual attacks on young girls around Cheltenham led to his arrest on sexual assault charges in 1982. After his arrest his wife revealed that he was a spy.

A search of his apartment yielded a hoard of 2,287 index cards on his victims—as well as a CODE pad and instructions on the use of MICRODOTS. He had access to what was described in court as “information of the utmost secrecy”—at least from 1968 to 1977. In 1982 he was convicted of espionage and sentenced to 35 years in prison; he also received a sentence of three years for sexual assault.

His Soviet CODE NAME was Rowlands.

OO PRINCIPAL AGENT

AGENT who, under the direction of an INTELLIGENCE OFFICER, is responsible for the activities of other agents, that is, a surrogate HANDLER.

OO PRODUCT

In intelligence terms, the final result of intelligence analysis that is prepared for the customer or user; it may be in oral, written, or graphic form.

OO PROFUMO AFFAIR

Espionage and SEX scandal that precipitated the resignation of British Prime Minister Harold Macmillan.

The complex affair originated with artist-osteopath Stephen Ward, who played in British society, and his two protégées, teenage prostitutes Christine Keeler and Mandy Rice-Davies. Keeler engaged in sex with both Secretary of State for War John D. Profumo and the Soviet assistant naval ATTACHÉ, Capt. 3rd Rank YEVGENY IVANOV.

Soon after his arrival in London in March 1960, Ivanov was introduced to Ward socially, and the two became close fiends. At the time Keeler and Rice-Davies, teenage seminude dancers, were living with Ward, who was apparently having sexual relations with Rice-Davies, but not with Keeler. Ivanov met Keeler in the spring of 1961; his autobiographic *The Naked Spy* (1992) provided graphic descriptions of Keeler:

There was some magic in Christine.... another girl from the provinces, simple and naïve.... a dangerous creature, sly and treacherous. Her eyes told me that: they shone with passion, sensuality and cunning. Like a small furry animal, she was graceful and enchanting, but she was also a predator.

Ward quickly included Ivanov in his social circle, where he met Lord Astor, Winston Churchill, Prince Philip, in-

ternational oil magnate Paul Getty, and Profumo. Ivanov, an experienced INTELLIGENCE OFFICER of the Soviet GRU, was able to purloin documents—some secret—and socially interrogate many of Ward’s friends.

Profumo was of particular interest to Ivanov. After entering Parliament in 1940 at the age of 24, he served in the Army during World War II and rose to the rank of brigadier by 1945. He became a successful businessman, regained his seat in Parliament in 1950, and married actress Valerie Hobson. He held several positions in the Tory government of Harold Macmillan, who became Prime Minister in 1957, becoming Secretary of State for War in 1960.

Profumo met Keeler on July 9, 1961. She had been swimming nude at Ward’s country cottage, adjacent to Lord Astor’s Cliveden estate in Berkshire where Profumo was attending a party. The following day, despite the presence of his wife, Profumo flirted with Keeler. That night Ivanov drove Keeler to Ward’s apartment in London, and she and Ivanov became sexually involved.

Three days later Ward told a contact at the British Security Service (MI5) that Ivanov had asked him specific questions about U.S. plans to put nuclear missiles into West Germany. Sir ROGER HOLLIS, Director-General of MI5, should have reported this to the Foreign Office, which has the power to expel any diplomat who attempts to breach the OFFICIAL SECRETS ACT. Hollis failed to do this. His questionable judgment about the Profumo affair later added weight to suspicions that he himself was a Soviet MOLE.

Ivanov wrote that he became interested in Keeler because he could see there was “obviously something going on” between her and Profumo. But, wrote Ivanov, “She was a half literate lass only good for showing her legs. Was I going to get her to ask [Profumo] about atomic secrets?” But Ivanov slept with her anyway. (Ivanov was married; his wife was a CODE clerk at the Soviet Embassy in London.)

Subsequently, Keeler began sleeping with Profumo.

Meanwhile, the Security Service warned Profumo about Ivanov and his close relationship with Ward. Although Profumo did not know at the time about Ivanov’s relationship with Keeler, he decided to break off the relationship with her late in 1961.

Nearly a year later Keeler became involved with two West Indians; one was arrested after they fought over her. The incident came to the attention of the press, which learned of Ward’s relationship with Keeler. She revealed her relationships with Profumo and Ivanov in a story she sold to the *Sunday Pictorial* in late 1962. Ivanov quickly departed for Moscow.

Profumo denied everything and tried to have the news stories suppressed. Questions were asked in Parliament, and on March 22, 1963, Profumo formally denied having indulged in any improprieties with Keeler. Meanwhile, Ward was charged with living off the earnings of prostitutes. In an effort to save himself, Ward sent a letter to Macmillan stating that Profumo had lied to the House of Commons. With details of the Ivanov-Keeler link known, the press raised the issue of security leaks to the Soviets.

Writing to Macmillan on June 4, 1963, Profumo resigned from the government, admitting that he had lied.

But the press continued to headline the scandal until, in Oct. 1963, Prime Minister Macmillan resigned. A government report published at the time concluded that the connections between Profumo, Ward, Keeler, and Ivanov had *not* damaged British security—although Ivanov was to claim differently.

Meanwhile, Ward was brought to trial in the Old Bailey on July 22. On July 30 he took an overdose of sleeping pills. Although he was unconscious, the trial continued and he was found guilty of living off the immoral earnings of prostitution. He died without regaining consciousness.

Keeler was tried, convicted of perjury, and sent to prison. (Mandy Rice-Davies became a cabaret singer and opened a string of successful nightclubs.)

Profumo left politics and dedicated his life to charities. In 1975 Queen Elizabeth II awarded him one of the country's highest honors for his work, Commander of the British Empire.

●● PROGRAM 1010

TRW Corp. project to develop a fifth-generation imaging SATELLITE given the CODE NAME KH-X and then the KEYHOLE-series designation 11; it was subsequently given the BYEMAN name KENNAN.

●● PROPRIETARY COMPANY

Term used by the CIA to designate ostensibly private, commercial entities capable of doing business, which are in fact established and controlled by intelligence services; the affiliation with the intelligence organization is usually secret. See AIR AMERICA.

●● PROSKUROV, Lt. GEN. OF AVIATION IVAN IOSIFOVICH

(b. ? d. 1940)

Soviet fighter pilot and INTELLIGENCE OFFICER who served as chief of the GRU, Soviet MILITARY INTELLIGENCE, in 1938–1940.

Proskurov combined the roles of pilot and intelligence officer as a Soviet military adviser in Spain in 1937–1938. He participated in air battles and shot down several Nationalist aircraft in that conflict. At the same time he carried out a series of first-class recruitments among the internationalists from several countries who were participating in the conflict on the Republican side. Given the rank of brigade commander, Proskurov was awarded the Hero of the Soviet Union in 1937, the country's highest decoration.

Upon his return from Spain, Proskurov became chief of the GRU, a post he occupied from the end of 1938 until July 1940. He openly spoke against the Soviet pact with Germany (signed in Aug. 1939), which set the stage for Hitler's invasion of Poland and the start of World War II in Europe. He was arrested on July 4, 1940, and shot the following day without trial.

●● PROVOCATION

Activity intended to cause an individual, organization, intelligence service, or government to take actions that can cause damage to itself. A provocation AGENT (or AGENT PROVOCATEUR) provides false information as part of a provocation operation.

●● PSALM

U.S. special information-handling channel for classified material related to the presence of Soviet ballistic missiles in Cuba. This included material provided by Col. OLEG PENKOVSKY.

●● PSYCHIC INTELLIGENCE

Information supposedly obtained by paranormal means through extrasensory perception (ESP) or the use of psychic powers. The U.S. DEFENSE INTELLIGENCE AGENCY (DIA) spent an estimated \$20 million on attempts to obtain psychic intelligence for over a decade. The project—CODE-NAMED Stargate—started in the 1980s and continued until 1995, when officials, closing down the program, admitted the employment of psychics (known as “remote viewers”) by the DIA and other intelligence agencies.

The Pentagon venture into the paranormal was apparently inspired by Soviet attempts at psychic intelligence gathering. Extensive disclosure of the Soviet experiments came in 1970 with the publication in the United States of the book *Psychic Discoveries Behind the Iron Curtain*. The authors, Sheila Ostrander and Lynn Schroeder, said that they had interviewed many prominent Soviet scientists who had been working on parapsychology and ESP for many years.

In an experiment that later intrigued U.S. Navy researchers, the Soviets placed baby rabbits in a submerged submarine, inserting electrodes into the brain of the mother rabbit and keeping her in a laboratory on shore. At the exact moment an experimenter killed a baby rabbit in the submarine, the mother's brain reacted. “There was communication,” a Soviet scientist reported. “And our instruments clearly registered these moments of ESP.”

The Soviet work seems to have begun soon after a French publication reported that the U.S. Navy had been testing ship-to-shore telepathy, using the *Nautilus*, the world's first nuclear-propelled submarine. Ostrander and Schroeder quoted Dr. Leonid L. Vasiliev, a Soviet physiologist, as saying, “We carried out extensive and, until now, completely unreported investigations on ESP under the Stalin regime! Today the American Navy is testing telepathy on their atomic submarines. . . . We must again plunge into the exploration of this vital field.” Vasiliev wrote widely on parapsychology.

Pentagon officials became interested in *Psychic Discoveries Behind the Iron Curtain* soon after it was published, but whether that book led to the DIA program is not known. *The Washington Post* revealed in Nov. 1995 that Stargate psychics had been employed at FORT MEADE,

the site of NSA. Stargate was quietly ended around mid-1995, shortly after the CIA took it over and had it evaluated by outside consultants. On the basis of their negative report, the CIA leadership decided that no more funds should be spent on the program.

DIA officials, however, believed that in at least 19 cases the "remote viewers" produced successful results. In one of the cited cases, in Sept. 1979 the NATIONAL SECURITY COUNCIL asked about a Soviet submarine under construction. A remote viewer predicted that a very large submarine with 18 to 20 missile launch tubes and a "large flat area" aft would be launched in 100 days. Two submarines with missile tubes (but with fewer missile tubes than predicted) were sighted in 120 days.

One of the remote viewers was Joseph McMoneagle, a U.S. Army warrant officer who was assigned to Stargate (then code-named Grillflame) in 1978. He said that the information he and other remote viewers supplied was always used to supplement intelligence from more conventional sources. Requests for psychic intelligence, he said, came from the CIA, NSA, the Joint Chiefs of Staff,

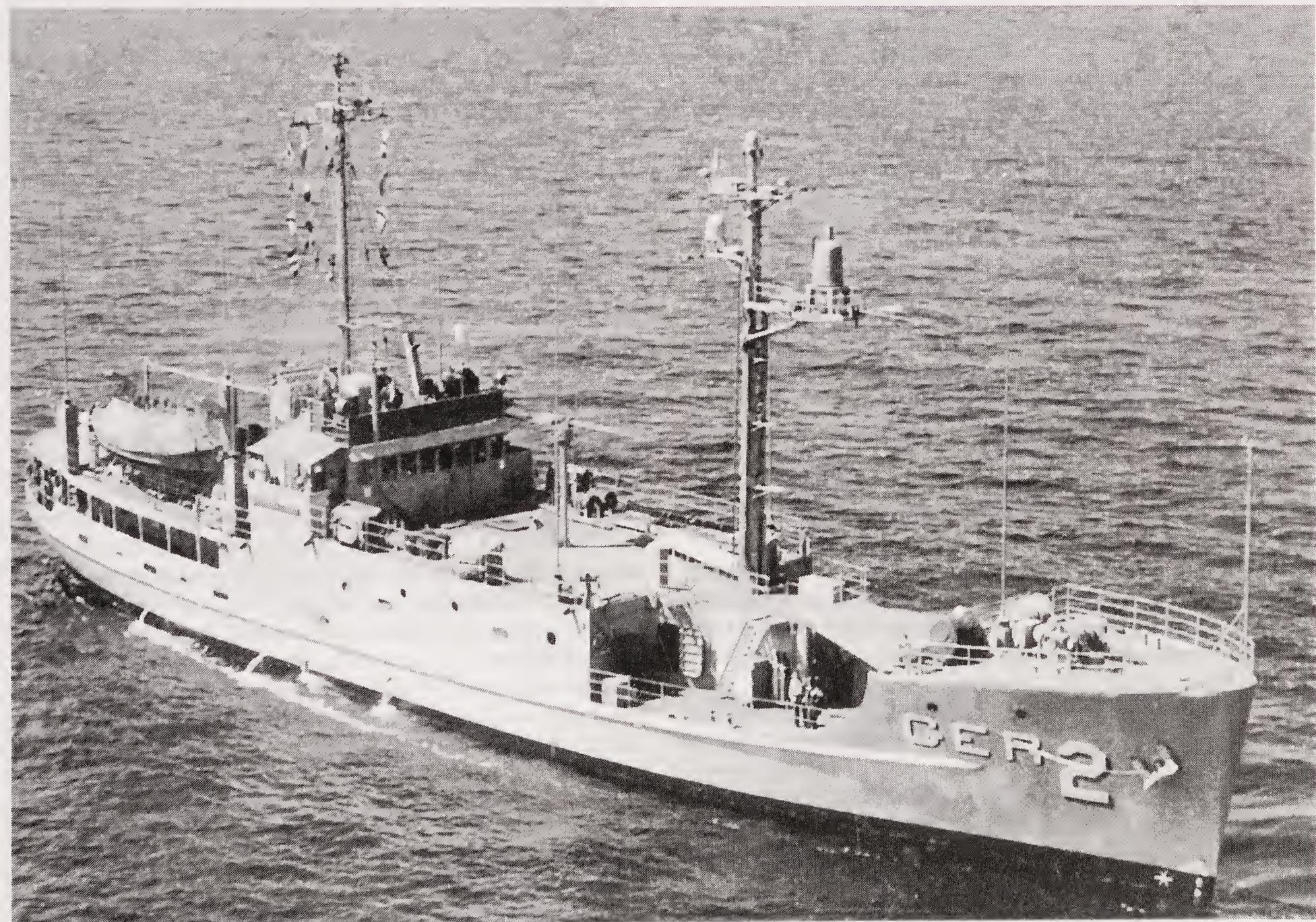
the Drug Enforcement Agency, Secret Service, the Customs Bureau, and the Coast Guard.

OO PUEBLO

U.S. Navy INTELLIGENCE COLLECTION SHIP boarded and captured by North Korean forces on Jan. 23, 1968, some 12 miles off the coast of Wonsan. The *Pueblo* was converted from an Army coastal cargo ship in 1966–1967 specifically for the collection of ELECTRONIC INTELLIGENCE (ELINT), being redesignated AGER 2. Although operated by the Navy, the ship was under the operational control of the NSA, which provided the technicians who served on board.

During 1968 the *Pueblo* was to participate in Operation ICHTHYIC with the USS *Banner* to conduct intelligence surveillance off the coasts of North Korea and Soviet Siberia. By the start of 1968 the *Banner* had successfully completed 16 intelligence collection missions. The *Pueblo*—on her first mission, code-named Pinkroot I—steamed out of Sasebo, Japan, on the morning of Jan.

U.S. intelligence ship *Pueblo*. (U.S. NAVY)



11, 1968, heading northeast through the Tsushima Strait toward the Sea of Japan. On board the 176-foot Navy ship were 83 men—6 officers, 73 enlisted men, 2 enlisted Marines who were Korean linguists, and 2 civilian Navy oceanographers. The ship was armed with two .50-cal machine guns and small arms.

The *Pueblo* was to spy on naval activities off North Korean ports, record samples of electronic signals off the North Korean coast, and keep any Soviet naval ships in the area under electronic SURVEILLANCE.

At 11:50 A.M. on Jan. 23 the *Pueblo* was steaming 15.8 nautical miles off the port of Wonsan when a North Korean SO-1 patrol ship was detected approaching. The ship “outgunned” the *Pueblo*, whose machine guns were under canvas covers that were frozen and in exposed positions. Four Korean torpedo boats soon appeared, and at 1:27 P.M. the first shots were fired.

Beginning at 12:55, the *Pueblo* had radioed U.S. commanders in Japan that she was being threatened. But no defensive action was taken by U.S. forces in Japan or South Korea—or by Commander LLOYD M. BUCHER, commanding officer of the *Pueblo*. Although some of his officers had earlier expressed concern about the approach of the North Korean craft, Bucher did not order the destruction of the classified documents and equipment until after the SO-1 had begun firing at his ship with a 57-mm cannon.

Bucher later wrote in the U.S. Naval Institute *Proceedings*:

Soon it became apparent that further flight was impossible, without a slaughter of the crew and the possible loss of *all* classified material. I thought to buy time by coming to a stop. During the firing the classified material destruction was not properly progressing. I had hoped that this above all else could be accomplished before we were all killed or the ship was seized or whatever was to happen. I desperately hoped that U.S. forces would appear on the scene, and I had communications from Kamiseya [Japan] indicating that “help was on the way.” Two North Korean MiGs were now flying over us and firing rockets ineffectively. We had to depend on the promised help if the ship was to ever have a chance of breaking clear of the situation.

The ship’s 28 intelligence specialists had neither the facilities nor the training necessary for anything but haphazard attempts at destroying the cryptographic equipment and key list materials. On board were 50 concussion grenades (which had been designed not to destroy documents but to be dropped in the water as a defense against hostile swimmers); a few fire axes; some sledgehammers; and two antiquated paper shredders, each of which would take 15 minutes to destroy a stack of paper eight inches high.

At 2:05 the *Pueblo* radioed: “DESTROYING ALL KEYLISTS AND AS MUCH ELEC EQUIP [electronic equipment] AS POSSIBLE. . . .” At 2:18, mention was made of some cryptographic machines: “WE HAVE THE KW-7 AND SOME CARDS IN THE [KWR-] 37 AND [KG-]14 TO SMASH. I THINK THAT JUST ABOUT

IT.” And, at 2:30, “. . . DESTRUCTION OF PUB[lication]S HAVE BEEN INEFFECTIVE. SUSPECT SEVERAL WILL BE COMPROMISED.” At 2:32 P.M. the *Pueblo* was boarded by North Korean troops. The *Pueblo* stopped transmitting.

Of the more than 400 classified documents in the ship, an unknown number had been destroyed and some of the electronic intercept, communications, and cryptographic gear had been smashed. Many documents had not been destroyed. Some *Pueblo* sailors later recalled seeing one or two canvas mattress covers stuffed with secret documents still on board. Scores of classified documents littered the ship’s passageways. Also surviving were some diagrams and manuals for repairing the gear. No one in the crew could later remember seeing those documents burned or thrown overboard.

Once captured, the *Pueblo* entered Wonsan under her own power. Soviet and Chinese intelligence specialists were climbing through the *Pueblo* within days of her being brought into port. The 83 Americans were quickly taken ashore, some wounded by the spurt of North Korean gunfire. One sailor soon died. The survivors were interrogated, beaten, and forced to write confessions. They were released eleven months later after the United States apologized and admitted that the ship was in North Korean waters.

As President Johnson grappled with the war-threatening crisis that followed the seizure of the *Pueblo*, the possible compromising of enciphering equipment got little notice. CIPHER machines were low priority for an outraged President who was talking in private about the possible use of a nuclear weapon against North Korea. And for the Navy, the excruciating humiliation over the loss of a ship far transcended the loss of battered cryptographic equipment and outdated key lists.

A Navy court of inquiry held after his release recommended a court-martial for Comdr. Bucher, but the Secretary of the Navy stayed any legal action against him. He retired from the Navy in 1973. The *Pueblo* remains on exhibit in Wonsan.

OO PUGH, SEAMAN APPRENTICE ERNEST C.

U.S. Navy sailor who attempted to become a DEFECTOR. Pugh, who was stationed at the Defense Language School in Monterey, Calif., walked into the Soviet Consulate in San Francisco in Aug. 1982 and tried to defect. The Naval Investigative Service (NIS) reported that Pugh had requested political asylum in the Soviet Union prior to enlisting in the Navy. “Pugh had an affinity for the Soviet Union, and it became apparent during the investigation that the Soviets intended to use Pugh for espionage purposes,” the NIS said. Diagnosed as having a personality disorder, he was given a convenience-of-the-government discharge.

OO PURPLE

U.S. CODE machine used to decipher Japanese diplomatic codes. The American machine functioned on the

same principle as the Japanese 97-shiki O-bun Injiki or Alphabetical Typewriter 97 (the number derived from when it was invented—the Japanese year 2597 [1937]). The Japanese machine represented a radical departure from the German ENIGMA and other electrical encoding machines because it used a battery of 6-level, 25-point switches with a plugboard to establish the key; Enigma and other encoding machines were based on the use of multiple rotors. The Japanese machine was invented by Capt. Risaburo Itō of the Japanese Navy, and it was first used in Tokyo in Feb. 1939. (Itō had earlier translated HERBERT O. YARDLEY's *The American Black Chamber* [1931] into Japanese.) By Dec. 1941 the alphabetical typewriter was in use by the Japanese Foreign Ministry, Naval Intelligence, and 13 embassies.

The American Purple was largely the result of efforts by America's leading codebreaker, WILLIAM F. FRIEDMAN. He, his colleagues at the Army's SIGNAL INTELLIGENCE SERVICE—especially Frank B. Rowlett—and Navy specialists built the first Purple device in 1940 at the Washington Navy Yard after more than a year of intense efforts. The first complete Japanese message text was deciphered in the fall of the following year. (Friedman referred to his staff as "magicians," apparently the origin of the term MAGIC that was used for Purple-derived intelligence.)

Rear Adm. EDWIN T. LAYTON, the senior INTELLIGENCE OFFICER of the U.S. Pacific Fleet, later wrote in "*And I Was There*" (1985), "By the second week in September [1940] the current keys to the Purple cipher had been recovered and the rat's nest of wiring and chattering relays housed in a makeshift black wooden box finally rewarded the months of ingenious labor by producing the first decrypts of Tokyo's most secret diplomatic messages."

Eight Purple machines were produced in the United States by Dec. 1941. Two were used at the War Department and two at the Navy Department in Washington by the service intelligence departments; one was sent to the Philippines, to be operated by a Navy team (station CAST); and three were transferred to British codebreakers at BLETCHLEY PARK, the first of those being sent to Britain in the spring of 1941 on board the battleship *King George V*, along with four Americans to work with British codebreakers. (One of the three machines that went to Britain had apparently been originally intended for the intelligence staff at U.S. naval headquarters at Pearl Harbor.)

Beyond the Purple machine, the Army-Navy code-breakers had to determine the key, which the Japanese changed every day. This key was not only "recovered" on a regular basis, but a system of "predicted keys" was developed whereby older keys could be reused after undergoing manipulations.

In Washington the Army and Navy shared the Purple cryptologic and distribution efforts, the Army processing messages with an even date and the Navy those with an odd date, with a complete sharing of results. (Later, the Navy took odd months and the Army even months.)

This combined intercept and cryptologic process produced some 7,000 decrypted and translated diplo-

matic messages in the six months before the PEARL HARBOR ATTACK by Japan on Dec. 7, 1941, an average of about 300 messages per week. The most important ones were carried by military officers to a small group of senior officials in Washington: President Roosevelt; the Secretaries of State, War, and the Navy; the Chief of Staff of the Army; the Chief of Naval Operations, and a few senior INTELLIGENCE OFFICERS of each service. Fourteen copies of each decrypted message were typed—12 for distribution (to be returned for destruction after reading) and two for Army and Navy files.

In the Philippines the radio intercepts made at Fort McKinley (near Manila) were forwarded to Washington and to the Navy decrypt team on Corregidor. The intercepts were passed to the two senior U.S. commanders in the Philippines, Gen. Douglas MacArthur and Adm. Thomas C. Hart.

No models of the original alphabetical typewriter are known to exist; only rough drawings survive. In defeat, the Japanese had destroyed all of them, except that some components were found buried in BERLIN by the Japanese embassy staff. (See HIROSHI ŌSHIMA)

Purple was the name assigned by the U.S. Navy to the alphabetical typewriter-produced Japanese codes; an earlier code was designated red because of the color of the notebook binder used by the Navy. (See RED BOOK.)

Also see RUDOLPH J. FABIAN, LAURENCE L. SAFFORD.

OO PUZZLE PALACE

Term generally used for the Pentagon Building, located in Arlington, Va., just outside Washington, D.C. It has been the headquarters for the Department of Defense and military services since 1942. However, author JAMES BAMFORD used the term for his book *The Puzzle Palace* (1982), the revealing and definitive discussion of the NSA.

OO PYRAMIDER

U.S. secret communications SATELLITE study, details of which were sold to the Soviet Union by American spies CHRISTOPHER BOYCE and ANDREW D. LEE.

In an unusual twist, VICTOR L. MARCHETTI, a former CIA officer, testified at Boyce's trial that such a satellite communications system had been planned in the 1960s. The CIA, said Marchetti, had also considered using the proposed satellite to transmit intentionally confusing data that could be intercepted by the Soviets so "the Russians would go bananas trying to figure out what it [the message] meant, when it actually meant nothing." Marchetti had been subpoenaed by Boyce's lawyers to establish that the Pyramider was not a viable project and should not have been classified TOP SECRET.

(Under cross-examination, Marchetti conceded that the project he had seen was in a preliminary stage when he left the CIA in 1969, and was not as capable and complex as the satellite envisioned in the later TRW study.)

Boyce, working on CIA satellite projects while employed by the TRW firm, had access to the Pyramider project, which was intended to provide the means for U.S. AGENTS in hostile areas to have two-way communi-

cation with CIA headquarters in Langley, Va. The satellite could also collect intelligence from secretly emplaced sensors that could be planted on hostile territory by agents, or dropped from aircraft.

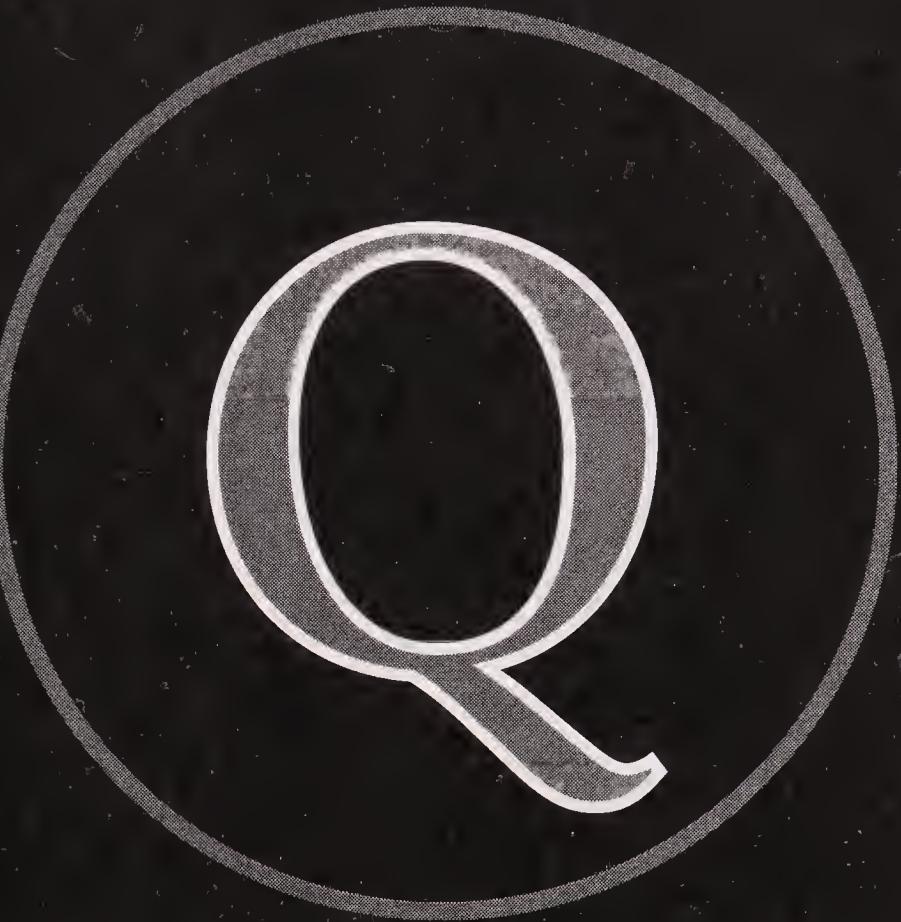
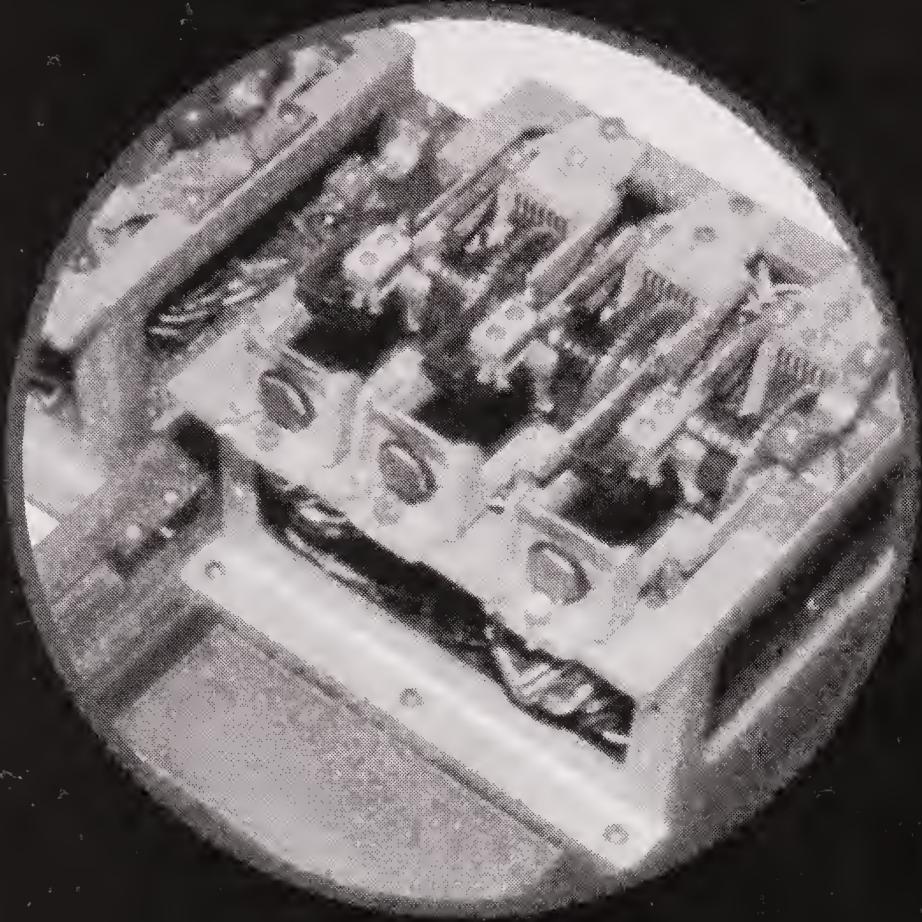
According to testimony during Boyce's trial, the Pyramider system would consist of three geosynchronous satellites that would provide a direct link to the CIA. A total of 3,500 communications and data channels would be available through the system, which would also be used as a backup communications link for noncovert radio traffic among U.S. embassies and to CIA headquarters.

The Pyramider had been initiated with a TRW study

in 1973. Although the project never went beyond the study stage, its revelation to Soviet intelligence revealed U.S. technical capabilities in the satellite field, requirements for communicating with AGENTS, and other information.

After the arrest of Boyce and Lee in Jan. 1977, a copy of the study that Lee had attempted to pass to his contacts at the Soviet Embassy in Mexico City was allegedly recovered by FBI agents.

The Pyramider satellite was to weigh an estimated 1,900 pounds. Two ground receiving stations were envisioned in the TRW study, one at CIA headquarters and one on Guam.



OO Q CLEARANCE

U.S. SECURITY CLEARANCE give by the Department of Energy (DOE, formerly Atomic Energy Commission) to DOE employees, personnel of other government agencies, and contractors. A Q clearance is valid for access to RESTRICTED DATA and national security information at the SECRET and TOP SECRET levels.

A Q clearance is necessary for access to nuclear weapon material.

Also see L CLEARANCE.

OO QUEEN ANNE'S GATE

A small house, at 16-18 Queen Anne's Gate, across from St. Jame's Park in London, housed the intelligence branch of the British Army from 1884 to 1901.

The house at 21 Queen Anne's Gate served as the office and official residence of the first chief of the MI6 (Secret Intelligence Service), CAPT. MANSFIELD CUMMING or "C," from 1909 until his death in 1923. He built a secret passageway between his office and the MI6 headquarters at BROADWAY.

Cummin's successors—also known as C—remained at Queen Anne's Gate until 1966, when MI6 moved to the modern CENTURY HOUSE, south of the Thames River at the Victoria Embankment.

OO QUICKSILVER

CODE NAME for the complex DECEPTION operation mounted to convince the Germans that the main D-DAY landing in France would be at Pas de Calais. Also see FIRST U.S. ARMY GROUP.

R



●● RABBANI, ALI NAGHI (b. 1920)

Iranian official in the Education Ministry who spied for the Soviet Union for 30 years.

Rabbani was arrested by INTELLIGENCE OFFICERS of the SAVAK, the Iran secret police, as he was on his way to meet Evgeni Venediktov, his KGB CASE OFFICER, in May 1977.

Rabbani had been recruited by Soviet intelligence in the 1940s, when the Soviet Union was menacing Iran, then under the rule of the shah, Muhammad Reza Pahlavi. The Soviets, supported by the anti-shah party called the *Tudeh* (masses), occupied much of northern Iran. Although he did not learn valuable intelligence information at his education post, Rabbani had influential friends and passed items of POLITICAL INTELLIGENCE to the Soviets.

Tried and sentenced to death, Rabbani received a reprieve from the shah, who indefinitely postponed Rabbani's execution in return for his giving the Savak information on Soviet intelligence activities in Iran.

●● RABORN, VICE ADM. WILLIAM F., JR. (b. 1905 d. 1990)

U.S. DIRECTOR OF CENTRAL INTELLIGENCE (DCI) from April 28, 1965, to June 30, 1966, one of the shortest tenures for a DCI.

"Red" Raborn, as he was known since midshipman days, graduated from the Naval Academy in 1928. A naval aviator and ordnance specialist who served afloat and ashore, Raborn directed the Navy's Special Projects

Office from 1955 to 1962, managing the Polaris submarine-launched missile program from its inception in Dec. 1955. Adm. Arleigh A. Burke, Chief of Naval Operations, said he chose Raborn "because he has the driving ability, he's got a lot of energy, he's full of enthusiasm, and he can persuade people. He can get things done." He did. The first Polaris missile was test-fired from the submarine *George Washington* on July 18, 1960, several years ahead of the original schedule.

Raborn's swift development of the Polaris missile was based on the PERT system—Program Evaluation and Review Technique. It became a model for managing large, complex projects in and out of government.

As a vice admiral, he served as Deputy Chief of Naval Operations for development from 1962 to 1963. He worked in private industry before and after his service as DCI.

President Johnson appointed fellow Texan Raborn DCI, to the surprise and chagrin of high-ranking officials of the CIA, who had wanted a professional INTELLIGENCE OFFICER from their own ranks. He had no previous intelligence experience when he became DCI—and according to CIA veterans of that era, it showed. Ronald Kessler, evaluating Raborn in *Inside the CIA* (1992), wrote that when President Johnson intervened in the Dominican Republic in 1965, "Raborn decided that he could best contribute by rushing every piece of paper received by the CIA to the president." RICHARD M. HELMS, then Deputy DCI, intervened, preventing raw, unevaluated material from getting to Johnson. "I never worked for a nicer guy who was more out of his element," said Walter N. Elder, who was Raborn's executive assistant. "I thought President Johnson did him a disservice by naming him DCI."

OO RADAR INTELLIGENCE**(RADINT)**

Intelligence derived from radar, in modern times a subset of IMAGERY INTELLIGENCE.

OO RADAR OCEAN RECONNAISSANCE SATELLITE**(RORSAT)**

World's first SATELLITE for ocean RECONNAISSANCE, developed and deployed by the Soviet Union

Known to Western intelligence as RORSAT, the satellites began undergoing testing for ocean reconnaissance in late 1967. Operational RORSAT satellites have been in orbit at least since 1974.

The Soviets have employed two types of satellites for seeking Western warships on the high seas: ELECTRONIC INTELLIGENCE (ELINT) Ocean Reconnaissance Satellite (EORSAT) vehicles, and RORSATs.

The ELINT, or FERRET, satellites detect and "lock on" to electronic signals emanating from ships, indicating their location and possibly, from the kind of radar signals, information on the type of ship; they cue in radar satellites to suspected ship TARGETS. The ferret satellites became operational about 1970. Weighing almost 18,400 pounds, they were initially placed in orbits 266 to 269 miles above the earth. Later versions had higher orbits. These satellites were orbited in pairs to provide more accurate "fixes" on possible targets. Each pair of EORSATs was usually coordinated with a single RORSAT.

The RORSAT vehicles use active radar to detect ships, normally orbiting at heights of some 540 to 590 miles above the earth. Their radar requires considerable electrical power, which is provided by a small nuclear reactor. The reactor section weighs about one ton and carries some 110 pounds of enriched uranium (U-235) to produce up to ten kilowatts of power for some 90 to 120 days in space. The early RORSAT satellites were 45 feet long and weighed 10,000 pounds.

Later RORSAT satellites could send target data to missile-armed aircraft, surface ships, and submarines, as well as to ground stations.

When the service life of these Cosmos-series RORSATs is completed, the section carrying the radioactive fuel is detached and boosted into a higher orbit—more than 550 miles. There it will circle the earth for more than 500 years and cause no danger when it does come down and burn up in the atmosphere.

However, the RORSAT *Cosmos 954* malfunctioned and the reactor plunged into the atmosphere in Jan. 1978, scattering radioactive uranium fuel particles over Canada. After the loss of *Cosmos 954*, the Soviets redesigned the RORSAT to prevent another reactor and its fuel from falling to earth. In an ingenious plan, if the satellite has a malfunction, or when the mission is over, the small radioactive fuel rods are ejected out to decay as they reenter the atmosphere. The empty reactor core remains radioactive, but it is heavily shielded. After a delay of two and a half years in launching RORSATs while the

new reactor components were produced, the Soviets again orbited radar surveillance satellites.

The RORSAT emergency scheme worked on Jan. 23, 1983, when the malfunctioning *Cosmos 1402* reactor, having ejected its fuel rods, crashed into the Indian Ocean. (This satellite weighed only 6,600 pounds.)

Beginning in 1986, the Soviets carried out an unprecedented research and development program in ocean reconnaissance efforts. Both RORSATs and EORSATs were improved, exhibiting variations in orbital planes, periods, and inclinations. Improvements have yielded more reliable satellite operations of longer endurance over wider search areas, providing more accurate target data for air- and sea-launched antiship cruise missiles, probably as well as land-launched ballistic missiles employed against naval targets.

The threat posed by these satellites to Western naval forces was revealed in early statements about the proposed U.S. Anti-Satellite (ASAT) program. In 1979 a U.S. Department of Defense official stated, "The principal motivation for our ASAT program is to put us in a position to negate Soviet satellites that control Soviet weapon systems that could attack our fleet."

Subsequently, the Soviets developed radar satellites that could detect submarines operating underwater. The Soviets conducted radar tests of submarine detection with their *SALYUT 7* manned space laboratory, launched in 1982. (Periodically provided with replacement crews, the *Salyut 7* remained in orbit until early 1991.)

The *Cosmos 1500* oceanographic and earth resources satellite, launched on Sept. 28, 1983, carried Synthetic Aperture Radar (SAR). The space-based SAR could detect or measure sea-surface winds, surface effects of naturally occurring internal waves, surface oil slicks, and ice. It could process and transmit real-time radar images to more than 500 Soviet ships, military and civilian, as well as to ground stations.

Cosmos 1500 appeared to be the harbinger of SAR satellites that could detect submarines. The potential of satellite detection of submarines was also realized by U.S. officials, although such interest was rarely discussed in public. However, in 1985 the U.S. Chief of Naval Operations, Adm. James Watkins, said that scientific observations from an American space shuttle (orbital) flight the year before had perhaps revealed some submarine locations. A Navy oceanographer on the flight "found some fantastically important new phenomology [sic] that will be vital to us in trying to understand the ocean depths," the admiral explained. While not releasing details of the observations, which were called "incredibly important to us," a Navy spokesman implied that "internal waves"—left by a submarine's underwater transit—were involved.

By 1988 Soviet officials stated that space reconnaissance "is accomplishing many missions, including the detection of submerged submarines," and that radars deployed on aircraft and satellites were being used to "detect the wakes of submarines." These statements, the latter by the head of Soviet naval intelligence, apparently referred to satellites that had already been deployed.

A 1993 article in the Russian General Staff magazine *Voennaia mysl'* discussing future satellites declared: "All-weather space reconnaissance and other types of space

support will allow detecting the course and speed of movement of combat systems and surface and subsurface [submarine] naval platforms at any time of day with high probability, and providing high-precision weapons systems with targeting data in practically real time."

The United States never developed a similar space-based ocean reconnaissance system.

OO RADIO FINGERPRINTING

Method used to determine the identity of a radio operator sending Morse transmissions. Every operator has a distinct "signature" produced when he or she works the Morse key.

TINA was the British term during World War II for the study of the characteristics of individual radio operators; TINA equipment could make a recording of an operator's Morse code technique for comparison with subsequent transmissions. This was supposed to be especially helpful in espionage activities to determine if an AGENT had been captured and someone else was transmitting with his or her identification.

TINA was not always successful in that role, in part because an individual's transmission technique could vary. However, TINA was able to distinguish radio operators aboard German ships and submarines, sometimes leading to identification of specific types and even of individual ships.

OO RADIO FREE EUROPE

U.S. propaganda operation, ostensibly financed through fund-drive appeals and other volunteer public contributions. Actually, Radio Free Europe (RFE) operated on funds provided by the CIA. RFE was established in 1948 in a highly secret NATIONAL SECURITY COUNCIL directive authorizing U.S.-sponsored propaganda activities.

RFE aimed foreign-language broadcasts at East European communist nations. A similar propaganda facility, Radio Liberty, aimed at the Soviet Union.

The propaganda was factually based and designed to give people behind the Iron Curtain a Western viewpoint. But in Oct. 1956, when Hungarians began rising against their communist government, RFE took up their cause, in what the CIA psychological warfare director later called encouragement without incitement. RFE did, however, relay rebel broadcasts, giving them wider impact—and an implication of U.S. assistance.

The Soviet Union sent in troops and tanks to put down the Hungarian revolt. In two weeks of fighting, some 7,000 Hungarians were killed. The government of West Germany, site of RFE transmitters, demanded to know how much the broadcasts had inflamed the rebels. Secretary of State John Foster Dulles had been preaching a doctrine of "liberating the captive nations," and the Germans, as did many others, wondered whether John Foster's brother, ALLEN W. DULLES, the DIRECTOR OF CENTRAL INTELLIGENCE, had been actively trying to carry out the doctrine.

After 1956, the CIA kept a tighter rein on the rhetoric of RFE and Radio Liberty (which was almost

continually jammed by the Soviets). Although the two radio operations were given open government funding in 1973, their CIA origins were not revealed until 1975, when the Rockefeller Commission report on CIA activities was published.

OO RADO, ALEXANDER

see LUCY SPY RING

OO RAFTER

One of the major electronic security operations of the Cold War era. Undertaken by the British Security Service (MI5) from 1958 onward, the electronics security effort was able to determine that from within the Soviet Embassy in London the KGB was keeping track of British communications related to COUNTERINTELLIGENCE activities, such as trailing KGB officers in cars. MI5 personnel could then correlate Soviet tracking efforts with their own activities, leading to more effective SURVEILLANCE of suspected Soviet AGENTS.

Also see PETER WRIGHT.

OO RAINBOW

Program to reduce the radar signature of U-2 spy planes. When the U-2s were developed in the mid-1950s, it was expected that they would be able to fly over the Soviet Union for two to four years before they were effectively detected and tracked by Soviet radar.

The very first flight of a U-2 over the Soviet Union, on July 4, 1956, and all subsequent flights were in fact detected by radar. When CLARENCE (KELLY) JOHNSON, designer of the U-2, learned of the detection, he initiated a program—given the CODE NAME Rainbow—to reduce the U-2s radar signature or, to use a later term, enhance their "stealth."

One scheme, dubbed Trapeze, called for long bamboo poles to be fitted to both wings, parallel to the fuselage. Wires would then be fitted over the poles as well as the wings and be rigged with other wires fitted with beads that were to "trap" and reduce the returns from radar pulses.

Another proposal, given the name Wallpaper, called for anechoic materials to be glued to the fuselage and wings of the aircraft in order to absorb radar pulses. Aircraft with this covering—called "dirty birds"—overheated and suffered hydraulic problems. One aircraft crashed during the 1956–1957 tests of this concept. The pilot was killed.

In place of such modifications, the decision was reached to develop the SR-71 BLACKBIRD as a successor to the U-2.

OO RAINBOW WARRIOR

Ship owned by the environmental organization Greenpeace, blown up by French intelligence operatives in Auckland Harbor, New Zealand, on July 10, 1985. One man drowned as the ship sank. Eleven crew members and visitors survived.

The ship was sunk by time bombs that divers had attached to the hull. Berthed at a commercial pier, the *Rainbow Warrior* was to have sailed as the mother ship to four yachts that were about to picket the coral atoll of Moruroa in French Polynesia, where France was to conduct underground nuclear tests. Greenpeace directors had dispatched the ship as part of a demonstration against the "nuclearization" of the Pacific Ocean.

The sinking of the ship was the work of the DGSE, the French external security service. Some details of the plot remain murky, but there seems little doubt that the originator was Minister of Defense Charles Hernu, who believed that Greenpeace was under Soviet influence. Officials of the French nuclear-testing program, fearing Greenpeace sabotage of the scheduled test, asked, through channels, for intelligence on Greenpeace and SURVEILLANCE of the *Rainbow Warrior*. Hernu apparently then alerted Adm. PIERRE LACOSTE, chief of the DGSE, and authorized him to set up an operation called K Cell.

French Army Lt. Christine-Huguette Cabon of DGSE was a MOLE inside Greenpeace, which she had infiltrated in New Zealand. Cabon had been in Le Cadre Spécial, a French special forces unit similar to the British Special Air Service. Injured in a parachute accident in 1982, she was transferred to DGSE. From New Zealand she sent back exaggerated reports of Greenpeace plans to sabotage the test.

With Cabon in place, DGSE sent two frogmen from a base in Corsica to Auckland. They arrived by yacht, and on the night of July 10 attached two time bombs to the hull of the ship, returned to shore, and hid their equipment. This was supposed to be picked up and disposed of by two other DGSE agents, Maj. Alain Mafart and Capt. Dominique Prieur, who carried Swiss passports identifying them as Alain and Sophie Turenge.

The first bomb exploded around midnight, sending all 12 persons hurrying ashore, according to plan. But before the second, larger bomb went off, Fernando Pereira, a Greenpeace photographer, returned to the ship to get some equipment, according to the definitive account of the incident in *Sink the Rainbow* (1986) by John Dyson. Pereira, 33, was killed.

Two days later, police arrested a man and woman who had been seen around the docks on the night of July 9–10 by a watchman who had jotted down the license number of their rented car. The couple, claiming to be Alain and Sophie Turenge on their honeymoon, were quickly unmasked as French agents and charged with murder and arson. "Sophie" carried a notebook with telephone numbers that included DGSE's.

When the media broke the story, DGSE attempted a DISINFORMATION campaign, claiming that the photographer had been a KGB agent and that a sinister plot had been launched to embarrass France. But the cover-up failed, and, in the tumult that resulted, Lacoste and Hernu were forced to resign.

Maj. Mafart and Capt. Prieur pleaded guilty to involuntary manslaughter to spare the French government the embarrassment of a trial. In Nov. 1985 they were sentenced to 10 years in prison. After the French government

agreed to pay the victim's family 2.3 million francs and to reimburse Greenpeace for the loss of *Rainbow Warrior*, Mafart and Prieur, as part of the agreement, were released from prison in New Zealand but kept on Hao Atoll, site of a French military base 500 miles east of Tahiti.

Mafart, claiming to be in need of medical attention, was transported to France in Dec. 1987. Prieur's husband was sent to Hao, reputedly under orders to impregnate Capt. Prieur. She did become pregnant, and in May 1988 she was transported to France. New Zealand, incensed at the flagrant breach of the agreement, took the matter to a UNITED NATIONS tribunal, which ruled that France had acted in bad faith and should pay \$2 million in compensation.

In 1995, Maj. Gen. Jean-Claude Lesquer, who had commanded the unit that sank the *Rainbow Warrior*, was awarded the Grand Officer of the Legion of Honor, France's second-highest military honor.

OO RAMSAY, RODERICK JAMES

Former U.S. Army sergeant arrested in 1990 for passing defense plans of the NORTH ATLANTIC TREATY ORGANIZATION to Czechoslovakian and Hungarian INTELLIGENCE OFFICERS. Ramsay was recruited by CLYDE LEE CONRAD, another former U.S. Army sergeant who was convicted of treason in a West German court. Conrad allegedly led a spy ring in West Germany.

The FBI said that Ramsay, who held a TOP SECRET clearance, had been an assistant document custodian of the plans section of the 8th Infantry Division in Bad Kreuznach, West Germany. Among the documents Ramsay was said to have sold were some dealing with the use of tactical nuclear weapons and military communications.

The FBI said that in Dec. 1985 Ramsay videotaped hundreds of documents and passed the tapes to Conrad for sale to Czechoslovakia and Hungary. Apparently Ramsay's alleged involvement with Conrad emerged from the investigation and trial of Conrad.

When Ramsay was arrested, FBI Director WILLIAM S. SESSIONS said that the investigation was one of the "most complicated foreign counterintelligence investigations ever conducted by the FBI." Two years after Ramsay was arrested, the FBI arrested another soldier, Staff Sgt. JEFFREY S. RONDEAU.

OO RATFUCKING

Term used by insiders to describe political infiltration of Democratic Party activities by Nixon supporters in the 1972 election campaign; this infiltration was spearheaded by the PLUMBERS.

Also see HUSTON PLAN.

OO RATKAI, STEPHEN

Canadian arrested in 1989 for trying to get SECRET information on how a U.S. Navy base in Newfoundland tracked Soviet submarines. Ratkai was videotaped by the

ROYAL CANADIAN MOUNTED POLICE (RCMP) while offering an advance payment of \$40,000 to a U.S. Navy officer working undercover in a joint operation involving the RCMP, the U.S. Naval Investigative Service (now the NAVAL CRIMINAL INVESTIGATIVE SERVICE), and the Canadian Security Intelligence Service.

The officer acting as an AGENT, Lt. Donna Geiger, was an administrative officer at the U.S. naval facility at Argentia, Newfoundland. Ratkai asked her to get him information. He also asked for personal information, including her astrological sign and her husband's hobbies.

Ratkai pleaded guilty to espionage in a Canadian court. Intelligence officials believed that others were implicated with Ratkai, but there were no further arrests.

●● RAVEN

A male AGENT employed to seduce males or females to engage in espionage.

●● RAZVEDKA

Razvedyvatelnoye Upravlenie is the Russian term for both RECONNAISSANCE and INTELLIGENCE. It forms the basis of the organizational names GRU and RU.

●● RAZVEDYVATELNOYE UPRAVLENIE

RU

●● RD

RESTRICTED DATA

●● RECONNAISSANCE

Operation to obtain information about enemy activity or resources or meteorological, hydrographic, or geographic information for a particular area.

●● RED Book

CODE NAME given to Japanese SUPERENCIPHER broken by U.S. NAVY COMMUNICATIONS INTELLIGENCE cryptographers.

The original "book" was a series of surreptitious photographs taken during BLACK BAG JOBS, or break-ins, at the Japanese Consulate in New York City. "The operation required more than one visit," wrote Rear Adm. EDWIN T. LAYTON, in "*And I Was There*" (1985). "It was slow going with the cameras of that day to photograph the voluminous code book of the Japanese fleet." The FBI had told the OFFICE OF NAVAL INTELLIGENCE (ONI) that a Japanese naval officer was using the COVER of vice consul.

An ONI COUNTERESPIONAGE squad picked the locks on the consul's office door, opened the safe, and photographed the book page by page. Photographs of the pages were given to Dr. Emerson J. Haworth and his wife, Japanese linguists who often translated for the ONI. The Haworths translated the book into English, a task that took nearly four years. That material was then

updated with photographs taken during other break-ins at the consulate in 1926 and 1927.

The translated, retyped material was put into two volumes, which were bound in red buckram. That was the origin of the name Red Book and Red Code.

The ONI passed the two-volume Red Book to the Navy's code and signal section, where the task of deciphering the Red Book was given to Agnes Meyer Driscoll, a cryptographer who, like master codebreaker WILLIAM F. FRIEDMAN, had been trained at Riverbank Laboratories. She cracked the Red Book code and, in the course of her work, trained a new young Navy officer, Lt. LAURENCE L. SAFFORD, who would become a leading advocate of machine cryptology.

●● REDL, COL. ALFRED

(b. 1864 d. 1913)

A senior Austrian INTELLIGENCE OFFICER—and a Russian spy.

One of 14 children of a poor Austrian railway official, Redl at age 14 was able to enter the Lemberg Cadet School; after graduation he entered the Austrian Army.

Despite his low origins, he was recognized as a bright officer, astute in languages, with a talent for organization. He rose to the rank of colonel and from 1900 served as head of the Kundschaftsstelle, the Austrian espionage and COUNTERESPIONAGE service.

The Russians learned of Redl's HOMOSEXUAL preference and—supplying young men as well as money—blackmailed him. Redl revealed to the Russians the identities of Austrian spies in Russia, the Austrian CODES, and the Austro-Hungarian mobilization plans.

Austrian officials in 1913 intercepted envelopes containing money and addressed to a postal box in VIENNA. When Redl went to the post office to collect them, he was found out. The Austrian government sought to keep his treason a secret. (Lack of publicity would not only save embarrassment, it could permit the Austrian Army to make changes in war plans without the Russians' knowledge.) Confronted by fellow officers who had orders to kill Redl if he did not take his own life, Redl shot himself. His final note read: "Levity and passion have destroyed me. Pray for me. I pay with my life for my sins."

Among the documents Redl gave the Russians was an Austrian plan for war against Serbia, which the Russians showed to the Serbians. After the assassination of Archduke Franz Ferdinand in June 1914, Austria did go to war. But because the Serbians knew the Austrian plans, they were able to repulse the stronger Austrian forces. As a result, Russia and other powers in both European alliances responded. World War I had begun.

Also see Gen. MAXIMILIAN RONGE.

●● RED ORCHESTRA

German name for an anti-Nazi, Soviet-directed resistance and espionage NETWORK centered in Germany during World War II.

The ring, which was Soviet intelligence's chief source of information from German-occupied Europe, consisted

of several independent CELLS originally established by the GRU, Soviet MILITARY INTELLIGENCE. Its members penetrated key political and military offices, including the German Ministries of Aviation and Economics, the High Command of the Armed Forces, and the ABWEHR, Germany's MILITARY INTELLIGENCE agency. One member of the ring was an officer attached to the German Air Force's General Staff; another worked in the CIPHER section of the Army Chiefs of Staff.

Like most spy organizations of the war, the Red Orchestra produced more legends than valuable intelligence. Enhancing the legends was postwar Soviet propaganda that raised the Red Orchestra to Olympian heights. There is no doubt that members of the network produced important intelligence, such as German aviation strength and Army movements on the Eastern Front. But military records fail to back up claims that the ring gave the Red Army intelligence that cost the German Army 200,000 casualties.

The story of the Red Orchestra is a human tragedy, for many of its members were youthful idealists, Germans who hated Adolf Hitler. The fact that they were Germans betraying the Fatherland inspired a frenzy of blood vengeance when they were caught. They were tortured and hideously executed, many by decapitation. They left a mixed legacy—despised by many West Germans for betraying Germany, officially lionized by communist East Germany because they had helped the Soviet Union.

Members included an American, Mildred Fish, originally of Milwaukee, Wis., who had met a German economist, Arvid Harnack, at the University of Wisconsin. They were married and she joined him when he returned to Germany in 1929. Harnack became a senior counselor in the Ministry of Economics and in 1937 joined the Nazi Party; by then he was a secret communist and may have had a connection with Soviet intelligence.

When Hitler rose to power, Arvid and Mildred Harnack became the nucleus of a left-wing resistance group, one of the origins of the orchestra. They helped Jews escape Germany and passed ECONOMIC INTELLIGENCE to the U.S. and Soviet embassies in BERLIN. When the European War began in Sept. 1939, they and their comrades organized sabotage in German factories and published an underground newspaper.

The espionage was conducted by cells in Germany and in conquered Belgium, France, and the Netherlands. Some accounts add to the orchestra the LUCY SPY RING, a Soviet network centered in Switzerland, and cells in Spain and Yugoslavia. But the core of the orchestra was in Germany, where, before the war, Soviet intelligence had established cells among communists. The CASE OFFICERS for those prewar spies were Leopold Trepper and Anatoli Gurevich, who used Soviet-trained radio operators.

Associated with the operations run by Trepper and Gurevich were Ursula Kuczynski (see SONIA), who later aided KLAUS FUCHS, and Alexander Rado, key man in the Lucy ring. Gurevich, a GRU officer CODE-NAMED Kent, ran the Belgian cell out of Brussels. Trepper, the RESIDENT or director, was code-named Otto. He was said to have been appointed head of Soviet espionage in Europe after the defection of WALTER KRIVITSKY in 1937.

"Orchestra" was used by the Abwehr as a generic term for an espionage network. (There were also an Ardennes Orchestra and a Maritime Orchestra.) Carrying on the musical metaphor, the leader of a network was called a "conductor," a spy's shortwave transmitter was a PIANO and a radio operator was a PIANIST. "Red" indicated the orchestra's sympathies, for the first transmitter discovered by the Abwehr was sending messages to the Soviet Union, not Britain. (Soviet intelligence used "piano" and "pianist" in the same way. The Soviet name for the ring was Krasney Kapel, "Red Choir.")

On June 26, 1941, four days after Germany invaded the Soviet Union, an Abwehr radio direction finder in Berlin discovered a secret radio transmitter operating in contact with Moscow, possibly from Belgium. Three members of the ring were arrested, but Trepper was released because the Germans accepted his credentials as a businessman from France. Trepper ("the Grand Chef," Abwehr called him) was able to warn several others.

More arrests followed in July 1942. About 85 suspects were rounded up in Hamburg, along with another 118 in Berlin. Of the first wave of AGENTS arrested, two killed themselves in custody, eight were hanged, and 41 were beheaded, among them Mildred Fish Harnack. Her last words, recorded by a prison chaplain, were, "And I have loved Germany so much." (In 1964 the East German government issued commemorative POSTAGE STAMPS honoring her and others for their work.)

From Aug. to Oct. 1942, the Germans "played back" captured agents who had, under torture, turned against their orchestra comrades. A special GESTAPO task force—Sonderkommando Rote Kapelle (Red Orchestra)—was assigned to the case.

A CIA study of the Red Orchestra says that its information would have been even better used by the Soviets had it not been for Josef Stalin's distrust of anything of German origin. The Red Orchestra, for example, had reportedly warned the Soviet Union of the planned German invasion in June 1941, but Stalin dismissed the warning.

The CIA study traced the Red Orchestra to Soviet networks in Europe as early as 1930. During the war the network extended beyond Germany into Belgium, Holland, France, Switzerland, and Italy. "Several connections," the CIA study says, ". . . were found in England, Scandinavia, Eastern Europe, the United States, and elsewhere."

Trepper was captured and was TURNED. He went back into the underground world and tried to continue to send information to Moscow. He survived the war.

In 1969 the Order of the Red Banner was posthumously awarded to several members of the Red Orchestra.

OO REDOUBLED AGENT

DOUBLE AGENT whose dual role has been discovered by the service on which he is spying and who is used, wittingly or unwittingly and voluntarily or under duress, to serve the latter service against the former service.

OO RED SOX-RED CAP

see FRANK G. WISNER

OO REENCIPHERED CODES

see SUPERENCIPHER

OO REILLY, SIDNEY

(b. 1874? d. 1925?)

British adventurer who spied, usually for Britain, during and after the turbulence of the Russian Revolution of 1917.

As befits a master spy, his true origin is not known. He told many versions of his ancestry and embellished details of his work as a spy. But there is no doubt that he was a hidden player in history and lived an incredible life, even allowing for exaggeration. Admirers have called him the greatest spy who ever lived.

He is believed to have been born in Russia, near Odessa, as Sigmund Rosenblum, the son of a Russian woman of Polish descent and a Jewish physician from VIENNA. His mother, however, was married at the time to another man, a Russian Army colonel who was well

known in the court of the czar. (Reilly sometimes gave his birth year as 1874 and sometimes as 1877.)

According to one of the many versions of his early life, he left Russia for Brazil after learning of his illegitimate birth. While there, he claimed, he saved the lives of either two or three British officers, and they rewarded him with a British passport, which he used to reach England. In 1898, when he married a widow named Margaret Thomas, he gave his name as Rosenblum. A year later he took the name Sidney Reilly, and he kept it. He spoke English and Russian fluently and claimed to have mastered five other languages.

The story of his life—recounted in numerous books, articles, and a TELEVISION series—is full of contradictions and fanciful claims. Adept at disguises and living under COVER, Reilly zigzagged through 30-odd years of spying, mostly for Britain, covering his tracks or having them covered by someone else. Michael Kettle's *Sidney Reilly* (1983) is the best-documented biography of the master spy. Among Kettle's discoveries was a LEGEND that Reilly created, undoubtedly with the aid of British intelligence, to give him a false persona. The legend puts Reilly in India at the start of the 20th Century, graduating from a college there, and working as a railway engineer in India. "It was this alibi," Kettle wrote, "which Reilly gave whenever the situation required it."

Reilly seems to have been recruited when he was in London by the British Secret Intelligence Service (MI6) and given the CODE NAME ST1. He reportedly produced intelligence on anti-czarist Polish and Russian refugees who lived in London's East End. He may have formally begun his espionage career during the Boer War of 1899–1902, when, pretending to be German, he sought intelligence on how the Netherlands was getting aid to the Boers. According to another story he learned welding in England and then slipped into Germany, taking a job at a Krupp factory to learn the German arms industry. Some reports have him at a German shipyard.

Shortly before the Russo-Japanese War (1904–1905) he went to Port Arthur (now Lüshun), a major Russian naval base in the Far East. Although he worked as a merchant in Port Arthur, there is little doubt that he was reporting to MI6 on the growing tension between Japan and Russia. Some accounts claim he played a major role in the Japanese surprise attack on Port Arthur. He returned to Britain when the war began, entered the Royal School of Mines, and in 1905 went on to Trinity College, Cambridge, staying there at least two years.

Now knowledgeable about petroleum exploration, and with the veneer of a Cambridge-educated English gentleman, he then went to Persia. Britain and Russia had claims there as part of the GREAT GAME for control of Central Asia. Reilly supposedly led British oil explorers to a rich field that had been eyed by French oil interests. By then Reilly was probably based in St. Petersburg, a partner in a Russian armaments firm. He also became the Russian agent for a German shipbuilder bidding to restore the Russian Fleet, all but destroyed in the war with Japan. Reilly simultaneously helped the Germans get large contracts and kept the British Admiralty informed

Sidney Reilly.



about German warship designs. He was also pocketing large commissions and building a good-sized fortune.

At the outbreak of World War I, Reilly was in New York City working as an arms agent for Russia. There he was joined by Nadine Massino, a Russian woman who fell in love with Reilly in St. Petersburg and divorced her husband, an official in the Ministry of Marine, to marry Reilly. He bigamously married her in New York.

Learning that Reilly was in New York, Capt. MANSFIELD CUMMING, head of MI6, told his AGENTS in the United States, Col. Norman Thwaites and Sir WILLIAM WISEMAN, to keep in touch with Reilly. Thwaites and Wiseman were under cover as part of the British Purchasing Commission. In 1916, possibly on the advice of Wiseman, Reilly left Nadine in New York and went to Canada, where he enlisted in the Royal Flying Corps.

Back in Britain, he agreed to enter Germany as a British spy. What he did in Germany during World War I depends upon what embellished Reilly story is told: One version is that he was flown into Germany and infiltrated the German General Staff. Another is that he passed through the German lines, obtained invaluable intelligence, and returned through the British lines.

British officials desperately tried to keep Russia in the war against Germany. After this policy failed, British intelligence tried to rally anti-Bolsheviks to overthrow the Red revolutionaries and get the nation back in the war.

The man first picked for the job was Capt. GEORGE HILL. When he got entangled in a Romanian operation, MI6 sent in Reilly, who arrived in Moscow in May 1918 as the revolution was nearing a bloody climax. In July the Bolsheviks massacred the czar and his family at Ekaterinburg. In August 1918, an anti-Bolshevik shot and grievously wounded revolutionary leader V. I. Lenin. Reilly undoubtedly was involved in the plot.

Reilly posed as Comrade Relinsky of the CHEKA, the Bolshevik secret police. Once, at the opera and believing he was about to be arrested, he tore incriminating papers into tiny pieces and swallowed the most dangerous ones while stuffing other into the lining of the sofa cushions.

Reilly later claimed that he had 60,000 Russian and Latvian soldiers ready to fight the Bolsheviks. He had even formed a shadow cabinet and was concocting a counterrevolution that could have changed history. Whatever he had and whatever it was that he really did, there was enough suspicion for the Cheka to charge that Reilly and the British diplomat ROBERT BRUCE LOCKHART were concocting a British plot. Lockhart, although fascinated by Reilly, did not fully trust him. "He was a Jew with, I imagine, no British blood in his veins," Lockhart later wrote. "He was a man cast in the Napoleonic mould. Napoleon was his hero in life and at one time he possessed one of the finest collections of Napoleana in the world." (Reilly later sold the collection to raise money for a counterrevolution against the Bolsheviks.)

Reilly drew Lockhart into the fringes of the anti-Bolshevik plan, but in the Bolshevik press it was described as the "Lockhart Plot." The Bolsheviks charged that the British planned to murder Lenin and another leader, Leon Trotsky, and set up a military dictatorship

under White Russians. Lockhart, who later said he had nothing to do with a plot, managed to get out of Russia. Another British diplomat was killed. Meanwhile, an Allied force arrived in Archangel in a futile attempt to put down the Bolsheviks. "I had been within an ace of becoming master of Russia," Reilly later wrote.

Reilly was supposed to report back to MI6, but he vanished as the Bolsheviks went on a murderous rampage, killing an estimated 8,000 suspected enemies. Reilly and Hill managed to escape. (According to one story, they made their way across the Baltic Sea into Sweden and then over to Scotland. In another version, Reilly escaped on his own via a tug to Reval, a German city on the Baltic, and then to Helsinki. Whatever really happened, he did receive the Military Cross for his exploits.)

After the war, Reilly became an adviser to Capt. Cumming, who sent him to the Paris Peace Conference to observe the White Russians and Bolsheviks. Cumming later described Reilly as "a man of indomitable courage, a genius as an agent but a sinister man I could never bring myself wholly to trust."

Reilly continued to urge Britain to support a "democratic" anti-Bolshevik group forming among White Russian émigrés in Paris. Their leader, Boris Savinkov, had been the Minister of War in the cabinet of Aleksandr Feodorovich Kerensky, Prime Minister of the provisional government that had first emerged from the revolution of Nov. 1917. Kerensky, overthrown by the Bolsheviks, had fled to Paris. Savinkov, aided by MI6 funds, was seen as the potential leader of 250,000 White Russians who had fled their native land during and after the revolution.

Reilly insisted that the Bolsheviks—"the arch-enemy of the human race" and "monsters of crime and perversion"—could be overcome. "The anti-Bolshevik movement all over Russia is proceeding with unprecedented vigour and is rapidly reaching a culminating point," he wrote in a report to the Foreign Office in Aug. 1921. ". . . [V]arious leaders, of whom the most important is Boris Savinkov, are rapidly moving into a General Rising. . . ." Reilly predicted that the rising would come in the following month.

The rising never came, and MI6 began wondering about Reilly. Intelligence officials, comparing his reports with Soviet cables intercepted and decrypted by the GOVERNMENT CODE AND CYPHER SCHOOL, realized that he was frequently not passing on reliable information. He was placed under SURVEILLANCE, at times because of suspicions that he was working either for the White Russians or as a DOUBLE AGENT for the Cheka.

In March 1921 the British government signed a trade agreement with the Soviet regime in what was to be a prelude to formal diplomatic recognition (see ARCos AFFAIR). Reilly, frustrated by British indifference to his warnings about the Reds, became involved in the ZINOVIEV LETTER controversy. In 1924 he arranged to have a letter—supposedly from Grigori Zinoviev, the President of the Comintern, to the British Communist Party—delivered to the Foreign Office, making sure its contents were known to the press. Ramsay MacDonald, Britain's first Labour Prime Minister, kept the letter secret, but he was

discredited when the *Daily Mail* published its contents. The letter's publication contributed to the Labour government's defeat in the impending general election.

Reilly, rapidly losing his influence in government and intelligence circles, corresponded with Winston Churchill and other politicians. He became well known in London, particularly after his marriage to Pepita Bobadilla, an actress. She soon fell into the espionage way of life, carrying a gun and sending telegrams in CIPHER.

Soviet intelligence officials had created a DISINFORMATION organization known as THE TRUST, which purported to be anti-Bolshevik. So believable was the information put out by the Trust that Savinkov believed it; in Aug. 1924 he was lured to Moscow, where he was arrested and condemned to death. But, Reilly was told, the Trust was so powerful that it had intervened and Savinkov was pardoned.

In Feb. 1925, when Reilly was in New York City, an MI6 officer wrote to him about the Trust. Reilly, still believing that a counterrevolution could be waged in the Soviet Union, contemplated asking for financial help from Henry Ford and Winston Churchill.

Reilly, seeking to meet leaders of the Trust, got help from the MI6 officer, who was also a victim of the organization's disinformation. He put Reilly in touch with a European representative of the Trust. In Sept. 1925 Reilly went to Helsinki and then to Viborg, on the Soviet-Finnish frontier. There he met a double agent, who was being run by MI6 but actually worked for the Cheka. He told Reilly that only by going to Moscow could he meet the leaders.

In a letter to Pepita on Sept. 25, Reilly wrote, "I cannot imagine any circumstances under which the Bolsheviks could tumble to my identity—provided *nothing* is done from your side. . . ." He crossed into the Soviet Union that night, using a passport bearing the name Sternberg, and was never again seen outside the Soviet Union.

Reilly was executed, although the exact time and circumstances are still not yet known in the West. The Soviet press announced that on the night of Sept. 28 four "smugglers" had attempted to cross the Finnish-Soviet border and that two had been killed, one taken prisoner, and one mortally wounded. Reilly was not named. In June 1927 the Soviet government said that Reilly had been arrested "in the summer of 1925" while trying to enter the Soviet Union from Finland. Undoubtedly he was intensely interrogated about British intelligence for weeks or months before he was executed.

"For my part I sincerely believe that he is still alive," his wife wrote in a foreword to *Britain's Master Spy* (1933), but her belief was based on hope, not evidence.

OO REMOTELY PILOTED VEHICLE (RPV)

Unmanned aircraft used for RECONNAISSANCE.

Although unmanned aerial vehicles—at first called "drones" and then termed RPVs—have existed since World War I, only during the Vietnam War in the 1960s were they used extensively as intelligence collection platforms. The popular name for them in Vietnam was BUFFALO HUNTER. Since the 1980s these aircraft have been

known in the U.S. military as Unmanned Aerial Vehicles (UAVs).

Israel made the first significant post-Vietnam use of drones for intelligence purposes in the 1980s, against Syrians in the Bekaa Valley in Lebanon. In 1982, when Israel forced Yasir Arafat and his Palestine Liberation Organization out of Beirut, an Israeli Mastiff drone overflew a U.S. amphibious ship in the harbor undetected. The drone sent television pictures through a downlink to its control station in southern Lebanon. A year later a camera-carrying Mastiff drone spotted an unsuspecting U.S. Secretary of Defense Caspar Weinberger visiting Beirut. Again the drone was not detected by U.S. forces. The television films from these incidents helped to inspire subsequent development of the U.S.-Israeli drone called the Pioneer, the first widely used U.S. reconnaissance drone.

The Soviet Union and other nations have also developed reconnaissance drones, but Israel and the United States remain the leading manufacturers and users of these aircraft. The United States used reconnaissance drones extensively in the Persian Gulf War in 1991. They were also flown in Bosnia, beginning in 1994, to provide reconnaissance and SURVEILLANCE for peacekeeping forces. Israel also used drones in April 1996 to direct artillery fire against Hezbollah guerrillas firing rockets into Israel from Lebanon.

In the Gulf War the Pioneer proved a highly effective tactical reconnaissance vehicle. The Pioneer has distinctive twin tail booms; the vehicle is powered by a reciprocating engine with a pusher propeller. It can be launched with rocket boosters and recovered on a road or by flying it into a net. Its metal and fiberglass construction makes it difficult to detect by radar.

During the Gulf War Pioneers were fitted with a daylight television camera or, alternatively, an infrared sensor. (The control-datalink has a range of 115 miles.) They were flown by the Navy from battleships and by the U.S. Marine Corps from shore launchers in the Gulf War. Some 40 Pioneers flew 552 sorties, yielding a total mission duration time of 1,641 hours. At least one Pioneer was airborne at all times during the Operation Desert Storm fighting in Jan.–Feb. 1991. The drones were employed to adjust naval gunfire, assess battle damage, and conduct reconnaissance. On Feb. 27, 1991, when a Pioneer detected two Iraqi patrol boats off Faylaka Island, naval aircraft were called in to destroy the craft. Seeing the drone and thinking they were about to be attacked, Iraqi soldiers on the island surrendered to the Pioneer! It was the first recorded surrender of enemy troops to an unmanned vehicle.

Another Gulf War drone was the Pointer, a small, hand-launched UAV that resembles a model aircraft. The Pointer is carried in two backpacks, one for the 45-pound vehicle and the other for the 50-pound control unit. Several Pointers were deployed to Saudi Arabia with the U.S. Marines in 1991. The Pointer's sensor payload is a black-and-white television camera using an 8-mm videocassette. It can be modified to carry a chemical agent detector. Flight endurance is over one hour. For recovery the Pointer is directed into a deep stall.

At the start of air operations in the Gulf, the U.S. Air Force and Navy launched target drones into Iraq to trick the Iraqis into turning on their radars so that they could be attacked by U.S. radar-suppression aircraft. The effectiveness of the UAVs during the Persian Gulf War inspired a major U.S. development program for producing RPVs, ranging from models flying at 5,000 to 25,000 feet and capable of staying aloft 24 hours to others that could fly at 45,000 feet for eight hours. Proposed missions for these craft range from TACTICAL INTELLIGENCE collection to airborne warning against attacking bomber aircraft and theater-range ballistic missiles.

In Bosnia the drone of choice was the Predator, which has turbojet propulsion, weighs 1,873 pounds, can carry about 450 pounds of sensors, and can remain aloft for some 40 hours with a ceiling of more than 40,000 feet. The Predator began intelligence collection missions in July 1995, flying from Albania to observe targets in Bosnia and Herzegovina. (The distance from Tiranë to Sarajevo is approximately 200 miles.) Four disassembled Predators were flown into Gjader Airfield near Tiranë in C-130 Hercules transports, where they were assembled and flown by civilian contract personnel.

One of the Predators was lost over Bosnia on Aug. 11, 1995; a second was deliberately destroyed on Aug. 14 after suffering an engine failure over Bosnia, which may have been caused by hostile ground fire.

Another Predator deployment to Bosnia began in March 1996. The three UAVs, operating from Sarmellek, Hungary, were fitted with Synthetic Aperture Radar (SAR), enabling more effective reconnaissance through clouds and fog.

In June 1996 the U.S. Navy conducted tests with a submarine controlling a Predator UAV. The drone was launched from land, flew out to an ocean operating area, and was then controlled by the submarine, running submerged with an antenna raised above the surface for the data link to the Predator. The data link could be direct or via satellite relay. (There have long been proposals for launching a UAV from a submarine, but they have not been pursued.)

Another contemporary U.S. UAV is the DarkStar, developed under a highly classified program at the famed Lockheed Martin SKUNK WORKS and Boeing Aircraft. DarkStar is a high-altitude UAV with a ceiling over 45,000 feet. The aircraft weighs 8,600 pounds and has a 69-foot wingspan. It carries SAR or electro-optical sensors with communication links directly to the ground or through SATELLITE relay. The prototype DarkStar first flew on March 29, 1996; it crashed during a subsequent takeoff on April 22, 1996.

Several other UAVs are under development in the United States, including the unusual Eagle Eye. This is a "tilt-rotor" aircraft that can take off and land in a vertical mode, making it highly suitable for shipboard use. It began flying in 1993.

Global Hawk is another high-performance UAV under development in the United States. With a 65,000-foot ceiling and 36-hour endurance, this craft has a wingspan of about 110 feet and can carry a variety of sensors.

Several other countries—including Israel—are developing advanced drones, high-technology aircraft that can carry out a variety of missions at lower cost than conventional aircraft and without risking the lives of pilots.

OO RENNIE, SIR JOHN OGILVY

(b. 1914 d. 1981)

Chief of the British Secret Intelligence Service (MI6) from 1968 to 1974.

Rennie was a career diplomat whose appointment was engineered to tighten Foreign Office control over MI6.

Educated at Wellington and Oxford, Rennie originally planned to be a painter. He served in the United States and Argentina during World War II, working for the British Information Service. After the war he was posted to the Foreign Office, eventually becoming Under Secretary of State.

At the time of his appointment to MI6 he had headed the Foreign Office's information research department, the peacetime version of what had been the wartime psychological warfare unit. That was the closest he had come to gaining intelligence experience.

Rennie served inconspicuously as "C" until his identity was exposed by publicity surrounding the arrest of his son on narcotics charges.

OO RESIDENT

Russian term (also *rezident* or resident director) for the head of an espionage NETWORK.

To the Soviets, an ideal resident was someone who was not of Russian nationality or a Soviet under diplomatic COVER but a trusted INTELLIGENCE OFFICER who could run a network (RESIDENTURA) in one country while living in another.

Leopold Trepper, resident of the RED ORCHESTRA in Germany during World War II, was a Pole living in Brussels and posing as a Belgian businessman. Sandor Rado, resident of the LUCY SPY RING, another World War II Soviet network targeting Germany, was a Hungarian living in Switzerland.

RUDOLF ABEL, Soviet resident in the United States, was an officer in the GRU, Soviet MILITARY INTELLIGENCE. Although Russian-born, he adopted a convincing American identity.

OO RESIDENTURA

Russian term for an espionage NETWORK operated by a RESIDENT.

OO RESTRICTED

Former U.S. security CLASSIFICATION for information, the unauthorized disclosure of which could be expected to result in damage to national security. Established after World War II, "restricted" was the lowest U.S. security classification. It was followed, in

ascending order, by CONFIDENTIAL, SECRET, and TOP SECRET.

"Restricted" is no longer used by the United States.

OO RESTRICTED DATA

U.S. CLASSIFICATION for information related to atomic energy. In accordance with the Atomic Energy Act of 1954, all atomic energy information is classified unless a positive action is taken to make it otherwise. This procedure is the opposite of that used elsewhere by the executive branch of the U.S. government (e.g., Department of Defense and Department of State), which states that information is classified only when specifically noted.

The concept of "Restricted Data" is known as BORN CLASSIFIED.

No organization other than the Department of Energy (formerly Atomic Energy Commission) can classify atomic energy information, and once it is classified, no other agency can declassify it.

OO RESURS-F

Soviet third-generation RECONNAISSANCE SATELLITE, an extensive refinement of the earlier ZENIT satellites. The first satellite in this series, the *Resurs-F1*, was launched on May 25, 1989. Weighing almost 14,000 pounds, it deployed two "subsatellites." The main satellite orbited 158 to 170 miles above the earth. It reentered—apparently to return film and other data—on June 17, 1989.

OO REZUN, COL. VLADIMIR BOGDANOVICH

see VIKTOR SUVOROV

OO RHODES, SGT. ROY A.

U.S. Army enlisted man who spied for the Soviets while he worked at the U.S. Embassy in Moscow in the 1950s. Discovery of his spying emerged from the defection in 1957 of Lt. Col. Reino Hayhanen of the NKVD, who for a short time was a CUTOUT for RUDOLF IVANOVICH ABEL, a Soviet spy stationed in New York City.

Hayhanen defected in Paris en route to Moscow and was taken to New York City by the CIA. Turned over to the FBI, Hayhanen led FBI agents to Abel. When Abel was arrested and his photography studio searched, the FBI found a microfilm that Hayhanen could link to Rhodes, who had served in the embassy motor pool. Rhodes admitted spying.

Rhodes and Hayhanen were key witnesses at the espionage trial of Abel, who was convicted.

Rhodes was sentenced to five years at hard labor.

OO RHYOLITE

U.S. SATELLITE used to intercept microwave point-to-point communications within the Soviet Union and China,

that is, COMMUNICATIONS INTELLIGENCE (COMINT). In addition, Rhyolite was employed to collect TELEMETRY INTELLIGENCE (TELINT) from Soviet and Chinese ballistic missile tests.

Rhyolite had a geosynchronous orbit 22,300 miles above the earth. It was fitted with a massive antenna whose narrow, high-gain beam could be aligned to capture even faint microwave signals. The satellite was large—described as being half the size of a railroad freight car—with the "dish" antenna extending while in orbit to 70 feet in diameter. The COMINT/TELINT data was transmitted to ground stations in Australia, Britain, and the United States for analysis by GOVERNMENT COMMUNICATIONS HEADQUARTERS and the NSA.

Reportedly, Rhyolite satellites could pick up major communication relay systems in the target countries, as well as calls made from car phones by Soviet government officials both to the Kremlin, and to their mistresses.

Developed and produced by the TRW Corp., the first Rhyolite satellite was placed in orbit by an Atlas Agena-D missile on Mar. 6, 1973. (At least one experimental Rhyolite satellite was orbited as early as 1970.) An additional Rhyolite satellite was placed in orbit in 1977 and another in 1978; there may have been later launches before the system was replaced by the CHALET satellite (first launched in 1978).

Details of the Rhyolite project were sold to Soviet intelligence by GEOFFREY PRIME in Britain and by CHRISTOPHER BOYCE and ANDREW LEE in the United States. After the 1977 arrest and trial of Boyce and Lee, Rhyolite was renamed Aquacade.

OO RICE-DAVIES, MANDY

see PROFUMO AFFAIR.

OO RICHARDSON, SGT. DANIEL W.

U.S. Army enlisted man who passed military documents to an FBI agent posing as a Soviet spy.

Richardson, a career soldier who had been in the Army 19 years, was targeted by the FBI after he attempted to contact a representative of the Soviet Union, apparently by calling the Soviet Embassy in Washington, D.C. Richardson was stationed at the Aberdeen Proving Ground in Aberdeen, Md., a center for research and testing of military weapons and munitions. He worked in a tank unit.

After he made his attempted contact, he met with an FBI agent posing as a Soviet INTELLIGENCE OFFICER and offered to hand over documents. He was arrested in Jan. 1988 and later court-martialed on several charges, principally for selling unclassified pages from a military manual and a circuit board from an M-1 tank. (Espionage laws prohibit conveying to a foreign power any material, classified or unclassified.) Richardson was sentenced to ten years in prison, reduction in rank, forfeiture of \$300 a month for 120 months, and a bad conduct discharge.

● RICHELIEU, CARDINAL DE ARMAND JEAN

(b. 1585 d. 1642)

Diplomat, royal adviser, and spymaster to King Louis XIII. Richelieu, who answered both to God and to Caesar, began his dual career in 1616 when, at the prompting of Maria de Medici, mother of the king, Bishop Richelieu entered the court and was appointed secretary of foreign affairs. He became one of the most powerful men in Europe, largely because he ran the most effective and extensive spy network of his time.

Richelieu also had a personal need for spies because so many people were plotting against him. His first fall came barely a year after he became secretary, when a plot to lessen the influence of Maria de Medici extended to the worldly bishop. By spinning a counterplot he returned to power in 1621, shortly before he was made a cardinal by the pope. In 1624 he became chief minister to the king.

Richelieu's chief AGENT was an aristocratic Capuchin friar, François Leclerc du Tremblay, who was also in Louis' court. Tremblay, known as Richelieu's "gray eminence," held a fanatic belief that Catholic France should fight to restore Catholicism in the Protestant states of Europe. He and Richelieu set in motion an intricate plan to curb Catholic Austria so that France could dominate the anti-Protestant crusade. To do this, paradoxically, they secretly had to oppose the Holy Roman Emperor, Ferdinand II.

Tremblay went undercover to the German states, urging them not to support the emperor in what would become the Thirty Years' War. Although Richelieu supported the rise of Catholicism, he and his agents arranged for King Gustavus Adolphus of Sweden, a Protestant, to invade the empire.

Richelieu made VIENNA one of his espionage centers, giving the city a reputation for intrigue that continued into the 20th Century.

● RICHELSON, DR. JEFFREY T.

(b. 1949)

A leading writer on U.S. spy SATELLITE programs and other intelligence activities. Richelson, who holds an M.A. and Ph.D. in political science from the University of Rochester, revealed much of the heretofore secret U.S. intelligence collection efforts in his book *America's Secret Eyes in Space: The Keyhole Satellite Program* (1990). He has also written extensively on general U.S. and Soviet intelligence subjects in books and articles, among the most useful being *The U.S. Intelligence Community* (1985) and *Foreign Intelligence Organizations* (1988).

In addition to teaching at the university level, Richelson is a senior fellow at the NATIONAL SECURITY ARCHIVE in Washington, D.C.

● RIMINGTON, STELLA

(b. 1936)

Former Director-General of the British Security Service (MI5), and the first woman to head a major nation's

intelligence service. She was appointed in Dec. 1991, when MI5's role was uncertain because of the end of the Cold War. She focused on terrorism, drug trafficking, and international crime, over the protests of Britain's police agencies, which questioned MI5's jurisdiction in nonespionage matters.

Born Stella Whitehouse, the daughter of an engineer, she attended a convent school in Cumbria, in northwest England, and then went to a grammar school in Nottinghamshire, leaving with grade A levels in English, history, and Latin. After studying English at Edinburgh University, she trained as an archivist in Liverpool.

In 1963 she married a civil servant, John Rimington. They moved to Delhi, where he worked for the British High Commission. There, at a crossroads in her life, "quite by chance" she was recruited into MI5.

Little is known of her secret life from then until the 1970s, when she is believed to have worked both in London and in Northern Ireland gathering intelligence on the Irish Republican Army (IRA). "She had a very calm approach and was a very good organizer and administrator," an intelligence source told a London newspaper. "Like most people at a senior level in that field, she could absorb information very quickly and slot it into a larger picture."

Speaking at her former grammar school about her early MI5 career, she said:

In those days, women were treated as second-class citizens in MI5. But all that has changed. Women are working alongside men in Northern Ireland or investigating Middle East terrorists. . . . It is no good me pretending that for a woman it is easy getting to the top. It is very hard work, particularly if you are a mother. You have to work hard if you want to beat the men.

(Rimington has two daughters and is separated from her husband.)

Immediately after taking over MI5, she made the service's principal target the terrorists of the IRA. And she became a target herself. When several suspected IRA terrorists were arrested in London in March 1993, among the documents seized was the address of a house where her elder daughter had lived.

Security officials worried that their Director-General was herself a potential terrorist victim, for she had taken few steps to protect herself. A London newspaper was able to get information on her credit cards from a computer data bank. She did her own shopping, and for a time her telephone number and address were publicly known. At the urging of other government officials, she improved her personal security.

Rimington, unlike her anonymous predecessors, began her tenure as a well-publicized Director-General. British newspapers vied with each other to publish the most glamorous photographs of her enjoying posh parties—champagne glass in hand—or lunching with Queen Elizabeth. She also lunched with members of Parliament and newspaper editors. The publicity was part of a program to "demystify the security services," observers said.